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Rethinking Leadership Development

Contributions from Theory and Research

Edited by
A. Rui Gomes and Catarina Morais

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About the Editors

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Preface

The role and importance of leaders have been solidly established. Around the world, it is recognized that "poor leadership" has destructive consequences for organizations, decreasing productivity and increasing turnover, stress and poor mental health. Thus, it is indisputable that leaders occupy a privileged position to shaping well-being and performance of their teams and organizations. Regardless of context – across healthcare, education, sport – organizations have understood the need for leadership development. However, even though investment in leadership developed has increased in recent decades, results remain uneven. Therefore, this reprint aims to respond to the practical urgency of better understanding leadership development, constituting a great opportunity to assemble theory, evidence and methodological knowledge to provide better leadership training in different contexts.

This reprint starts with a reflection on how leadership development should be considered in terms of more holistic approaches, arguing for continuous feedback-rich architectures rather than casuistic trainings. The main argument in rethinking leadership development is that it should be embedded in context, relationships, and work itself. Building from this foundation, an evidence-informed framework with specific strategies to be implemented before, during and after leadership development to maximize outcomes and return on investment is presented.

Then, the topic widens along four different but interconnected threads. First, reflections are provided on how to understand leadership in context. Considerations on how leadership is a relational, group and context dependent process are provided. Using ethnographic methods guided by social identity theory, we move to a broader understanding of how and why effective and ineffective leaders look different in different groups. Second, the main focus is shifted towards building leadership where teams work. Specifically, integrated research on internal team coaching, clarifying needed competencies and behaviors are presented, alongside a showcase of identity-leadership reflective intervention aiming to improve perceived leadership, social identity and psychological safety in sport. Third, we expand towards effective development outcomes, considering how leadership impact radiates into society, a number of contexts where leadership development advances public good are provided: a case study of servant leadership via community service-learning illustrates character-infused practice; a meta-summary of art-based programs demonstrate the gains of reflective and reflexive practice; a phenomenological study in medical education shows how team sports (rowing) can foster shared leadership and teamwork; and a narrative review introduces a new theoretical model (ICERR model) to guide leadership development that elevates pro-environmental behavior, linking leadership skills to organizational sustainability outcomes. Finally, readers are taken to reflections on structural barriers to leadership development, including guidance on preventing leadership derailments early and a systematic review on the impact of motherhood in career progression (the 'motherhood penalty'). We then culminate with an integrative intervention, Pro• Leader, grounded in the Leadership Efficacy Model, that presents a program that comprises not only leadership competencies, but also characteristics of the team and environment innovating by individualizing leadership development to context, embodying systems and the inclusion of themes that thread this reprint. The closing call to a diversity-attuned paradigm invites researchers and practitioners to continue the journey, expanding whose leadership is recognized and resourced, and to keep testing what truly works.

In sum, we hope readers will encounter a full stack on leadership development: from architecture and accountability, to method, role development and evidence of impact. This reprint allows readers to explore different approaches in shaping mindsets and relationships, applicable to different contexts (from professional education to sport and organizations) and agendas that extend outcomes to societal aims, such as environmental sustainability. It also provides reflections on societal structural barriers for leadership development and the key role of considering culture and context when training leaders.

This reprint is not just for scholars of leadership. It is also for practitioners who design, deliver and evaluate leadership development in different contexts, as well as for leaders at all levels who seek evidence-based and context-sensitive ways to improve.

In assembling these contributions, our aim is to help the field of leadership development moving from scattered programs to coherent systems, to contextualized practice and inclusive participation. If chapters provoke reflection and foster action towards broadening access to effective leadership, then they will have achieved their purpose.

A. Rui Gomes and Catarina Morais
Guest Editors

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Article

Reconsidering Leadership Development: From Programs to Developmental Systems

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Abstract: We argue for reconsidering leadership development based on open systems theory and systems design principles. A primary advantage of open systems thinking is that it encourages holistic approaches to development and avoids episodic program-based training and piecemeal thinking. The latter approaches are both limited and limiting yet tend to be the preferred approach to leadership development in organizations. Open systems approaches to development offer numerous advantages both conceptually and pragmatically, especially through the incorporation of ongoing feedback cycles. Core practices that define a leadership development system are presented and implications are discussed.

Keywords: leadership development; leader development; leadership development programs; open systems theory; systems thinking

1. Introduction

In rethinking leadership development, which is the focus of this Special Issue, a question to be addressed is why it needs to be rethought. Rethinking implies that present approaches to leadership development have reached their limits in terms of developmental impact. We agree with that assessment; however, perhaps a different way of addressing this issue is to reconsider leadership development based on what we know from a scientific, evidence-based perspective. If we approached leadership development from the perspective of science, how would that motivate a reconsideration? Rethinking implies a new start with a clean state that ignores or rejects what has been established. A reconsideration tries to avoid the problem of "throwing out the baby with the bathwater" by retaining the good (i.e., effective) aspects of extant leadership development practices while considering novel approaches to certain intractable problems.

A case was made more than 20 years ago that the field of leadership development was almost completely co-opted by practice perspectives [1]. The point was also made that whereas leadership development is big business, the evidence for its effectiveness was weak. Two things have not changed. The first is that leadership development is still a big business. Investments globally run into the billions of dollars and there is a plethora of consultancies that offer leadership development "solutions". The claim of solutions suggests strongly that there are proven answers to the various challenges of developing leaders and leadership. The second aspect that has not changed over the previous two decades is that the evidence for effectiveness of these so-called solutions is hardly compelling. Another way of stating this is that the evidence for effective solutions to various problems or challenges of leadership development is weak.

No less an expert on organizational leadership than McKinsey & Company has noted both the importance and the shortcomings of contemporary initiatives on leadership development. McKinsey researchers conducted interviews with more than 500 senior executives and found that approximately two thirds identified leadership development as their most urgent concern [2]. This attests to the importance of the underlying issues associated with the development of leadership talent. McKinsey researchers also reported in that article that fewer than 10 percent of senior managers think their companies develop global leaders effectively, and about one third of US companies lament they do not have enough leaders with the right capabilities. Although this might not be the most scientific evidence to inform the issue, these data come from those with a close-hand perspective on leadership needs in corporate for-profit organizations. The perspectives captured in the McKinsey research suggest that a great deal of the investments in leadership development is probably wasted or at least not invested wisely in the most effective strategies to address their leadership (development) needs. We are aware of no more recent data that suggest this situation has changed for the better.

There is a saying attributed to Albert Einstein that insanity is doing the same thing over and over while expecting different results (https://www.scientificamerican.com/article/einstein-s-parable-of-quantum-insanity/ accessed on 23 July 2023). Applying this to the leadership development industry suggests that the whole field is a bit crazy, which, when you think about the amount of money involved relative to documented impact, has a ring of truth to it. But what is the alternative? One approach might be to think about leadership development in a more holistic systems manner than by the "insane" (i.e., ineffective) approach associated with leadership programs as the solution to the leadership development conundrum in organizations.

Something else to consider is that programs are a commodity and undoubtedly the largest and most expensive commodity in the marketplace of leadership development. There are advantages to packaging development interventions as programs because it makes them conducive for marketing and sales as discrete products. Leadership development programs typically include costs associated with assessments (usually proprietary), facilitation, and overhead such as classroom space, meals, and lodging (if the program is residential). The rest is pure gravy for the vendor. These costs are bundled into an overall program expense, which is relatively easy to justify against something like an HR budget given that is there is typically an annual amount to invest in development for most corporate organizations.

Despite certain advantages such as the widespread acceptance of programs as the appropriate way to conduct leadership development, there are distinct disadvantages. A major limitation with programs is their bounded and episodic nature. Even the best programs have a relatively limited time scale that does not match with the underlying nature of development in general and leadership development more specifically [3,4]. Developing leaders and leadership can take years or even decades, and typically involves a large commitment to ongoing deliberate practice. A program is usually a few hours, a few days, or perhaps a few weeks. There might be exceptions to this general rule, but those would be the few exceptions that prove the rule.

A different way to consider or think about the design and delivery of leadership development initiatives (i.e., interventions) is as systems. One advantage of systems thinking when it comes to leadership development is that this type of thinking identifies the various components but extends a step beyond that in specifying how the components are interrelated to the whole. Systems thinking is based on a more holistic perspective, in this case, about leadership development. Although there has been some attention in the literature to the notion of leader and leadership development systems [5,6], we take a different perspective on systems by grounding our ideas in open systems theory.

2. Open Systems Theory

One of the most renown theories in the organizational sciences is that of open systems theory [7]. The authors of open systems theory proposed a model for understanding any organization as "an energic input–output system in which the energic return from the output reactivates the system" (p. 20). The theory is grounded in the characteristic state of the living organism, which can be compared to a closed system in this way:

> "A system is closed if no material enters or leaves it; it is open if there is import and export and, therefore, change of components. Living systems are open systems, maintaining themselves in exchange of materials with environment, and in continuous building up and breaking down of their components" [8] (p. 23)

As is discussed, this makes for a compelling way to view leadership development initiatives as a transformation of energy into outputs to the environment that elicit feedback to be used as input to reactivate the system. In the case of leadership, that system is a developing individual or broader collective. A key word in the description by von Bertalanffy—considered the founder of open systems theory—is "continuous" in terms of building up and breaking down of the components.

In essence, there is no openness to the environment with a closed system. As a result, there are no external resources returned to reactivate the system. There is also no continuous building up and breaking down of systems attributes (i.e., no development). Reconsidering leadership development involves reconsidering how to reinvent or reconceptualize it in terms of open systems principles.

According to Katz and Kahn, the following ten characteristics are descriptive of all open systems (see Table 1 for a summary). With each of these principles, a brief explanation is provided as to how each is potentially relevant to a leadership development system. A primary point is if organizations can be open (i.e., "living") systems, then why not a leadership development initiative? What would it take to reconsider leadership development in systems terms rather than as programs? The core characteristics of open systems are:

1. Importation of energy: The energy in a leadership development system comes from the motivation to develop. These characteristics might also apply to leadership development programs, but sometimes individuals are sent to programs even though there is no demonstrated motivation to develop as a leader.
2. Throughput or transformation: Energy is transformed into some sort of new learning with the acquisition of new skills or mindsets changing in ways that involve some reorganization of the input. This might also be characteristic of a leadership development program. Indeed, it might be the most defining characteristic of a program.
3. Output: There is something exported into the environment. This could be in the form of new ways of thinking, new behaviors, or deliberate practice to further develop leadership skills and competencies. There might be some of this as follow-up to a program, but there are few if any guarantees that program participants engage in such post-program activities. Participants are "released" as output into the respective organizational environments, but there is no assurance that what was developed in a program is also released. There is the saying that sending a changed person back into an unchanged system often is an exercise in futility. There is little in the way of support from a system guided by unchanged principles.
4. Systems as cycles of events: The pattern of activities that define the energy exchange have a cyclical nature. If leadership development is conceptualized as ongoing development practices in everyday life, then the cyclical exchange is clear. There is no return of energy following the completion of a program. Once the program ends, so does the system in which it was created.
5. Negative entropy: The entropic process is "a universal law of nature in which all forms of organizations move toward disorganization or death" [7] (p. 25). Open systems can reverse or delay the natural entropic progression through the exchange of energy from the environment. Closed systems do not have this capability, and that includes leadership development programs. There is a set date at which a program ends (i.e., dies). Continuing lifelong learning and development as a leader is a way of staying or delaying that terminal state.
6. Information input, negative feedback, and the coding process: Information serves as an environmental input in addition to energy. The feedback a developing leader receives in the environment is one such information input into the cycle. In comparison,

feedback in a leadership program often takes the form of 360-degree or multisource feedback reports, which are akin to driving a car while looking in the rearview mirror. These reports are feedback about past behavior or events and not an ongoing or continuous process grounded in environmental inputs.

7. Steady state and dynamic homeostasis: When thinking about a steady state, it is important to consider that this state is steady in a dynamic way, like a gyroscope. But given that the nature of leadership development is change, it needs to be considered not as unchanging but as preservation of the character of the system as a developmental system. Although there is development and therefore change is occurring, the fundamental nature of the leadership development system is a commitment to ongoing development. This is why self-views are so important in long-term development, especially in terms of internalizing a leader identity [9]. People devote their time to what they value most. What is valued is a reflection of one's identity.
8. Differentiation: Different leadership skills and self-views that are developed as part of leader development can be considered as different strands in an overall web of individual development [10]. These differentiated strands or skills and self-views develop in their own way independent of each other, at least initially. An important consideration in systems design is that differentiation always precedes integration [11].
9. Integration and coordination: Consider the web of development again. As differentiation proceeds, it is supported by processes that bring the system together for more holistic or unified functioning. But a key issue with integration and coordination is time. It takes time to build on differentiation of leadership skills and self-views to integrate and coordinate at a more holistic level. Most leadership development programs are bounded in terms of relatively short-term time frames.
10. Equifinality: People start at different places and change in different ways on their developmental journeys. This is especially the case when an individual owns their development by choosing what to develop and how to do it. A system in the form of a developing leader can reach the same final state from differing initial conditions and by a variety of pathways. Most programs adopt either implicitly or explicitly a training approach in which all participants follow a set of structured practices in a set order with the goal of having all participants end the program at the same level of standard [12].

Table 1. Characteristics of Open Systems.

Characteristic	Brief Description
1. Importation of energy	Some form of energy is imported from the environment.
2. Throughput	Energy is transformed in some way within the system.
3. Output	Some type of product is exported to the environment.
4. Systems as cycles of events	There is a cyclical nature to the pattern of activities characteristic of energy exchange.
5. Negative entropy	Reverse or arrest the natural tendency toward death and destruction.
6. Information input, negative feedback, and the coding process	Information serves as a system input along with energy.
7. Steady state and dynamic homeostasis	There is a tendency to maintain some consistency and constancy in energy exchange.
8. Differentiation	Systems move in the direction of differentiation and elaboration.
9. Integration and Coordination	Processes counter differentiation to bring the system together for holistic functioning.
10. Equifinality	The same final state can be reached from differing initial conditions and through various pathways.

Note: Adapted from Katz and Kahn [7].

A major difference between an open and a closed system is that an open system has permeable boundaries that allows interaction with the environment. An open system is characterized by cyclical events that transform inputs in terms of energy and information (as well as developing skills and self-views) to outputs into the environment in the form of behavioral practice with feedback about that practice returned as input to the system. An essential characteristic of an open system is that it comprises repeating cycles of events and is not a single, stand-alone episode like a program (see Figure 1).

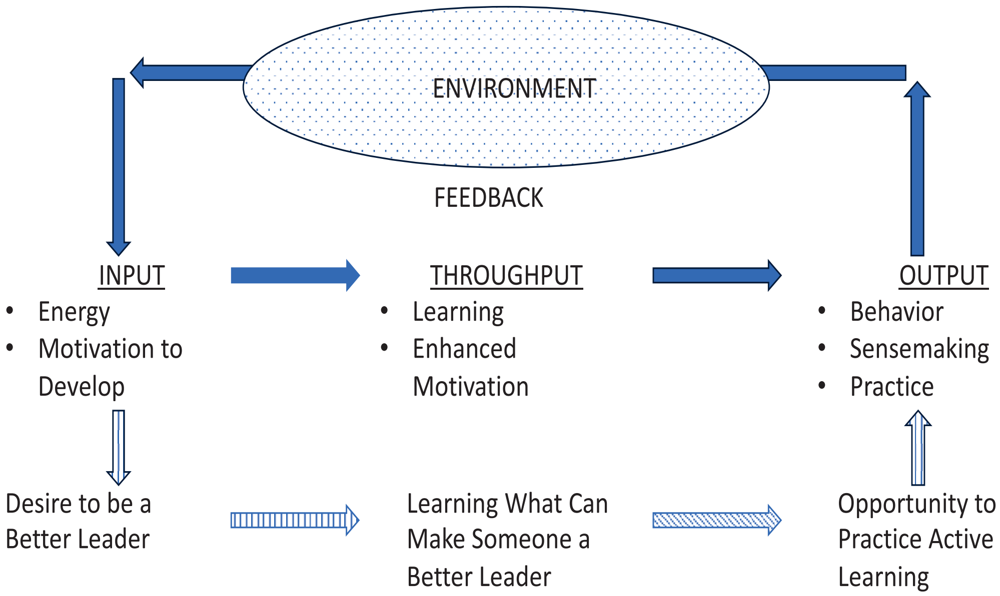

Figure 1. Leadership Development System.

The cycle of repeating events in developmental systems operates in two ways. One cycle involves the transfer of developmental energy in the form of motivation into leadership skills and self-views. These transformed resources provide the outputs released into the environment in the form of leadership behaviors and sensemaking filters. These outputs are the foundation for practice that drive ongoing leader development by experiential learning through doing. From this practice comes feedback, either formal or informal. Did things go well or not so well? What was learned from engaging in or practicing a leadership skill or mindset? Information is imported from the practice environment or experience, which forms the basis of inputs back to the system for the next cycle of development. This feedback mechanism is one of the core characteristics of an open system in which new information also is fed back to the system that contributes to building energy or motivation for further developmental transformation.

Another defining characteristic of open systems is equifinality, which maintains that any system can reach the same final state from differing initial conditions and through any number of different paths. In terms of developmental systems, this characteristic highlights the true nature of development in terms of how individuals start their respective developmental journeys at different places and change in different ways. This is a key aspect of personal trajectories of development that has been adopted in the study of leader development [13]. It is also the case that the focus of the development differs across individuals because of individual differences in leadership strengths and weaknesses. Two different individuals can choose two very different skills or mindsets to work on to become more effective leaders. With training, it is assumed that individuals all start pretty much at the same place and change in the same way over the course of the training. These assumptions do not hold when the focus is development because it is assumed that individuals start at different developmental levels and have different developmental trajectories for a given skill or self-view.

3. From Program-Based to Systems Approaches in Leadership Development

Rethinking leadership development through the lens of systems design principles grounded in an evidence-based perspective involves a more holistic and integrative approach that contrasts with traditional leadership training and development methods. This approach is built on the premise that leadership is not just about individual capabilities but also about the systems within which leaders operate. Transforming leadership development involves moving from periodically attending a highly structured program to an ongoing long-term perspective on self-authored and personalized development.

The point was made at the opening of this article that reconsidering leadership development does not mean completely rethinking it. State-of-the-art leadership development involves a few systems-based principles, especially those practices that take participants out of the classroom and leverage ongoing work for development. But it is still the case that too much emphasis is placed on program-based interventions. A major challenge to such approaches is that they tend to operate (implicitly) as closed systems, especially in not having continuous and ongoing inputs from the environment.

The following points provide additional background material on systems thinking and design beyond what is considered in open systems theory and is focused more tightly on leadership development. There has been a great deal of interdisciplinary work on systems theory since the Katz and Kahn contributions to the social psychology of organizations (see [14] for more detail on why systems thinking is important). It is not possible to include all the different systems principles that define the field; however, the following represent some of the most relevant ones to consider in moving the field of leadership development to a more systems-based approach.

3.1. Understanding Systems Thinking

State-of-the-art leadership development involves a holistic view on development. Systems thinking encourages leaders to view organizations as complex, interrelated structures and processes, rather than collections of independent and mutually exclusive parts. This means understanding how different elements within an organization interact and influence each other [15,16]. The notion of understanding the various components in a system as well as the nature of the interdependencies between them is the basis for one definition of complexity [17]. Taking an evidence-based approach to understanding complex systems means that decisions are made based on data and evidence rather than intuition or tradition [18,19]. Being evidence-based involves collecting, analyzing, and using data to understand system dynamics, identify leverage points, and inform interventions. The following constitute additional considerations in understanding and implementing leadership development using the principles of complex systems and systems thinking.

3.2. Leveraging Feedback Loops

Identifying and understanding feedback loops within an organization can help leaders anticipate and manage the consequences of their actions. A positive feedback loop occurs when the output of a system amplifies the system's performance or accelerates a process [20]. This does not necessarily mean positive in terms of valence or desirability; rather, it refers to the direction of change. A key characteristic of a positive feedback loop is that it increases or enhances the rate of a process or change within a system. Thus, positive feedback loops lead to exponential growth or decline, driving systems away from equilibrium and potentially causing runaway effects.

A negative feedback loop occurs when the output of a system results in a counteraction that diminishes the effects of a change, promoting stability or equilibrium [21]. The negative aspect refers to the reduction in or negation of the change, not to the desirability of the outcome. Thus, negative feedback loops are stabilizing forces in systems, helping to moderate changes and maintain balance. They work to bring a system back to its set point or equilibrium, resisting deviations caused by external or internal changes. In short, positive feedback loops amplify changes, while negative feedback loops attempt to maintain dynamic stability (i.e., steady state or dynamic homeostasis). Both positive and negative feedback loops are ongoing and dynamic processes in systems thinking.

3.3. Adopting a Multi-Level Perspective

State-of-the-art leadership development involves perspectives at the individual, team, organizational-level, as well as cross-level interactions [22]. As such, effective leadership development based on systems design principles address competencies at multiple levels. This includes developing personal leadership qualities while also enhancing team dynamics and shaping organizational culture [23]. Understanding how changes at one level affect other levels is crucial. Evidence-based practices help in designing interventions that are coherent across different levels of the system [24].

3.4. Emphasizing Adaptability and Resilience

Organizations can be conceptualized as complex adaptive systems that are constantly evolving [25]. Leadership development should therefore focus on enhancing adaptability and resilience. Evidence-based learning and adaptation become the norm. Leaders are encouraged to experiment, learn from outcomes, and adapt strategies accordingly [26]. This involves systematically gathering and analyzing evidence about the effectiveness of different approaches.

3.5. Fostering Innovation and Creativity

Incorporating design thinking into leadership development encourages innovation and a user-centric approach to problem-solving [27]. Creativity fuels ongoing development. Based on evidence, leaders learn to iterate, prototype, and test solutions in real-world settings, embracing failure as a learning opportunity.

3.6. Building Collaborative Networks

Recognizing that no leader or organization operates in isolation, developing systems-oriented leaders involves building skills for cross-functional and cross-organizational collaboration [28]. Sharing data, insights, and best practices across networks helps in leveraging collective intelligence and amplifying leader and organizational impact. Implementing these principles requires a shift in how leadership development is designed, delivered, and evaluated.

Curriculum Design. Integrating systems thinking and design thinking principles into the long-term development curriculum enables leaders to see the bigger picture, understanding the complex interdependencies within and outside their organizations. Design thinking adds a human-centered approach to problem-solving, encouraging creativity and innovation. Together, these frameworks are foundational to curriculum design with the goal of helping leaders approach problems holistically and iteratively, fostering a mindset geared towards continuous improvement and adaptation. Leadership development is viewed as a continuous journey rather than a one-time event. The curriculum supports long-term growth, allowing for leaders to evolve their skills as they progress through different stages of their careers and as organizational needs change.

Experiential Learning. Here, the focus lies on real-world projects and challenges that allow for leaders to apply systems thinking and gather evidence on their interventions and impact. Experiential learning places leaders in real or simulated situations where they must apply their knowledge and skills to solve real-world problems in real time. This method is effective because it extends beyond theoretical knowledge, compelling leaders to think on their feet, adapt, and apply systems and design thinking principles in practice. It also enables them to see the immediate impact of their decisions and actions, providing for powerful learning experiences through timely feedback. This type of evidence-based approach to learning and development ensures that leaders are not just applying concepts in theory but are also able to critically evaluate and learn from their actions in real-world contexts and in real time.

Continuous Feedback and Adjustment. Using data and feedback can aid in continuously refining leadership development strategies. The collected feedback should not only be used for personal development, but also to inform and motivate collective leadership development. This can mean updating the curriculum, introducing new learning modules based on emerging needs, or adjusting methodologies to better suit the learning styles and preferences of developing leaders. Ultimately, implementing systems design in leadership development requires fostering a culture that values learning, feedback, and adaptation. Organizations must encourage leaders to embrace experimentation, learn from failures, and view leadership development as an ongoing process and not a discrete event. Development is embedded in everyday life.

Implementation Consideration. To effectively implement these principles, organizations should consider customization and flexibility to tailor development to the specific needs of the leaders and their organizational context. This involves being flexible and adaptive in the design and delivery of leadership development initiatives. Furthermore, organizations should consider and encourage cross-functional collaborations. Encouraging collaboration across different parts of the organization helps to ensure that leadership development is integrated and aligned with overall organizational strategies and goals. In doing so, leveraging technology to facilitate learning, gather data, and provide feedback is paramount. This includes online learning platforms, data analytic tools, and digital collaboration resources.

Reconsidering leadership development based on systems design principles from an evidence-based perspective offers a more comprehensive and effective approach to preparing leaders for the complexities of modern organizational life. It emphasizes the importance of understanding and influencing the systems within which leaders operate, using data to inform decisions and fostering adaptability, resilience, and collaboration.

4. Practical Perspective on Leadership Development Systems

This section takes a more practical perspective on systems thinking in leadership development. Shifting the focus to how reconsidering leadership development based on systems design principles looks on a day-to-day level, we enter the realm of embedding leadership development into the fabric of organizational life [29,30]. This approach moves beyond formal programs or training, emphasizing continuous learning, feedback, and leadership practice within the daily workflow [31,32]. How can development as a leader manifest in everyday activities?

4.1. Integrating Learning into Daily Work

Microlearning, job rotation and stretch assignments, as well as reflection and journaling are various ways amongst a multitude of possible integrated learning initiatives for daily application [33,34]. Short, focused learning activities embedded into the workday allow for leaders to develop skills in real time. Enriched by providing opportunities for leaders to take on different roles or challenging projects that stretch their abilities and foster new competencies enhance experiential learning [35]. Encouraging leaders to reflect on their experiences and learnings daily or more regularly fosters self-awareness and insight.

4.2. Continuous Feedback Loops

Continuous feedback loops within the web of organizational life are best cultivated via frequent real-time feedback. Implementing tools and practices for immediate feedback from peers, subordinates, and supervisors on leadership behaviors and decisions is crucial for learning and development. One way to achieve this is to establish a habit of regular check-ins wherein the premise is to move beyond the traditional annual review to more frequent, informal feedback focused on development and not just evaluation [36].

4.3. Leveraging Technology

Utilizing digital tools and platforms for on-demand learning resources, peer collaboration, and tracking development goals is a way of horizontally and vertically embedding leadership development into ongoing organizational activities [37]. In addition, promoting the use of internal social networks for sharing knowledge, asking questions, and learning from the experiences of others promises avenues for democratizing leader development in organizations [38].

4.4. Cultivating a Supportive Culture

Cultivating a supportive culture through formal and informal mentoring and coaching relationships that provide guidance, advice, and support on a day-to-day basis helps to instill a leadership practice in the daily workflow. Small groups or communities of practice where leaders can share challenges, solutions, and learn from each other function as peer learning groups, fostering a learning organization [30].

4.5. Rewarding Growth and Learning

A successful leadership practice within organizations is based on recognition of effort and progress. As such, acknowledging and rewarding not just outcomes but also the effort and commitment of leaders towards personal growth and helping others develop is essential. Moreover, integrating development into performance metrics allows for leadership development to be an integral part of what is regularly measured, discussed, and rewarded in organizations. Focusing on how a leader has helped others develop as leaders themselves reinforces the importance of development as a foundation for enhancing individual and collective performance [39].

4.6. Tailoring to Individual Needs

Personalized development plans align with individual strengths, weaknesses, and career aspirations, offering adaptive learning pathways based on feedback and changing needs. This personalization ensures that leadership development is relevant and effective, supporting leader growth in alignment with an organization's strategic goals.

4.7. Emphasizing Intangible Skills in Daily Interactions

Demonstrating and encouraging empathy, self-awareness, and effective communication in everyday interactions models so-called soft skills, which are indispensable to effective leadership. In addition, encouraging practices that build resilience, such as mindfulness, stress management, and viewing challenges as opportunities for growth assist in cultivating a resilient mindset [40].

In a day-to-day context, leadership development becomes less about structured programs and more about creating an environment where learning, feedback, and development are part of the natural workflow. This requires a shift in mindset from both leaders and the organization, where development is seen as a continuous process integrated with work, not separate from it. Organizations can foster this environment by providing the structures, tools, and culture that support ongoing learning and growth for both formal and informal leadership.

5. Discussion and Implications

An overarching question addressed in this article is how to make leadership development more effective. The data over years and even decades suggest that the consumers of leadership development initiatives, which are typically delivered as programs or similar one-off events, believe that there are significant shortcomings in the development of leaders and leadership. The importance of leadership development remains a critical concern for most senior leaders, yet there remains a large gap between the skills needed of future leaders and the present levels and types of skills they have acquired.

Instead of proposing how to completely rethink leadership development or offer suggestions on how to fix the programs that are typically used in leadership development, we argue for reconsidering things from a systems perspective. Simply put, we may have reached the limits of what leadership development programs can accomplish. There is a point of diminishing returns that has been reached.

One reason why programs no longer meet the needs (if they ever did) of many if not most organizations that invest in leadership development is that the world continues to become more complex at an increasingly rapid rate of change, whereas our tools used in development have not kept up with this complexity. The result is what some have termed the complexity gap between the adaptive challenges leaders are facing and their current levels of individual complexity in their sensemaking and reasoning capabilities [41]. A notable research question going forward is this: How might the adoption of systems thinking and the implementation of open systems design principles help reduce this noted complexity gap?

In answering this question, it is helpful to consider the nature of human development. How individuals develop is not an episodic or programmatic process, but one that is continuous and ongoing potentially over the entire lifespan [42]. Systems thinking recognizes the importance of continuous cycles of events that transform inputs in the form of energy and motivation into outputs to the environment leading to feedback that serves as new input into the ongoing developmental cycle. Open systems involve cycles of events that operate continuously [43]. A related research question that this point raises concerns the optimal number of cycles needed to bring about meaningful developmental changes in a leader or a broader collective. Furthermore, are these cycles the same in terms of their respective numbers across the level of analysis?

In contrast, leadership development programs are more like closed systems given that the interaction with the organizational environment is minimal with little in the way of ongoing feedback cycles. As result, any development is probably limited and not long lasting. There is the possibility of using a program as part of a leadership development system, but it should be treated as a single practice embedded in a set of interdependent developmental pathways (i.e., practices and processes) and not a stand-alone event.

The reconsidered role of providers of leadership development should be on helping individuals learn the key principles of system design and to use them in developing their own (bespoke) leader development systems. This may sound theoretical or abstract, but we suggest several tangible ways to start embedding systems thinking into ongoing, everyday leadership development. A key to leveraging the systems nature of these suggestions is to deliberately attend to their interdependencies and not think of them as separate practices.

Reconsidering leadership development in terms of systems rather than discrete programs might also be seen as an ongoing organizational process. It could be part of a broader change management initiative focused on organizational culture. An organization that has historically used various programs to develop leaders and leadership is unlikely to successfully move to an open-systems approach very quickly because the latter involves new ways of thinking about development and puts more of the impetus for development on the individual rather than having an organizational unit like HR assume that responsibility. A related, more holistic research question to consider is how to better align leadership development systems with change management processes [44,45].

In the literature on deliberately developmental organizations, the recommended approach is to embed development for everyone into the ongoing processes associated with shared work [39]. This is what those authors call an everyone culture, which is antithetical to the elite (and elitist) high-potential leadership programs adopted in many corporate organizations. A place to start is to view current practices with more of a systems perspective, identifying the various practices and processes currently used for leadership development but also identifying their interdependencies. A follow-up question is to consider (or reconsider) how to scale the developmental system in aiming a version of an everyone culture. Doing so would foster a deliberate attempt at democratizing leadership development [38].

6. Conclusions

The point was made earlier that it is ridiculous to expect different results from the same actions over time. We fear that most initiatives devoted to developing leaders and leadership are mainly tweaking at the margins in terms of what is offered. Evidently, there is a hope that some new practice can be added to a program that will provide the leadership solution [sic] that many claim to offer. It is time to reconsider how leadership development is designed and delivered. By thinking in systems terms, especially using open systems principles, there is an inherent holistic focus with particular emphasis on the interrelationships and interdependencies among its parts.

There is also the issue of time. There are no "quick fixes" when it comes to human development, including leader development. The evidence is clear that any meaningful and long-lasting change requires a commitment to dedicated practice over a long time. Expecting substantive personal or collective change after just a few days or weeks devoted to attending a leadership program is a fool's errand. Without a deep reconsideration of how leader development is part and parcel to human development, especially adult development [3,42], we fear that there will be a continued focus on relatively short-term programs with increasingly diminishing returns.

It was nearly 35 years ago that the American statesman and educator John Gardner opined that when it comes to leadership development: "We can do much better. Much, much better" [46] (p. xix). We urge a reconsideration of how we design, deliver, and evaluate leadership development initiatives. It is time to let go of how we did things in the past and strive to do much, much better.

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Review

Maximizing the Impact and ROI of Leadership Development: A Theory- and Evidence-Informed Framework

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Abstract: Globally, organizations invest an estimated USD 60 billion annually in leadership development; however, the workplace application of learning is typically low, and many programs underperform or fail, resulting in wasted time and money and potential harm. This article presents a novel theory- and evidence-informed framework to maximize the outcomes and return on investment (ROI) of leadership development programs. The foundation of the framework derives from four separate literature reviews: three systematic reviews on leadership development, including the only two to isolate gold-standard elements of effective design, delivery, and evaluation, and one on "training transfer". Informed by innovative principles of leadership development and unique theoretical models and frameworks, this framework consists of 65 evidence-informed strategies that can be applied as a foundation (9), and before (23), during (17), at the conclusion of (11), and sometime after (5), programs, to maximize impact and ROI. Implications for practice and further research are also presented. Given the stakes, there is an urgent need for evidence and tools to maximize the impact and ROI of leadership development. This novel framework provides robust theory- and evidence-informed guidance for governments, policymakers, and those funding, designing, delivering, and supporting development.

Keywords: leadership development; leader development; evidence-based program design; impact; training transfer; return on investment

1. Introduction

Internationally, an estimated USD 60 billion [1] is spent on leadership development each year, which is roughly a third of the annual funding allocated to cancer treatment [2]. This sum is rationalized by the potential impact of effective leadership on organizations and outcomes [3,4] and by confidence in the importance and utility of professional development [5–8]. Supporting the latter is evidence that leadership is not purely an innate quality with which one is born, but rather that leader performance is largely attributable to acquired experiences and training [9,10]. Consequently, many organizations consider leadership development an essential cost and a source of competitive advantage [7,11–13], as well as a key retention strategy [14–18]. Accordingly, the proliferation of leadership programs offered by organizations internally and those delivered by external providers, including business schools, private corporations, and individual consultants, continues to rise [19]. Unsurprisingly, the substantial time and money dedicated to development carry with them expectations of a return on investment (ROI) and of demonstrable outcomes at the individual level and beyond [5,12,20–24]. This signals a critical need for evidence-informed guidance.

1.1. Evidence of Leadership Development Outcomes

The abundance of leadership training corresponds with evidence that interventions can facilitate improved participant outcomes, such as increased confidence, knowledge, skills, capabilities, self-efficacy, engagement, job satisfaction, and performance [25–27]. Leadership programs have also been correlated with organizational-level outcomes, such as decreased absenteeism, increased staff retention, engagement, motivation, and sense of shared purpose, and increased organizational performance [25–27]. In healthcare settings, this includes superior financial and clinical performance, including improved patient outcomes and patient safety [25–27]. These findings echo empirical and meta-analytic results that development programs can facilitate the application of learning to the workplace, commonly called "training transfer" [19,28–35], terms used synonymously here. This application and the achievement of desired outcomes at various levels are indications of the ultimate goal of, and the currency of success in, leadership development, which is increased capacity and outstanding practice [19,36,37]. Finally, there is also evidence that interventions can demonstrate financial ROI [38].

1.2. Problem #1: Conflicting Results and Consequences

Despite this evidence, extensive global investment, and typically favorable program evaluations [34,39,40], training transfer, and its corresponding outcomes, are not automatic or certain [7,19,41,42], and the empirical evidence of program effectiveness is conflicting [12,27]. For example, many studies and meta-analyses of leadership interventions report significant, positive results and effect sizes [19,35,39,43]. Others, however, suggest the rate of program participants applying their learning to work is minimal [12,44–48], with as few as five per cent doing so successfully [49]. Furthermore, Avolio et al. (2010) indicate that the organizational ROI of leadership interventions can range from positive benefits worth USD 5,811,600 to losses of USD 460,588 [50]. Additionally concerning is that some programs allegedly fail altogether [51,52], including ten per cent of interventions in a combined data set of 72 studies from two separate systematic literature reviews of leadership development [53]. The frequent inefficacy of these programs has caused many to question the true yield of leadership interventions [12,20,21,54,55] and others to suggest that much of the investment has been wasted [23,56–58] and even harmful [23,58]. Poor results create a five-fold loss: wasted funds, the opportunity cost of participants' time off work, the discouragement of participants, organizational reluctance to invest in further development, and, in certain sectors, the potential to jeopardize people's well-being [7,59–62]. Aligned with these results, Beer et al. (2016) concludes that a "great training robbery" is taking place [63].

1.3. An Optimizing System

Many studies of unsuccessful interventions attribute their failure to issues related to participants lacking support, change-averse organizational cultures, and the absence of an "Optimizing System". The latter includes a set of enabling factors designed to maximize program impact and ROI by facilitating the workplace application of learning and the achievement of desired outcomes [7,56,64,65]. These factors relate to the programs (design, delivery, personnel, evaluation, and direct application strategies) and to organizational culture and support. This concept builds on previous terms, including "transfer system" [66], "organizational climate" [67,68], and "training climate" [69]. Although the scholarly literature focuses mainly on the design and delivery of individual interventions, if participants' organizational cultures are not conducive to change, even outstanding development programs based on gold-standard evidence will underperform or fail [7,63,70,71]. Brinkerhoff and Gill explain, "the workplace can untrain people far more efficiently than even the best training department can train people." ([72], p. 9) Some argue that application strategies before and after interventions are far more impactful on outcomes than the actual program content and activities [7,48]. Effective design and application strategies can also influence the degree to which individual performance improvements extend beyond participants to organizational levels and become integrated systematically [73].

1.4. Problem #2: Research Gaps, Uncertain Quality of Evidence, Dated Models, and Potential Consequences

An additional challenge is the widespread uncertainty regarding which program designs and application strategies individually and collectively are linked empirically to outcomes [40,49,57,63,74,75]. The scholarly knowledge base is predominantly anecdotal, seldom involving objective data [27,53,76,77], which obscures what works best, why, and with what reliability [38], and can dangerously perpetuate ineffective practices [40,53]. Similarly, much of the field's theoretical foundation, including seminal models and frameworks, is dated, and despite a desire for evidence-based training [78–81] and available research on the workplace application of learning [7,12,19,44,81,82], there is not yet a comprehensive, theory- and evidence-informed framework of effective approaches to design, delivery, and evaluation and direct application strategies to maximize the impact and ROI of leadership development [12,32]. Designing interventions without a credible theoretical and empirical foundation exposes them and their people to substandard or damaging outcomes [40,51,52,58,78,83]. The risk and fallout of deficient interventions for organizations heighten given that increasingly, budgets are strained, priorities are competing, and capacity is limited [20,84,85].

1.5. Purpose

The purpose of this article is to describe a novel theory- and evidence-based framework for maximizing the impact and ROI of leadership development. The framework, called the "Optimizing System", is grounded in a robust theoretical and empirical foundation, as described in a forthcoming companion article, and is the only published framework of its kind. It was created to support outstanding leadership by providing credible guidance for those designing, revising, delivering, and sponsoring interventions to maximize their quality, impact, and ROI [7,11,69,74,81–83,86,87].

1.6. Definitions

Defining what we mean by "leadership", "leadership development", "integration", etc., matters because the terms are used so commonly, yet inconsistently, and there is no collective set on which scholars and practitioners generally agree [23]. And yet, how one understands leadership, as distinct from "management" and "power", for example, has significant implications for how one approaches research, practice, and development program design, delivery, and evaluation [53,88]. Similarly, the predominant term for the enterprise, "leadership development", nearly always refers to interventions *about* leadership for individuals (thus, *leader* development), often with minimal or no accountability-bound expectations to involve their colleagues. This situation rarely yields remarkable results [7,48], further signaling the need for reliable research and guidance to maximize impact and ROI [23].

To clarify the nomenclature and theoretical underpinnings of the framework [88], the following definitions related to (a) leadership, management, and power; (b) development; and (c) leadership integration are presented.

1.6.1. Leadership, Management, and Power

Leadership is the process of leaders and team members collaborating meaningfully and responsibly to realize a shared purpose and vision (True North) [89]. The opposite extreme is power.

Power is the capacity to control others without their consent, including through force. In the middle is management.

Management is the process of exercising authority to ensure others produce predictable, effective, and efficient results. This typically, but does not automatically, involves positional leaders (supervisors or managers) establishing targets, processes, checkpoints, consequences, and rewards, as well as holding people accountable to these targets. At the team, departmental, and beyond levels, this involves a systematic approach and coordination.

A *leader* is anyone who takes responsibility or is ultimately accountable for the process of realizing a shared purpose and vision (True North) in a given situation [89].

A *team member* is anyone who collaborates meaningfully and responsibly in the process of inspiring others to realize a shared purpose and vision (True North) [89].

Beneficiaries refer here to those whom the organization serves, including users, clients, or patients, etc.

1.6.2. Development

Leader development is the intentional process of striving to enhance individuals' leadership knowledge, capabilities, capacity, and performance. This is typically approached through educational, developmental, and/or training programs; experiences; resources; and supports, which can be formal and/or informal and include structured, on-the-job learning, as well as various talent optimization functions [90].

Leadership development is the intentional process of striving to enhance collective leadership knowledge, capabilities, capacity, and performance in groups, such as teams, organizations, and communities. This enterprise necessarily includes non-positional leaders and normally addresses the organizational culture required for effective leadership.

Developmental activities refer to structured formal and informal experiences that are intended to facilitate development through enhanced knowledge, capabilities, capacity, and performance [71].

1.6.3. Integration

Talent optimization/management refers to the structured collection of formal human resources (HR) and organizational development (OD) strategies, requirements, and resources available to staff throughout their tenure intended to maximize their engagement and performance. These include mandatory functions, such as annual performance reviews, and optional ones, such as voluntary training.

Organizational culture refers to the explicit and implicit priorities, assumptions, expectations, values, norms, practices, language, and symbols in an organization that convey meaning and influence behavior [91].

Affected parties (otherwise, "stakeholders") refer to those who are likely to be significantly involved in, or impacted by, a given situation.

True North elements refer to the collection of an organization's ultimate raison d'être: its purpose, vision, mission, and values toward which the strategic plan and all other organizational functions should be directed. This also includes organizational standards of excellence.

A Leadership Organization (ALO) is a learning organization [92] in which leadership is an expectation of all staff, who are supported by specialized training, corresponding talent optimization, and a conducive organizational culture.

1.7. Theoretical Considerations

The Optimizing System framework is informed by the theoretical and empirical foundation described in Geerts (2024) [88], which draws on the wisdom of prominent adult educational theorists, including Knowles [93], Dale [94], Freire [95], Kirkpatrick [96], Kolb [97], and Bloom [98]. The Geerts article presents unique models and frameworks, including progressive levels of mastery, an outcomes-based design, levels of program outcomes, categories of development activities, a program evaluation framework, talent optimization functions, and the concept of A Leadership Organization (ALO). Within ALOs, individual leadership development interventions are embedded within the wider context and culture of organization-wide talent optimization and leadership integration.

The article also includes eleven principles of leadership development, which have been interwoven throughout the design of this framework.

1.8. Contextual Considerations

That said, while the Optimizing System is intended to guide leader and leadership development generally, it is comprehensive, and some strategies may be considered superfluous or inapplicable to certain circumstances, or will manifest differently when applied to different interventions. For example, although there is value in conducting a pre-program needs analysis and identifying a non-intervention control group, these strategies may be expedited, approached informally, or considered non-essential in advance of an informal mentoring program for a small team. In addition to its purpose and scope, distinct program contexts can influence how the Optimizing System might be applied. For example, during various stages of a crisis: escalation, emergency, recovery, and resolution, leadership development is approached very differently [99]. Other variables include single versus multiple intervention programs, formal versus informal components, whether programs are internal, open-enrollment, or community-based (i.e., invited representatives from different organizations within the same community), and whether the program is standalone versus connected to a wider talent optimization or leadership integration strategy or ecosystem.

Finally, given the contextual and adaptive nature of leadership [100], which normally takes place in dynamic and complex environments [101], different approaches are more effective in some circumstances than others. Consequently, program content should be presented and discussed from this contextual perspective: when may certain strategies be optimal and when not, and how might leaders adapt them according to the situation?

2. Methods

2.1. Research Question

The central research question guiding this study was the following: which elements of program design, delivery, and evaluation, along with application of learning strategies, can most reliably contribute to maximizing the outcomes and return on investment of leadership development?

2.2. Data Sources

To answer this question, we drew on the theoretical and empirical foundation established in Geerts (2024) [88], as well as four other data sources. Three were independent systematic literature reviews of leadership development for professionals whose formal research protocols [102] were guided by specialist librarians from the University of Cambridge [27,53] and Oxford University [25]. The reviews were informed by The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) [103] and the Cochrane Review Handbook for Systematic Reviews of Interventions [104].

2.3. Inclusion Criteria

Primary research studies identified in English-language, peer-reviewed academic journals were included [53] if they adhered to the following:

- focused on leader or leadership education, development, or training programs, including individual developmental activities, such as coaching;
- featured adult professional participant samples, not children, undergraduates, or pre-qualified trainees, such as military cadets or medical students;
- reported results of an evaluation of the effectiveness of the program, not simply presenting a model, theory, or program that was not evaluated.

Programs featuring a single task, such as creating a business plan, or capability, such as innovation, or interventions where leadership was only one of many learning outcomes were not included [27].

2.4. Review Details

The first systematic review was conducted for an unpublished doctoral thesis [53] and included 56 empirical studies from various sectors, including the business and private sector, the military, the public sector and government, manufacturing, engineering, healthcare, public health, and higher education. The second, by Geerts et al. (2020), focused on healthcare professionals and identified 25 empirical studies, as well as featuring a novel approach [27]. This review was the first to differentiate its included studies according to the quality of their evidence into three tiered categories (bronze, silver, and gold) based on appraisal results using the Medical Education Research Study Quality Instrument (MERSQI), a validated instrument. It was also the first to isolate program elements exclusively from top-quality studies (the silver and gold categories). This critical process resulted in a collection of "gold-standard" elements of design, delivery, and evaluation (Table 1), reinforced by the best available evidence linking them to outcomes [27,105].

Table 1. Gold-standard elements of program design, delivery, and evaluation.

Category	Element	Element Details
Design	Conduct a pre-program needs and gaps analysis	
	Apply an outcomes-based design approach	Please see Table 4 for an example.
	Define explicit program goals	
	Have participants select personalized goals	
	Incorporate the principles of adult learning [93]	(Pre-program): Motivation to learn; 1. Self-directed; 2. Participants' experience as the basis; 3. Content that is practical and relevant to participants; 4. Outcomes-based
	Incorporate a leadership capability framework	For example, the LEADS in a Caring Environment framework
	Embed an application of the learning/training transfer strategy	
	Calculate the return on investment (ROI)	
Personnel: faculty	Mixed	Internal/external to the organization; and experts/practitioners
Design: developmental activities	Individual	Multi-source feedback (MSF) and 360-assessments, psychometrics, goal setting, Leadership Development Plans (LDPs), certifications
	Educational	Lectures, webinars, small-group discussions, guest speakers, case study analyses, site visits, and assignments
	Experiential	Role play, simulations, training, impact projects, application exercises, internships, job shadowing, and presentations
	Relational	Individual and peer coaching, mentoring, networking, and engagement in a Community for Practice
	Resources	Readings, reflective journals, toolkits
Outcomes	Desired outcomes based on the Kirkpatrick (2006) framework [96] levels: satisfaction (1), attitudes and perceptions (2a), knowledge and skills (2b), subjective behavior change (3a), objective behavior change (3b), organizational change (4a), and benefit to patients (4b)	For a revised framework, please see Table 5.

Table 1. *Cont.*

Category	Element	Element Details
Evaluation	*Focus* of evaluation: both the program and participant outcomes	
	Type of data collected: both quantitative and qualitative	
	Type of data collected: both objective and subjective	
	Raters: multiple	Self, peer, program faculty, workplace supervisor
	Control group	
	When data were collected: pre/baseline, post, and post-post	

The third source was the systematic review by Lyons et al. (2020) [25], which identified 117 included studies of medical leadership development, replicated the aforementioned gold-standard methodology and categories, and added appraisals using the Joanna Briggs Institute (JBI) Critical Appraisal Tool for qualitative studies [106,107].

The final data source was a literature review specifically on training transfer guided by a robust peer-reviewed search strategy [108], which identified several meta-analyses [10,12,19,22,35,44,56].

2.5. Review Results

Combined, these reviews identified 172 unique studies from 2000 to 2020, including 30 high-quality studies. The collection of gold-standard elements drawn from this exclusive subset can inform further research and programming, including the choices proposed below [27].

2.6. Coding

To prepare for analysis, all included articles were coded meticulously. Fields included: program location, length, format (e.g., virtual), goals, provider (internal vs. external), faculty, participants and their selection criteria, curriculum, leadership models or frameworks included, developmental activities, resources, delivery details, desired outcomes, application strategies, evaluation details, and reported outcomes, as well as corresponding reported lessons. Each article was also examined for reported barriers to application and explanations for substandard outcomes [109], which informed proposed strategies to counteract these shortcomings.

2.7. Analysis and Framework Creation

Through an iterative, inductive process centered on the gold-standard studies, the data were analyzed for credible theory and evidence supporting effective approaches to program design, delivery, and evaluation, as well as for training transfer. The results were combined with the evidence and theory identified in Geerts (2024) [88] to form the empirical and theoretical bases for creating the framework. The Optimizing Framework was created, reviewed, and revised through multiple rounds of an iterative, inductive process, again centered on the gold-standard studies, as well as the principles of leadership development [88] (Table 2).

Table 2. Principles of leadership development [88].

No.	Principle of Leadership Development
Pre-program	Motivated and invested personnel with shared accountability
1.	Timely, customized, co-created, contextual, and aligned with the organizational needs and opportunities, True North elements, including the strategic plan/priorities, the talent optimization strategy, and the organizational context
2.	Integrated, coordinated, and embedded in the organizational culture, system-wide, including in all aspects of talent optimization
3.	Evidence-informed (design), including regarding transfer to work
4.	Experiential and application- and outcomes-based
5.	Aligned with the principles of adult and professional learning, including being multi-faceted with optionality
6.	Capacity-growing through increased self-awareness, efficacy, and adaptability
7.	Evaluated (program and outcomes) and evolving (during and after)
8.	Explicit about prioritizing expertise and equity, diversity, inclusion, and accessibility (EDIA)
9.	Enduring (individual) and sustainable (organizational)
10.	Relational and community-centered

3. Results

3.1. A Framework for Maximizing Leadership Development: The Optimizing System

Structure

The Optimizing System (Table 3) includes elements of gold-standard programs and strategies for maximizing their impact and ROI. Following a foundational set (F), they are organized sequentially according to when they can be implemented: before (P = Pre), during (D), at the conclusion of (C), and sometime after (A) leadership development programs. The strategies are mainly subdivided into major categories: program design, delivery, personnel (participants and faculty), direct application strategies, evaluation, and organizational culture and support. Each of the points below is worded in a directive manner in order to avoid repeating "Research suggests that the outcomes and ROI of leadership development are maximized when providers and/or organizations, . . ." Preceding the strategies below, "(GS)" indicates support by gold-standard evidence [25,27,105] (Table 1) and "ideally" indicates strategies pertaining to organizations with extensive leadership integration, as in A Leadership Organization. For each strategy, the supporting evidence, role in facilitating desired outcomes, and relevant considerations are presented, along with some application examples.

Table 3. The Optimizing System.

Foundations for Leadership Development Programs ("F", *n* = 9)		
Type	**No.**	**Strategy**
Foundational models	F1 *	Have a shared leadership model and capability framework as the common conceptualization and language of leadership
Organizational culture	F2 *	Earn executive support for leadership development as a key strategic enabler and investment in their people
	F3 *	Embed leadership development as a key component of talent optimization, aligned with the overall organizational purpose, values, vision, mission, and strategy (True North)
	F4 *	Provide funding and/or resources and protected time for leadership development
	F5	Ensure there is a safe culture of learning and leadership within the program and in the organization

Table 3. *Cont.*

Foundations for Leadership Development Programs ("F", *n* = 9)		
Type	**No.**	**Strategy**
Design	F6	Ideally, have developed a comprehensive ecosystem of leadership development interventions, experiences, and resources available to staff at all levels, aligned to career pathways
Leadership integration	F7	Ideally, have distributed leadership organization-wide, fully integrated into talent optimization, embedded in the organizational culture, and is an accountability expectation of all staff to develop and support the development of others
	F8	Ideally, synthesize graphically the various forms of leadership development and integration, as well as their interconnectivity to each other and to career pathways for all people, in a blueprint
Organizational support	F9	Develop a communications strategy for the program to relay progress and celebrate achievements
Pre-Leadership Development Strategies ("P", *n* = 23)		
Type	**No.**	**Strategy**
Context and engagement	P1 *	Conduct a needs, gaps, opportunities, and strategic priorities analysis involving key affected parties (stakeholders) to inform program goals and to generate engagement and support
Design	P2 *	Determine the scale and scope of the program, with a preliminary consideration of return on investment (ROI)
	P3 *	Apply a robust outcomes-based design strategy, beginning with selecting explicit program goals
	P4 *	Select ensuing desired outcomes, including level of mastery, at various levels
	P5	Ensure that diversity, equity, inclusion, and accessibility (EDIA) are prioritized in the selection of participants, faculty, speakers, and content
Participants	P6 *	Select participants intentionally to address organizational needs and priorities
	P7 *	Address participants' motivation to learn and ensure that they can commit fully to the program with supervisor and sponsor support
	P8 *	Have participants create a Leadership Development Plan (LDP) that includes personalized goals and desired outcomes aligned to their organizational plans and career pathways
	P9 *	Ideally, align programs to internal and/or external professional requirements (e.g., Maintenance of Certification), distinctions, or credentials
Design	P10 *	Select evidence-based program details (content, faculty, developmental activities, resources, structure, etc.) intentionally to achieve identified targets, customized for the participant group
Faculty and guest speakers	P11 *	For faculty and guest presenters, prioritize diverse, mixed teams (internal/external and experts/practitioners)
Design: curriculum	P12 *	Customize the curriculum according to pre-program engagement and the participant group, and embed the leadership model and capability framework
	P13	Reserve in-program time for emerging issues/topics
Design: developmental activities	P14 *	Select developmental activities according to their intended impact on desired outcomes and offer a variety
	P15 *	Embed activities in reflective or experiential learning cycles
Direct transfer strategies	P16 *	Ensure that application/transfer is included explicitly throughout
Design: structure and formal	P17 *	Select the optimal program structure and format
Delivery	P18 *	Incorporate the principles of leadership development and adult learning
	P19	For programs involving mixed participant samples, include designation-specific cohorts or syndicate sessions

Table 3. *Cont.*

Foundations for Leadership Development Programs (“F”, *n* = 9)		
Type	**No.**	**Strategy**
Evaluation	P20 *	Develop a robust evaluation framework for the program, including the ROI, and for participants, and consider a control group
	P21 *	Establish relevant baseline measures
Direct transfer strategies	P22 *	Conduct a barriers and enablers assessment and apply results to remove or circumvent obstacles and leverage enablers
	P23 *	Communicate explicitly the purpose, goals, content, outcomes, and evaluation framework of programs overall and individual components to establish a shared understanding and accountability among providers, faculty, participants, and other affected parties
During-Leadership Development Strategies (“D”, *n* = 17)		
Type	**No.**	**Strategy**
Direct transfer strategies	D1	Have participants select and engage accountability teams
Design	D2	Host a program launch and orientation event with senior leader support to level set and introduce personnel
	D3 *	Provide networking opportunities with program colleagues and faculty, internal senior leaders, guest speakers, past program graduates, etc.
	D4	Immerse in an internal Community for Practice (when available) to discuss, share resources, and connect more widely
Delivery	D5 *	Communicate to faculty and participants the purpose, relevance, rationale, and evaluation of each session, as well as the connection to other sessions and components
	D6 *	Maximize participant engagement and hold them accountable for attendance, in-class participation, and application/asynchronous exercises
	D7 *	Demonstrate a personal interest in all participants and their individual learning and development, as well as actively incorporating their expertise
	D8 *	Embed discussions of experiences and lessons from application exercises regularly to enhance and extend learning, as well as promoting accountability
	D9	Highlight emerging key themes, learnings, tensions, and ongoing questions throughout through different lenses
Feedback and evaluation	D10 *	Ensure all participants are provided with formal performance feedback from several sources during the program
	D11	Routinely provide time for participants to self-evaluate their progress with respect to their LDPs, and have them share their results with their accountability teams and adjust their goals accordingly
	D12	Collect informal feedback regularly from participants regarding effectiveness and proposed improvements and adapt the delivery accordingly
	D13 *	Collect formal anonymous feedback regularly from participants on the program, communicate the results to relevant affected parties, adjust accordingly, and communicate adjustments to participants
Design: curriculum	D14 *	Provide tools and resources (frameworks, checklists, models, technologies, services, etc.) that participants can sample in class and apply to their work
	D15	Engage with the dynamic and contextual nature of leadership and address emerging important internal and external issues as they arise
	D16	Gather input from participants and other affected parties on emerging priority topics and include them in the program as it develops
Direct transfer strategies	D17	Remind participants of the end-of-program culminating activity so they focus and prepare

Table 3. *Cont.*

Type	No.	Strategy
Foundations for Leadership Development Programs ("F", *n* = 9)		
Type	**No.**	**Strategy**
Program Conclusion Leadership Development Strategies ("C", *n* = 11)		
Type	**No.**	**Strategy**
Design	C1	In class, have participants reflect and provide feedback on each component of the program specifically to identify key learnings and ways to optimize, partly to prepare for the culminating activity
	C2	Celebrate participants through a formal event at the conclusion and invite senior leaders, supervisors, and sponsors, perhaps with past graduates, to cultivate a community
Direct application strategies	C3	Have a culminating activity whereby participants present their key learnings, program impact, and committed action items during the celebration event
	C4	Inform personnel of the post-program assessments
Design	C5	Extend development by having each participant update their LDP with post-program career and development goals and plans, aligned to talent optimization strategies
Evaluation	C6 *	Formally evaluate the program overall based on its goals, as well as its individual components and their link to outcomes
	C7 *	Evaluate participants' progress in relation to the desired outcomes and hold them accountable, recognizing successes and supporting improvement
	C8 *	Calculate the ROI of the program and communicate the results selectively
Organizational support	C9	Communicate the results of programs to affected parties within the organization to celebrate successes, justify the investment, and provide support for future programs
	C10 *	Ensure that there is adequate organizational support and resources to continue to facilitate further development
	C11	Review program results in the context of the Leadership Integration Blueprint and Roadmap, develop a community and culture of leadership, and build internal capacity
After-Leadership Development Program Strategies ("A", *n* = 5)		
Type	**No.**	**Strategy**
Evaluation	A1 *	Evaluate the program, its components, and participant outcomes again from the perspective of sustained learning linked to application and results
Direct application	A2	Providers remind participants, their supervisors, and their sponsors in advance of the post-program ratings of participant outcomes
	A3	Have participants report results of their progress regarding post-program goals
Design	A4 *	Formally review the various forms of feedback and revise the program based on the feedback and evolving organizational needs
	A5	Sustain the program community of graduates, including through refreshers and involvement in future iterations of the program (e.g., as speakers, mentors, etc.)

NB: "*" = based on gold-standard elements.

3.2. Foundations for Leadership Development Programs ("F", n = 9)

Foundational strategies pertain to what the organization has in place that supports leadership development programs directly or indirectly.

3.3. Foundational Models

F1 (GS). Have a shared leadership model and capability framework as the common conceptualization and language of leadership

Adopting a leadership model and a leadership capability framework is essential for defining what is meant by leadership conceptually and for describing the specifics of effective practice [88,110]. These resources can guide individual leaders' decisions and actions and serve as a common language to enhance collaboration. Organizationally, they can help structure strategic decisions and innovation projects [111,112]. They can also inform talent optimization functions and resources, such as performance and development targets and reviews, as well as curricula for development programs and 360-assessments, and facilitate integrating leadership organization-wide, which is vital for embedding leadership in the organizational culture and becoming A Leadership Organization [111,112]. It is beneficial when they are customized to the organization and when the capability framework describes behaviors at different levels of leadership (e.g., frontline, middle, senior, and executive) [86,113–115]. An example of the latter is the LEADS in a Caring Environment Framework (LEADS) [111,116], which is the most widely used resource of its kind in healthcare in Canada [117,118]. Integrating LEADS organization-wide has been empirically correlated in multiple sites with improved outcomes at the individual and organizational levels [119].

3.4. Organizational Culture

F2 (GS). Earn executive support for leadership development as a key strategic enabler and investment in their people

Leadership development can have strategic value in terms of advancing strategic priorities, optimizing performance at all levels, and increasing staff engagement, job satisfaction, and retention [25,27]. Executives who are convinced of this, versus viewing leadership development as expendable or a luxury, prioritize development, allocate resources, and actively endorse participants and programs, including as sponsors and guest speakers [7,34,49,120–124]. The lack of senior leadership support is commonly viewed as the principal threat to the application of learning [34,49]. Edmonstone (2009) reports that the leadership program he studied was successful when there was an executive-level champion during and after the program; conversely, when the program lacked a champion and that person's support, outcomes suffered [115]. Executives are also instrumental in leading by example by participating in development themselves [7,44,49,125], which can then cascade throughout the organization, and by shaping an organizational culture that encourages and expects leadership, experimentation, and innovation [7,49,126–130].

F3 (GS). Embed leadership development as a key component of talent optimization, aligned with the overall organizational purpose, values, vision, mission, and strategy (True North)

Leadership development is most effective when understood as a key component of talent optimization, alongside other complementary functions [88]. A robust talent optimization strategy requires a comprehensive framework [88], including talent acquisition (recruitment), talent integration (onboarding), talent specialization (identification), talent motivation (engagement, rewards, retention), performance validation (management), talent connection (social), and talent continuation (succession) [88]. These should be explicitly directed toward the organization's True North and reviewed regularly to ensure that they are intentionally addressing current and evolving strategic, HR, and business priorities [7,44,49,70,81,114,121,122,130–133]. Understanding the role of development programs in the broader context can increase participant motivation and commitment, as well as supervisor support.

F4. (GS) Provide funding and/or resources and protected time for leadership development

When development interventions underperform or fail, participants frequently cite a lack of time to participate fully, reflect on and discuss their learning, and/or apply these learnings or advance change initiatives at work [7,49,53,85,114,127,132,134,135]. For example, although impact projects can be a highly effective developmental activity when properly supported [40,136,137], if participants are expected to design and implement them on top of their existing workload without sufficient protected time or clear alignment with their current priorities, then frustration, incompletion, and poor results are likely [36,44,138,139]. Securing time for leadership development, covering course costs, providing stipends, and curating a library of in-house or online resources are further examples of organizational support, which is expected when leadership is integrated organization-wide [123].

F5. (GS) Ensure there is a safe culture of learning and leadership within the program and in the organization

To maximize their experience of, and contributions to, programs, participants, faculty, and guest speakers must trust that the developmental environment is safe, psychologically, emotionally, physically, and culturally, and conducive to experimentation and learning [140,141]. The "environment" refers to program spaces (physical or virtual), personnel, communication, and materials, as well as to participants' work contexts. Many important topics and issues, planned and emerging, are complex and even divisive or triggering, and thus require a tactful approach. A safe environment instills trust that one can express oneself candidly and confidentially, and that there is shared respect for all people and a commitment to supporting their development [140]. Safe learning and leadership cultures involve regular experimentation and honest and constructive feedback, expecting that mistakes and setbacks will occur and can catalyze deeper learning [92,142]. Confirming these norms at the outset can be reinforced by having participants sign written codes of conduct. Faculty are responsible for verifying that these are being upheld throughout and resolve any concerns quickly.

3.5. Design

F6. Ideally, have developed a comprehensive ecosystem of leadership development interventions, experiences, and resources available to staff at all levels, aligned to career pathways

Leadership development is optimized when instead of isolated interventions, there is a coordinated ecosystem of formal and informal development activities and resources [19,88,143,144]. These components are best organized using a framework according to their main characteristics and optimal utility. As that described in Geerts (2024), categories include individual, educational, relational, experiential, organizational, and resources [88]. Ideally, numerous options would be available to staff at all levels, aligned to their career pathways and development plans, with specific programs designated for key roles (e.g., new directors). Without such coordination, leadership development becomes a disjointed "hodge-podge of classes and lectures lacking coherence, logical progression, comprehensiveness, and relevance" ([145], p. 542). Limited programming also tends to lack equity, typically catering to a relatively small group of senior leaders, with few or no options for others. An explicit ecosystem can increase participants' motivation and commitment by clarifying the relevance of each component to their career journeys, enhancing outcomes [12,50,69,130,146].

3.6. Leadership Integration

F7. Ideally, have distributed leadership organization-wide, fully integrated into talent optimization, embedded in the organizational culture, and is an accountability expectation of all staff to develop and support the development of others

Similarly, when leadership is embedded in talent optimization and in the organizational culture as an expectation of all staff, as in an ALO, program participants, their colleagues, supervisors, and senior leaders are held accountable for their own development and that of others [88]. For example, when leadership and development goals are included in job descriptions, performance reviews, and promotion criteria, it signals that they are prioritized by the organization and that results are expected [12,50,69,130,146]. This enhances the perceived relevance of programs, participants' motivation and commitment to achieving their goals, and supervisor and colleague support offered to achieve success [12,50,69,130,146]. In leadership cultures, supervisors are responsible for their reports' development, increasing the support they offer participants and accountability for both parties. Similarly, senior leaders are actively engaged in development as sponsors, speakers, or mentors. Finally, participants are surrounded by colleagues who are also regularly engaged in development and expect application and experimentation, which enhances their openness, encouragement, and support as well.

F8. Ideally, synthesize graphically the various forms of leadership development and integration, as well as their interconnectivity to each other and to career pathways for all people, in a blueprint

It is helpful for organizations to have a graphic summary or blueprint of all aspects of the leadership development ecosystem and talent optimization functions, including the program and personnel details, goals, and interconnectivity of each to each other and in the larger scheme. Such a blueprint reinforces that leadership development is fundamental to achieving system-wide priorities and to supporting individual career development, and is an important step in building and sustaining a culture of leadership and innovation across the organization. It is beneficial to have a subset of supporting graphics specific to various roles and career tracks (e.g., physician leaders), which can be used in career planning and development discussions. In addition to serving as a visual inventory, the blueprint can also highlight gaps in programming, personnel, equity, and support for organizational priorities.

3.7. Support

F9. Develop a communications strategy for the program to relay progress and celebrate achievements

A formal communications strategy for leadership development programs can increase the cachet and perceived importance of programs, as well as supporting recruitment, engagement, and retention strategies. It can also be used to celebrate faculty, participants, and their achievements, as well as demonstrating the organizational commitment to its people and to leadership development. Finally, these measures can heighten social accountability among personnel to achieve program and individual outcomes.

3.8. Pre-Leadership Development Strategies ("P", n = 23)

3.8.1. Context and Engagement

P1 (GS). Conduct a needs, gaps, opportunities, and strategic priorities analysis involving key affected parties (stakeholders) to inform program design and to generate engagement and support

Informing development program design by a needs, gaps, and opportunities analysis can increase their quality, perceived relevance, and effectiveness [19,51,113,123,147]. Along with a review of relevant research and leading practices and an environmental scan of emerging trends in local and broader contexts, customizing programs based on input from diverse key affected parties (stakeholders) and experts can ensure that the purpose, priorities, desired outcomes, personnel, and content of leadership development will best serve the organization as it evolves [7,19,40,52,113,130,147–149]. This engagement also increases the likelihood that contributors will share ownership of the success of programs [7,49,63,85,113,122,123,130,147,150,151]. Despite this evidence, the practice is rare [28]. For example, McGurk (2010) attributes a lack of substantial or long-term program impact to the design's lack of connection to specific business needs and to the organizational context [152], reinforcing that leadership development is not one-size-fits-all [19,88,143,144].

Information can be gathered from affected parties regarding priority program focuses, participants, or strategic initiatives, as well as by examining recent organizational staff engagement survey results, 360-assessment aggregate reports, and the blueprint.

This process can indicate personnel, expertise, experiences, standards, and partnerships required to address current gaps, develop key talent, prepare people for specific roles (e.g., recently promoted leaders), increase capacity [122,148], and achieve strategic priorities, or to maximize opportunities to improve, optimize, innovate, or expand [7,28,130]. Gaps can include those in equity and diversity (EDI) representation in leadership positions and in development program faculty or participant samples.

Engagement can involve senior leaders and those in key roles [130], such as the strategy lead, HR and OD professionals, those directly impacted, such as clients or community members [78,80], and internal exceptional performers. The latter understand the capabilities and resources required to perform outstandingly [153]. Involving potential program participants in this process can also increase their motivation to develop and their accountability [7,48,154]. Similarly, engaging participants' supervisors, sponsors [7,12,44,72,81,122,155–157], and colleagues [158–160] in advance can increase the encouragement, resources, and support they offer, as well as their receptivity to experimentation as part of a learning and leadership organizational culture [7,49,126–130], which are vital to maximizing outcomes [7,34,49,52,56,69,124,147]. Involving a diverse pool can also uncover any misalignment that could obstruct outcomes if not addressed.

3.8.2. Design

P2. (GS) Determine the scale, scope, and provider of the program with a preliminary consideration of return on investment (ROI)

Determining the optimal and feasible scale and scope of programs, given the budget and internal capacity to design, deliver, support, and participate, is important. This involves estimating the cost (direct and opportunity) and ROI. This analysis informs choices of the number of participants, types, number, and format of activities, formal versus informal options [7], and whether to pilot-test prior to widespread implementation [82]. Pilot-testing can enable providers to assess the effectiveness of an intervention, to refine aspects based on feedback from faculty and participants, and to establish initial data to garner support for further development.

This also includes the decision of providers: internal, external, or mixed. In-house interventions are typically less costly [50,85], partially due to internal facilities and faculty, and are customized to the organization, referencing actual aspects of the participants' workplace and culture, resulting in increased perceived relevance [7,19]. In their systematic review, Lacerenza et al. [19] (2017) found that in-house interventions facilitated superior outcomes and ROI compared to external programs [28,50]. However, in-house programs can be insular, lacking different perspectives and insights about, and from others within, the broader, socio-political context [57]. Likewise, some organizations lack the expertise, resources, or capacity to design and deliver programs. Conversely, external programs can expose participants to diverse faculty, perspectives, and ideas, as well as professional facilitators and modern facilities [19]. However, they tend to be more expensive [85] and may disproportionately rely on standardized, "off-the-shelf" programs [24], which can detract from their perceived relevance and utility. Mixed programs can combine benefits of both; however, they require distinct coordination to maintain cohesion and continuity among component parts.

P3. (GS) Apply a robust outcomes-based design strategy, beginning with creating explicit program goals

Optimal programs feature a robust outcomes-based design, such as that described by Geerts et al. (2020) [27] (Table 4) and applied to the design of the Inspire Nursing Leadership Program (INLP) by the Canadian College of Health Leaders (CCHL) and the Canadian Nurses Association (CNA) [105].

Informed by the steps above [7,27,78,80,81], design begins with creating specific program goals that are customized for its purpose and participant group [34,85,128,152,154,161] and aligned to the organization's True North [7,49,81,114,131–133]. Without clear goals, there can be confusion, conflicting expectations, and poor outcomes [44,115,130,162]. Goals should be communicated to all involved prior to registration and at the outset, revisited throughout, and included explicitly in the evaluation framework [7,27,78,80,81]. It is beneficial if goals include increased participant self-awareness and self-efficacy [88], since these capabilities are proven to augment leadership effectiveness [34,163–165]. Self-efficacy refers to one's confidence in having the knowledge, capabilities, experience, resources, and capacity to meet role and performance expectations [166]. Program goals should extend beyond individuals' development to include those at broader scopes, such as the team and organizational levels.

Table 4. An outcomes-based design process [27].

Steps	Details
1.	Conduct a needs, gaps, opportunities, and priorities analysis and establish an empirical foundation
2.	Select explicit program goals customized for the purpose and participants and aligned to the organization's True North elements
3.	Select ensuing desired outcomes, including level of mastery, at various levels
4.	Select participants intentionally to address the needs, gaps, opportunities, and priorities
5.	Select program details intentionally and incorporate evidence-based elements according to their suitability to achieve identified targets
6.	Develop a robust evaluation framework
7.	Embed an application of learning/training transfer strategy
8.	Consider calculating the return on investment (ROI)

P4. (GS) Select ensuing desired outcomes, including level of mastery, at various levels

Next, providers identify specific desired outcomes to achieve the program goals [7,19,35,53,94,96,130,167,168]. To categorize these outcomes, drawing on Kirkpatrick and Kirkpatrick [96], the framework described in Geerts (2024) includes levels of increasing scope [88] (Table 5). Each of these is divided into subjective or objective (verified by external sources, tangible results, or statistics) [88]. There are also three core outcomes, which can relate to various scopes: environmental (Env.); equity, diversity, inclusion, and accessibility (EDIA); and economic (Ec.) impact (direct or indirect), such as cost savings [88].

Table 5. A framework categorizing leadership development program outcomes [88].

Scope	Level	Details
	Individual	
	1	Satisfaction
Participant	2a	Attitudes and perceptions
	2b	Increased knowledge, skills, and capabilities
	2c	Paradigm/mindset shift
	3s, 3o	Behavior change and performance improvement (subjective/objective)
	Beyond	
Team	4s, 4o	Team impact (subjective/objective)
Organizational	5s, 5o	Organizational and staff impact (subjective/objective)
Beneficiaries	6s, 6o	Beneficiary impact (subjective/objective)
Community	7s, 7o	Community impact (subjective/objective)
Region/nation	8s, 8o	Regional/national impact (subjective/objective)
International/global	9s, 9o	International/global impact (subjective/objective)
	Core outcomes	
	Env.s, Env.o	Environmental sustainability impact (subjective/objective)
	EDIAs, EDIAo	Equity, diversity, inclusion, and accessibility (EDIA) impact (subjective/objective)
	Ec.s, Ec.o	Economic impact (subjective/objective)

NB: "s" = subjective; "o" = objective.

Within individual-level outcomes, consideration should be given to the degree of mastery, which, drawing on Dale (1969) [94], is divided in Geerts (2024) into mastery of concepts (knowledge) and mastery of capabilities.

Concept mastery progresses from the ability to remember, understand, analyze critically, apply in theory or practice, reflect critically, contextualize, teach with authority, create new content, validate and refine, and reproduce the creation and validation process successfully [88].

Capability mastery progresses from the ability to remember, apply practically (and receive feedback), reflect critically on experience and feedback, be able to adapt approaches, practice and develop as a habit, contextualize and understand why different approaches are effective or not, analyze critically, teach with authority, create new content or approaches, experiment, validate and refine, and reproduce the creation and validation process successfully [88].

Naturally, different levels of mastery require different design, delivery, and evaluation approaches.

P5. Ensure that diversity, equity, inclusion, and accessibility (EDIA) are prioritized in the selection of participants, faculty, speakers, and content

Diversity is essential for ensuring programs are appropriately equitable and inclusive and for maximizing their effectiveness. Diversity includes gender, race, age, sexual orientation, and people living with disabilities or neurodiversity, as well as profession, stage of career, geographical location, sector, etc. Thus, it combines the diversity of identities, backgrounds, experiences, and perspectives. This priority builds on evidence that effective diverse teams outperform homogenous ones [169–177]. Providers should ensure that diversity is visibly reflected in program participants, faculty and speakers, and course materials (e.g., visuals and examples), and is particularly reflective of the staff and beneficiaries/community populations.

3.8.3. Participants

P6. (GS) Select participants intentionally to address organizational needs and priorities

Selecting program participants should be informed by the needs, gaps, and opportunities analysis and directed toward organizational and talent optimization priorities [128,150,178,179]. The latter can include onboarding new leaders, supporting executives to lead the system, or preparing high-potentials for promotion as part of succession planning [50,122,130]. High-potential employees are those who have the experience, expertise, and leadership to likely succeed in advanced roles [180,181]. Choosing people wisely is important, since the Edmonstone (2009) study reports that inadequate participant selection is a key contributor to program underperformance [115].

Another selection consideration is having teams or groups from the same organization or community participate in leadership development together [7,19,32,49,82,182–184], building on the distinction between (individual) leader development and (collective) leadership development described above [13]. The meta-analysis by Salas et al. (2008) found 20 per cent higher team performance outcomes resulting from team versus individual training [185]. Similarly, Dannels et al. (2009) reported that the impact of leadership development was significantly higher in organizations from which three or more participants attended than in those from which fewer took part [186]. These findings are perhaps attributable to participants developing their teamwork and leadership capabilities together using common language, feeling enhanced relevance to their shared workplace, and holding each other accountable.

P7. (GS) Address participants' motivation to learn and ensure that they can commit fully to the program with supervisor and sponsor support

Participant investment and capacity to participate in leadership development interventions are important pre-conditions of the principles of adult [85,93,187] and professional learning [88] and major predictors of outcomes [7,12,13,24,93,159,188–195]. Participant motivation is influenced by their perception of the program's utility and relevance to their passions, accountabilities, job performance, and career pathways, which are enhanced through personalization of goals and projects [7,44,196]. Participants' commitment and engagement are equally important, since without full attendance, assignment completion, and in-session participation, individual and collective learning is diminished [48,145]. Upholding attendance and participation requirements can counteract this; however, it is most effective when supervisors temporarily modify participants' workloads to allow time to apply their learning [36,44,138,139]. Motivation and commitment are increased when participants must apply to programs and be selected, as well as when supervisors and sponsors nominate or personally endorse them, check in regularly regarding progress, and attend important sessions (e.g., first and last) [85,187].

P8. (GS) Have participants create a Leadership Development Plan (LDP) that includes personalized goals and desired outcomes, aligned to their organizational plans and career pathways

Having a program Leadership Development Plan (LDP) enables participants to record and commit to personalized goals and desired outcomes aligned to their career aspirations, as well as helping them organize their learning and track their progress [86]. The personalization of program goals, projects, and desired outcomes can increase participants' perceived relevance, motivation and commitment, and impact [7,44,82,93,113,128,152,197,198]. For projects, when participants consult with non-program collaborators and beneficiaries regarding the need, approach, and metrics beforehand [105], outcomes are enhanced [36,85,188,199]. Goals can be optimized when they are SMART: specific, measurable, attainable, results-based, and time-bound [200]. These goals are optimized when aligned accountably to participants' workplace development plans, performance metrics, and career pathways [12,50,69,130,146].

Though rarely implemented [53,152], personalizing program goals is also important because of the proven impact of several individual characteristics on application outcomes. These include participants' innate orientation to learning and goal achievement [195], their baseline proficiency of leadership capabilities and their capacity limits [201], their ability to develop when challenged [190], and their perceived control over their own development and achievement of outcomes [188]. Additionally, having participants' supervisors approve their goals can verify their feasibility and result in additional support to facilitate their successful achievement [7,198].

P9 (GS). Ideally, align programs to internal and/or external professional requirements (e.g., Maintenance of Certification), distinctions, or credentials

Program credibility and participant motivation and commitment are increased when successful completion "counts toward" internal and/or external professional requirements, distinctions, and credentials, linked to their career pathways [105,202]. The former can refer to routine organizational mandates or those required for advancement, or externally to satisfy annual Maintenance of Certification for professional bodies. Similarly, interest is often heightened in programs linked to earning distinctions, such as diplomas, certificates, university degrees, or professional certifications, such as the Certified Health Executive (CHE) designation offered by the Canadian College of Health Leaders [105,202].

Organizations must balance the appeal of individual distinctions with equity, resource, and capacity considerations. That is, highly credible programs are typically expensive, highly time-consuming, and consequently, only available to a select few. Thus, it is important to ensure that organizations provide options more broadly that are feasible given limited funding, internal capacity to design and deliver/implement programs and tools, and staff capacity to participate, given their workloads and required coverage. One solution is having a wide range of formal and informal leadership development options, including structured on-the-job learning, available to everyone and built into talent optimization requirements, and to design a mechanism or passport to track how each activity counts toward credentials.

3.8.4. Design

P10 (GS). Select evidence-based program details (content, faculty, developmental activities, resources, structure, etc.) intentionally to achieve identified targets, customized for the participant group

To maximize effectiveness and efficiency, program details should draw from the best available theory and evidence and be customized according to the needs analysis, identified targets, and participant group [7,27,78,80,81,105]. This approach has been proven to increase program outcomes considerably [7,203]. Organizations lacking the capacity to review the evidence comprehensively can reliably select program details from the gold-standard elements identified by Geerts et al. (2020; 2024) [27,105] (Table 1).

Customization can cater to participants' geographical location, domain or sector, profession, organization, level of leadership, role, and previous leadership development experience, as well as the size of the group [86,110,113,115]. For example, one would expect that a program for international chief executive officers (CEOs) would differ from one for newly hired frontline supervisors in a small organization. Gathering input beforehand from top performers in the same area or facilitators with relevant experience can provide insight into content, program formats, and delivery techniques best suited for the participants. The design selection process should involve outlining explicitly how each aspect of the design, delivery, and evaluation contributes to achieving program goals and desired outcomes [7,27,35,85,93,94,127,130,147,168].

3.8.5. Faculty and Guest Speakers

P11. (GS) For faculty and guest presenters, prioritize diverse, mixed teams (internal/external and experts/practitioners)

The best programs feature credible and skilled faculty, mentors, and guest presenters with diverse expertise and backgrounds. Lyons et al. (2020) identified a statistically significant correlation between programs with mixed faculty in terms of (a) internal and external to the organization, and (b) experts and practitioners in achieving organizational outcomes [25]. For both, the faculty should have established credibility that resonates with the participants.

Having internal faculty demonstrates their commitment to development [7,44,113,123,148,151] and can enhance the perceived relevance of interventions to the shared professional context [124]. Their first-hand experience enables them to address underlying organizational norms and culture, including their protocols, challenges, and resources, as they affect leadership, in a way that external facilitators cannot [11,113,128]. Additionally, participants report appreciating the value of networking directly to internal senior leaders, a benefit which extends after the program [110,113,204]. Involving internal outstanding performers with relevant roles and expertise, including program participants and graduates, can augment the quality and relevance of the content, as well as the prestige of the programs, and aligns with the principles of adult [93] and professional learning [88].

Conversely, external faculty can offer professional facilitation, prominent experience, and diverse perspectives, which can enhance the prestige of programs, broaden and deepen their content, and avoid insular thinking, though they are typically more costly [11,125,205]. Mixed faculty can draw on the strengths of both approaches, and a diverse variety offers assorted perspectives, the value and utility of which may resonate differently with individual participants.

3.8.6. Curriculum

P12. (GS) Customize the curriculum according to pre-program engagement and the participant group, and embed the leadership model and capability framework

Customizing program content based on the needs analysis, the participant group, and their professional context increases the perceived relevance, utility, and outcomes of programs [34,85,128,152,154,161]. The curriculum involves topics (knowledge), skills, behaviors, capabilities, and perspectives that participants need, along with pressing issues in the internal and external professional context [7,35,44]. Although some leadership topics and capabilities appear to be universal, such as communication, the Lyons et al. (2020) [25] systematic review found no correlation between specific curriculum content and improved program outcomes [7,48]. This reinforces the importance of customization versus off-the-shelf offerings [19,143,144], which is amplified by considerations of different desired degrees of mastery [88]. Similarly, content should be prepared within the dynamic and complex leadership perspective [100,101]. Research suggests that management competencies, or "hard skills", such as business acumen and delegating, appear to be easier to learn than leadership capabilities, or "soft skills", such as adaptability or emotional intelligence [206].

Customizing the content for the participant group should involve selecting materials, examples, and resources from contexts to which participants can relate, whether similar or intentionally contrasting to avoid insular thinking [93]. For the latter, facilitators should allow time for reflection and discussion about how external examples could apply locally. The more senior the participant group, the more the focus should shift from technical management and one-on-one interpersonal skills to more strategic systems of thinking capabilities, broader innovation, and the development of coalitions with those outside one's organization and sector. For organizations that have an internal leadership model and capability framework, they should be interwoven throughout the program to demonstrate continuity and applicability. Finally, program design should consider what other development opportunities participants are undertaking and relevant talent optimization functions that could be referenced for enhanced cohesion and relevance. For example, participants could be invited to discuss issues raised in class with their (non-program) mentors or consider how they relate to their organizational development plans.

P13. Reserve in-program time for emerging issues and topics

Even with robust curricula, important topics or issues may arise during interventions that appear valuable to address in class. These include topics participants feel are important, which are either not covered in the curriculum, or are worthy of deeper exploration. They can also involve pressing contextual issues, such as new government legislation or organizational restructuring, which can serve as real-life, real-time case studies to scrutinize. Incorporating these emerging priorities can augment participant learning and maintain its relevance and applicability. Time can be reserved formally in synchronous sessions, through support components, such as coaching, or in discussion forums. For example, the final module of a year-long executive leadership program by the Telfer School of Management, University of Ottawa, includes three concurrent master classes, the topics of which are only selected midway, based on participant preference.

3.8.7. Design: Developmental Activities

P14. (GS) Select developmental activities according to their intended impact on desired outcomes and offer a variety

Programs are most effective when their developmental activities are evidence-based and selected specifically based on their utility, individually and collectively, to achieve program goals, given the participant group [39,53,94,128,132,147,148,152,159,204,207]. Activities vary in their efficacy to facilitate different types of outcomes and the extent to which they link directly to workplace application. Some activities serve to enhance others or work best in combination, such as executive coaching debriefs following multi-source feedback (MSF) [19,208]. Finally, offering a variety of activities, especially with some optionality, is beneficial in accommodating different learning preferences [7,19,94,113–115,122,128,152,161,207,209].

The framework by Geerts (2024) provides five categories of development activities according to their central features, purposes, functions, and connection to application [88,105]. The categories are as follows: *Individual* components that provide focus and enhance self-awareness, structuring, such as goal setting and career planning [210], diagnostics, such as psychometrics, 360-assessments [38,210], performance feedback, reflection [182], and credentialling [202]. *Educational* components, typically involving presented didactic content, include lectures [136,161], guest speakers [147], site visits, and case study analyses [147].

Experiential activities, involving practice in a safe environment [60], such as role play and simulations [136], workplace application exercises [13,36,41,53,85,136,147,198,211,212], and leadership impact projects [40,136,137]. *Relational* learning, which results from dialogue [110,122,128,147,162,204,207,213,214] and includes in-class or forum discussions, mentoring [128,215], coaching—individual [38,40,137] and peer [216]—networking [217], and communities of practice [218]. Coaching and mentoring are particularly important during longer programs by increasing participant focus, accountability, and self-awareness, by providing extra learning insights, and by navigating challenges experienced in application [11,86,114,128,148,207,213,219]. Bowles et al. (2007) demonstrated that participants who received coaching achieved significantly higher results than their non-coached counterparts [213]. In-class activities can be reinforced by *resources*, such as articles and multi-media clips, with clear expectations of pre-work and asynchronous tasks, such as required readings and posting in online forums.

Although formal leadership programs often default to traditional lecture formats [39,183,184,220], multifaceted interventions with experiential components, coupled with structured on-the-job learning, are becoming more common [27,34,113,195,198,221].

Finally, designers should consider whether artificial intelligence and other forms of technology can be incorporated beneficially, the advantages, limitations, and feasibility of which continue to evolve [7].

Therefore, selecting the optimal package of experiences, resources, and tools for the purpose, goals, formats, and participant group is essential for maximizing program outcomes.

P15. (GS) Embed activities in reflective or experiential learning cycles (RLCs and ELCs)

The impact of some developmental activities can be maximized when they are embedded in reflective or experiential learning cycles (RLCs and ELCs), drawing on Kolb (1984) [97], which require designated time for each component [7,35,49,53,88,97,113,123,222]. Both these cycles involve sequential processes with a developmental activity in the center, framed before and after by strategies to optimize learners' development. Reflective learning cycles (RLCs) can apply to all activities, whereas ELCs pertain to experiential activities and involve performance feedback.

The sequence is as follows: initial interest/questions, goal setting, the activity or experience, performance evaluation and feedback (ELCs only), discussion, reflection, revision of goals, support, and repeat (ELCs only). This process accelerates the rate at which participants learn from experiences and progress toward mastery [7,19,82].

To sharpen focus and increase participants' motivation and commitment, the cycles start with exploring their interest in the activity and potential questions, which prime them to engage fully. Next, they set activity learning goals, aligned to their program goals [7,223], and then experience the activity. For ELCs, after and, when appropriate, during experiential activities, such as simulations, participants use pre-defined criteria to self-assess their performance, which is a key leadership skill [7,44,224–228], and receive feedback from fellow participants, program facilitators, and/or workplace colleagues [7,19,35,65,82,130,229,230]. Feedback should be timely, considerate, constructive, and actionable [7,231,232]. Comparing one's self-ratings to others' can gauge their congruence, enhancing self-awareness [225,233,234]. Analyzing and discussing video recordings of these experiences can be highly beneficial [161,235–237]. Although excessive evaluation should be avoided [44], the effectiveness of experiences with no feedback appears to be comparatively reduced [113,130]. For all cycles, debriefing the feedback received and/or the experience of the activity with peers and/or facilitators enables participants to identify outstanding questions, capabilities to further develop, strategies that were effective (or not), and potential next approaches [7,229,238].

Participants should also be granted time to reflect on their experience, feedback, and lessons, as well as their relevance to their work context [75,226,239]. This exercise serves as an additional heuristic developmental tool [198,240]. For example, the most consistent request by participants following a week-long executive leadership development program, run jointly by The Staff College: Leadership in Healthcare and the UK Defence Academy, was for more time to reflect on the course content [241]. This stage is also an opportunity for participants, in consultation with faculty and/or sponsors, to re-evaluate and consider adapting their program goals [65,93,95].

Finally, for ELCs, this cycle can be repeated, since practicing skills and behaviors, even after correct performance, deepens capacity based on varied experiences and creates automatic responses, the latter of which frees cognitive energy, which can be dedicated to more complex tasks [7,242]. This repetition can be enhanced by gradually increasing the difficulty of the conditions and decreasing facilitator support, leading to greater self-efficacy [7]. This process relies on a psychologically safe space in which participants can experiment, commit errors, and receive follow-up support that enables them to develop their knowledge, skills, adaptability, and resilience [140,141].

Reflective and experiential learning cycles can be embedded in programs in a myriad of forms, with some steps being prioritized and others included informally or omitted based on their anticipated utility in maximizing activity impact.

3.8.8. Direct Transfer Strategies

P16. (GS) Ensure that application/transfer is included explicitly throughout

Embedding the application of learning to work in intervention designs is essential for consolidating learning, progressing toward mastery, and maximizing program impact [19,49,53,97,237,243]. When not built in, research has shown consistently that transfer is limited and that participants typically revert to previous behaviors [44,132,138,244–246]. The experience of applying learning on-the-job throughout development programs also validates and deepens participants' understanding and efficacy, given the complex nature of leadership. Validation is essential, since the military expression "no strategy survives first contact with the enemy" indicates that no training environment can replace lessons learned in real conditions. For example, when participants implement projects during the program, the process reveals insights beyond taught content, which can be discussed in class to contribute to overall program learning. Post-application discussions also enable fellow participants and faculty to provide support or propose alternative approaches when challenges are encountered, an opportunity not afforded when application is left until after the program [7,81,114,147]. In addition to lessons participants can learn and capabilities they can develop from workplace application, the process can also enable them to enhance their relationships with colleagues and understand their priorities and readiness for change. Finally, application, particularly through projects, can also provide evidence of outcomes and return on investment, compared to a project proposal intended to be actioned following the intervention.

3.8.9. Design

P17. (GS) Select the optimal program structure and format

Optimal designs involve logistics (structure and format) determined specifically to achieve program goals, given the details above. Aspects include the program location (in-house, external, or mixed), format (in-person, virtual, hybrid, or blended), scheduling (synchronous, asynchronous, or mixed), social nature (communal or self-directed), length, and optionality. For each aspect, it is presumed that "mixed" could involve combinations of the alternatives presented below.

In terms of location, in-house programs avoid facility rental costs and travel time and expenses, while also featuring the physical spaces and equipment from the participants' workplace, increasing relevance [7,19]. Off-site interventions, on the other hand, can minimize work-related interruptions, enabling participants to fully engage [19]. Suutari and Viitala (2008) found no difference in outcomes when comparing in-house to external programs [195].

Format-wise, in-person interventions can increase participant engagement and experience, can be more effective for experiential, creative, and interpersonal activities, and allow for informal interactions ("watercooler discussions") and networking opportunities. They also minimize technological interruptions. Virtual interventions are typically less costly, more convenient and less disruptive scheduling-wise, and can involve larger numbers of participants from a wider geographical range. The latter can be important from an EDI and physical accessibility perspective, although access to and familiarity with technology can be an issue. Hybrid (in-person and virtual, simultaneously) aspects can be inclusive, accommodating those unable to attend in person for planned or unexpected reasons; however, this format can involve double the effort to design, coordinate, and facilitate both groups concurrently, with reduced effectiveness and participant commitment to attending in person, given the virtual option. A preferred alternative is a blended format, involving non-overlapping in-person and virtual components with intentional choices about which components are in which format.

Further format considerations involve which components are synchronous, which feature shared experiences, discussions, and social accountability, versus asynchronous, which are more convenient but rely on pre-prepared content and parallel interactions. Similar benefits and limitations exist with cohort-based programs, with groups participating together, versus individual, self-directed approaches.

In terms of the length of leadership programs, Lacerenza et al. (2017) note a linear, positive relationship between longer programs and improved outcomes at individual and organizational levels [198]. The authors suggest that demonstrating cognitive, behavioral, and organizational changes takes time [247–249], as does progressing toward mastery [23,88]. Longer programs also support the implementation of impact projects, which necessarily produce outcomes [41,212]. Lengthy programs risk participant workload stress and cognitive overload [44,250], which can be reduced by spacing sessions [12,19]. Spacing, along with providing reflection time, increases the rate and volume of information retained, as well as enabling participants to apply their learning in between sessions [198,239,251]. Conversely, the effect sizes for shorter programs are reportedly smaller [12,35]; however, they can be effective for task-based, micro-burst, or just-in-time training [32,183].

Finally, designers must determine whether any program components are optional. Optionality can increase participant motivation and engagement, since they attend only sessions that interest them; however, it can increase design and administrative work to coordinate, reduce cohort continuity and commitment, and deprive participants of exposure to important content that they skip.

3.8.10. Delivery

P18. (GS) Incorporate the principles of leadership development and of adult learning

To optimize development programs, the design and delivery should align with the principles of leadership development [88] (Table 2) and with Knowles's (1984) principles of adult learning [86,93,95,115,154,187,252]. The latter involves addressing their pre-program motivation and commitment to learn, the strategies for which have been described above [85,187]. This is further enhanced by self-directed components and customization [93]. The first principle involves facilitators actively drawing on participants' expertise as a source of valuable content during discussions and by providing feedback [93]. Second, faculty should link new learning to participants' existing knowledge and propose how it can be extended and applied to their work [93]. Third, program content should focus on its relevance to participants' professional context [93], which is verified through background engagement and analysis, customization of the design, and the selection of appropriate faculty and speakers. Finally, professional learners prefer outcomes-based programs [93], which is the basis of this framework.

P19. For programs involving mixed participant samples, include designation-specific cohorts or syndicate sessions

There is ongoing debate regarding whether participant samples in leadership development programs should be specific to designations, including their sector, organization, profession, level of seniority, and roles, or whether the groups should be mixed [27].

Many open-enrollment leadership programs at business schools and private providers involve mixed samples, which can attract enough numbers at premium rates to afford high-profile faculty, advanced technology, and modern facilities, as well as exposing participants to diverse peers and perspectives. Mixed, in-house programs enable participants to learn with colleagues outside their usual circles, which can provide a valuable understanding of and relationships with those in other roles or departments, as well as potentially increasing collaboration and teamwork [32,36,85,134,136,162,186,209,253].

Conversely, supporters of designation-specific samples, such as executive- or physician-only, contend that the commonalities among participant backgrounds, contexts, experiences, and scope of responsibility, along with the corresponding design customization, positively influence program outcomes [24,86,113,115,147,215,239]. This is partly attributable to a shared trust and sense of psychological safety among similarly qualified peers, which increases their openness to be vulnerable in a way that they would not in mixed groups [239]. Similarly, some programs are reported to have failed, at least in part, because of mixed samples. For example, although mid-level participants in the study by Pradarelli et al. (2016) described several benefits of a leadership intervention, many senior-level participants stated that it had no impact, suggesting that including junior-level participants (residents) diluted the caliber of the program [86].

An alternative is embedding designation-specific cohorts or small group sessions within mixed-sample programs. These sub-groups could provide an extra peer support network [7], in which those facing similar professional demands can discuss workplace challenges and can problem-solve collectively in a trusted environment [254,255].

3.8.11. Evaluation

P20. (GS) Develop a robust evaluation framework for the program, including the ROI, and for participants, and consider a control group

Program evaluations typically only assess participant satisfaction [57], but a robust outcomes-based evaluation framework is essential for maximizing program impact [11,12,21,34,122,130,198,256] and for demonstrating ROI [257]. Evaluating the program overall and its components in reference to their goals can inform quality improvement during and following the intervention. A formal evaluation framework also reinforces that affected parties value the program and expect that outcomes will result from it [130,223,258]. Similarly, making faculty and participants aware beforehand of metrics at different levels can enhance outcomes by providing focus, motivation, and accountability [12,34,198]. Tangible participant outcomes, such as cost savings generated through impact projects, can be used to calculate the program ROI by measuring them against the expense and opportunity cost of the intervention [257].

Assessment should involve collecting various forms of data (formal, informal, subjective, objective, qualitative, and quantitative) from multiple sources at the outset, throughout, at the conclusion of, and six to nine months after interventions [27,34,80,130,145,259]. An example of such a framework in practice is described in Geerts et al. (2024) [105].

Formal evaluations are important for maintaining program credibility, quality standards, and accreditation, when applicable, and for justifying the investment to affected parties. Informal assessments can offer providers, faculty, and participants insights into successes and areas for improvement.

Qualitative data through free-text responses can provide elaborations on performance ratings/feedback and descriptions of how participants have applied their learning to work, as well as of unanticipated outcomes or those not easily quantified, such as increased confidence [105]. They can also allow for nuances of in which ways and to what extent interventions and components were effective (or not) [34,51,74,260]. Quantitative data through Likert-scale ratings and enumerable outcomes enable quick assessment, analysis, comparisons, and discussion, and can minimize interpretive bias, enhancing the reliability of the results [261].

Subjective data (perceptions) include participant self-ratings and self-reported outcomes, whereas objective data can involve external ratings, statistics, or externally verifiable results, which enhance their credibility. Combining these forms offers deeper and more complete insights than singular approaches [262–264].

Similarly, in terms of raters, balancing participant self-ratings with those of others, such as fellow participants, program faculty, and workplace colleagues or supervisors, provides additional opportunities for learning and self-awareness, and increases the credibility of the results, since self-reports alone have been shown to be unreliable [12,34,35,52,53,265].

Finally, although rare, it is useful to identify a non-intervention control group of individuals, teams, or organizations (clusters) that is as similar as possible to the participant group so that the key differentiating variable is the latter's involvement in the program. Administering the same assessments to both groups and collecting identical data to track the participant group's relative progress can strengthen claims of program causal effect and minimize speculation concerning confounder influence [263].

P21. (GS) Establish relevant baseline measures

It is important to establish baseline figures linked to program and individual goals to focus goal setting, measure desired outcomes and participant development, gauge program impact, and calculate ROI [27,161,248]. Clarifying specific starting points provides benchmarks for further assessments, as well as focus for participant goal setting and discussion. This process involves considering if pre-existing data can be used, such as recent participant multi-source feedback (MSF) or organizational engagement survey results, and which should be gathered specifically for the program. A similar consideration is which data should be standardized across the participant group for comparative and reporting purposes, and which should be personalized. Data can include subjective (self-reports) and objective items at the individual and organizational levels, as well as those related to application projects [121,130,131]. Individual-level measures can include participant self-ratings of knowledge, skills, or behaviors, recent performance reviews, or other internal talent optimization data. Organizational measures can include staff engagement survey results, turnover rates, etc. Finally, data relevant to projects can include performance metrics, such as recent user satisfaction scores or average service wait times. When applicable, similar data should be gathered from the control group.

3.8.12. Direct Transfer Strategies

P22. (GS) Conduct a barriers and enablers assessment and apply results to remove or circumvent obstacles and leverage enablers

Though rarely conducted before development programs [53], a barriers assessment involving input from key affected parties and participants can highlight workplace cultural obstacles that could inhibit achieving desired outcomes [7,44,63,128,130]. Providers can use this information to circumvent impediments and increase program success. Barriers can include conflicting internal priorities, policies, or metrics; inflexible processes or practices that inhibit change; lack of senior leadership support; insufficient resources; or inadequate time for participants to implement changes [114]. Pre-program assessments should also investigate enablers in terms of organizational strategic priorities, initiatives, personnel, networks, and resources that can be leveraged to maximize results. Other enablers include talent optimization functions and non-program development opportunities in which participants are involved, which can be referenced as complementary resources.

Verifying that participants' colleagues and workplace environments are conducive to application by circumventing barriers and leveraging enablers is vital to maximizing outcomes [7].

P23. Communicate explicitly the purpose, goals, content, outcomes, and evaluation framework of programs overall and of individual components to establish a shared understanding and accountability among providers, faculty, participants, and other affected parties

To maximize programs, all personnel must be aware of, and formally commit to, the program goals, desired outcomes, and evaluation metrics [34,65,114,115,122,130,162]. Similarly, it is important that faculty and guest speakers are informed of the program details, including which sessions precede and follow theirs, as well as how they will be evaluated. Providers may also choose to share program goals and highlights of outcomes and evaluation results with key affected parties, such as participant sponsors, organizational senior leaders, and a governance committee, when in place.

Communicating the goals and results transparently can activate the social contract effect and increase results [65,114,266]. A social contract can increase participant motivation and accountability to achieve goals because of implicit pressure they feel to report positive progress, even to those without formal authority over them. Engaging others in this way can also augment the support they offer in terms of advice, networking connections, or other resources.

Finally, participants can be primed from the outset for an end-of-program summary presentation of their key program learnings, outcomes achieved, and further steps, which is described below.

3.9. During-Leadership Development Strategies ("D", n = 17)

3.9.1. Direct Transfer Strategies

D1. Have participants select and engage accountability teams

Participant commitment is enhanced when they share program details and their individual goals and desired outcomes at the outset with a trusted accountability team [105]. Teams can comprise their workplace supervisors or sponsors, fellow participants, and non-program colleagues [105]. Program designs can include designated checkpoints throughout the program when participants are expected to share their learning and results with their teams and discuss how to optimize program outcomes [105]. In addition to increasing participant commitment to achieving results through this process, feedback from their teams can also enhance their learning.

3.9.2. Design

D2. Host a program launch and orientation event with senior leader support to level set and introduce personnel

Whether as a standalone event or at the beginning of the first session, it is helpful to have an official program launch and orientation with participants, faculty, and, when possible, sponsors and organizational senior leaders. This event is an opportunity to review the program goals, details, expectations, reminding participants of their commitment, resources and how to access them, and housekeeping items, as well as enabling personnel to meet. Faculty can also introduce important supports, such as the Leadership Development Plan (LDP), journals, accountability teams, and the Community for Practice.

The presence of organizational leaders reinforces the organizational investment and demonstrates the value that they place on the program and its people. They can also provide their perspectives on the relevant organizational context: why this (leadership development and the program specifically), why you (participants), and why now (the program's strategic importance in the evolving organizational context)? Vocal support from senior leaders, as well as their implicit endorsement of the expectations, increases participant motivation, commitment, and accountability, and improves program outcomes [7,44,49,70,81,114,121,130–133,267].

D3. (GS) Provide networking opportunities with program colleagues and faculty, internal senior leaders, guest speakers, past program graduates, etc.

Networking events with colleagues, faculty, guest speakers, and past program graduates are important for several reasons. First, social functions allow for one-on-one or intimate conversations among participants and with faculty and guests beyond the time allotted in class. These connections may become or deepen relationships, including with those outside one's existing circles, which can lead to collaborations or coalitions that outlive the program [128,134,147]. Second, interactions in less-formal settings can enable participants to broaden and consolidate their learning by articulating their thoughts, hearing the perspectives of others, and together discussing feedback, issues, challenges, and outstanding questions, as well as teasing out implications and potential applications in dialogue [128,134,147]. Third, this type of environment appeals especially to those uncomfortable or unwilling to be candid in front of the full group. Fourth, providers and faculty can also gather opportune informal feedback from participants and fellow faculty regarding their program experiences and suggestions for optimization. Finally, even in a relaxed setting, describing one's goals, progress, and strategies can activate the social contract effect and its advantages, since listeners are likely to inquire later regarding progress [65,114,266]. Interestingly, although participants cite "networking benefits" as an additional reported outcome in post-intervention evaluations, it is rarely identified as an explicit pre-program desired outcome [53].

Providers can organize official networking events during or immediately after class time, though this requires administrative work and often extra costs for venues and/or catering, which the hosts are normally expected to cover. Alternatively, participants can be encouraged to self-organize and be welcomed to advertise in class; however, attendance may suffer. A third option is treating meals included in the program, such as lunch for full-day sessions, as networking time. Regardless, social time together outside of class is valuable.

D4. Immerse in an internal Community for Practice (when available) to discuss, share resources, and connect more widely

Similarly, when the organization and/or the provider has an online Community for Practice, immersing personnel in it as part of the program offers a forum for asynchronous announcements, questions, and discussions; for sharing, requesting, and housing resources; and for connecting with others in the wider community. The latter can involve mentoring relationships or peer support or coaching units, or can be used as a medium to share desired outcomes and projects that may interest others. The benefits of this immersion can extend beyond the program conclusion. Creating private subgroups for each participant cohort and for all program graduates can help create community and sustain group solidarity.

3.9.3. Delivery

D5. Communicate to faculty and participants the purpose, relevance, rationale, and evaluation of each session, as well as the connection to other sessions and components

To maximize the experience and outcomes of sessions, all personnel must be aware of their purpose, goals, details, and rationale, including their connection to other program components [34,65,114,115,122,130,162]. The purpose means the session's role in achieving the overall program goals. Advanced relevance includes linking program content and tools to important internal resources or initiatives, such as the launch of a new performance management system. Since maximizing participants' time and development is important, the rationale includes why design choices were made for given sessions and their goals. For example, to explore innovation, faculty might justify the time, disruption, and expense of visiting a leading-practice workplace by describing its experiential merits, versus a virtual tour or inviting a representative as a guest speaker. Providers should also meet with faculty beforehand to discuss this information, as well as the details of the participant group and their context, and any relevant issues that have arisen thus far. Faculty can then prepare their materials to align to the program and session goals and to intentionally build on, and avoid repeating, companion sessions. Providers should also confirm the faculty's approval of the details of the components for which they are responsible before distributing them to the participants.

Materials should be consolidated in efficient packages and circulated in advance. Information can include summary agendas with topics, timings, and faculty, as well as a fuller collection of individual session descriptions and their corresponding learning objectives, faculty details, and supporting resources. At the beginning of each session, facilitators should review key details with the group in terms of its topic/focus, facilitator(s), aims, rationale, success metrics, and how it fits with previous and subsequent sessions. Clarifying these points enhances the perceived relevance of each session and eliminates confusion, questions, and related distractions [7,44,65,130].

D6. (GS) Maximize participant engagement and hold them accountable for attendance, in-class participation, and application/asynchronous exercises

Maximizing personnel experience and program impact requires full participant engagement in all aspects. Faculty are responsible for maintaining this standard consistently, since if engagement is low overall or limited to certain participants, outcomes will suffer. Expectations include attending all required sessions on time, avoiding distractions while in session, concentrating on the task at hand, contributing regularly to discussions and activities, and completing asynchronous exercises regularly. Even dedicated professional learners often need some benevolent management to prioritize program requirements and resist allowing pressing work or life demands to dominate or distract their attention. Similarly, without facilitation, some participants will remain quietly in their comfort zone, happily observing as more outspoken participants dominate discussions or activities. When participants fail to meet participation standards and faculty neglect to hold them accountable, typically to avoid conflict or making people feel uncomfortable, it sends an implicit message to the group that engagement is optional. This then has a spillover effect to others, which is challenging to reverse. Naturally, extenuating circumstances arise and, in some cases, being unwaveringly rigid without reasonable empathy can be inappropriate and can corrode the trust and sense of safety in the learning environment. Faculty must aim to establish a heathy balance.

Ideally, striving for intrinsic motivation and self-imposed accountability is best, rather than punitive tactics. One approach is the pre-established transparency of results, such as sharing attendance reports with participants' sponsors or supervisors, which may prompt a discussion between them regarding what support is needed to improve it. Another is social accountability, such as scheduling to have participants discuss required readings in pairs or small groups, which might motivate them to read them to avoid the embarrassment of having to admit that they have nothing to add. Similarly, requiring all participants to prepare a question for a guest speaker beforehand, knowing that they may be selected to ask theirs in front of the group, can facilitate wide airtime distribution without surprises or relying on the regular volunteers.

Inasmuch as participants must be held accountable for their engagement, faculty must also create the conditions for all to feel comfortable participating fully. This involves clarifying expectations so no one feels blindsided, maintaining the standards consistently, and accommodating different ways of contributing. Upholding accountability demonstrates respect for the importance of leadership, the development process, the participants, and the desired outcomes.

D7. (GS) Demonstrate a personal interest in all participants and their individual learning and development, as well as actively incorporating their expertise

The customization of programs according to the participant group is enhanced by faculty getting to know them individually and demonstrating care and commitment to supporting their development and career goals. This also involves respecting their expertise and actively drawing on it, whether ad hoc during relevant discussions, to provide performance feedback following an activity, or officially to facilitate a session. Incorporating participant expertise as a program resource demonstrates appreciation for the caliber of the participant group and aligns with the principles of leadership development [88] and adult learning [93].

D8. (GS) Embed discussions of experiences and lessons from application exercises regularly to enhance and extend learning, as well as to promote accountability

Along with valuing participants' professional experience as an important source of relevant information, faculty should incorporate participant reflections and lessons following application exercises as part of the program content. These discussions with similarly qualified peers can augment and deepen their learning [7,229,238], reinforce the contextual nature of leadership, and increase participants' accountability.

D9. Highlight emerging key themes, learnings, tensions, and ongoing questions throughout through different lenses

Throughout the program, faculty should frame, link, and summarize noteworthy points in the learning journey by identifying common themes that arise, as well as overarching lessons, tensions, and outstanding questions. The latter two are particularly relevant given the wicked problems or polarities inherent in complex environments, which can never be totally resolved. This also involves challenging participants to check their assumptions and consider alternate or modified paradigms, even if they choose not to adopt them. Facilitators should also discuss the relevance to participants of program content through five leadership lenses: self, direct reports, peers (leading "beside"), senior leaders (leading "up"), and external colleagues (leading "beyond").

3.9.4. Feedback and Evaluation

D10: (GS) Ensure participants receive formal feedback from several sources during the program

As mentioned regarding RLCs and ELCs, receiving performance feedback effectively is key to enhancing self-awareness and to maximizing learning and development [7,19,35,65,82,130,229,230], since without such feedback, outcomes appear to be comparatively reduced [113,130]. Interim feedback has also been shown to decrease participants' stress associated with challenging assignments, as well as increasing the likelihood that outcomes will be achieved successfully [75]. Feedback should come from multiple sources, including peers, faculty, experts, and workplace colleagues [60,136,161]. Feedback should be timely, constructive, and actionable [7,231,232], and based on credible pre-defined criteria and standards, such as those governing military After-Action Reviews following simulations [53]. These debriefs typically begin with lead participant self-ratings, followed by those of the peers involved and expert observers [7,44,224–228]. This variety highlights the degree of congruence among raters, which enables all participants to learn about effective performance, and about receiving and giving feedback, the latter of which is also a key leadership capability [225,233,234]. Feedback should also be gathered in reference to relevant participant goals, such as the capabilities they are targeting for development, and to projects, including participant performance, as well as the effectiveness (or not) of certain strategies. Following this process, the lead participant can summarize important lessons to consolidate learning.

D11. Routinely provide time for participants to self-evaluate their progress, and have them share their results with their accountability teams and adjust their goals accordingly

Similarly, participants should be given time regularly to reflect on their experience, feedback, and learning, as well as their relevance to the work context and to their LDPs [75,226,239]. These sentiments can be recorded in a journal, an exercise that serves as an additional developmental, heuristic tool [198,240]. When participants share their insights from reflection and results with their accountability teams, the ensuing conversation typically inspires further thoughts and support. Gauging progress during the program can signal when goals should be extended because headway is being made, or when extra support or adjustments are needed because difficulties are being encountered [65,130,145,258]. This adaptation can augment application outcomes [93], particularly with ongoing support from program personnel [65,93,95].

D12. Collect informal feedback regularly from participants regarding effectiveness and proposed improvements and adapt the delivery accordingly

Facilitators should routinely collect informal and anonymous feedback from participants to optimize program effectiveness. Data can include participants' perspectives on delivery aspects that contribute effectively to achieving their goals and should be continued, which aspects they find ineffective and should be modified or dropped, and whether additional approaches could be introduced to improve results. These responses should be analyzed, summarized, actioned, and communicated speedily in an attempt to improve success, demonstrate a commitment to participants to incorporate their feedback in real time, and model the process [7,11,125,130,268].

D13. (GS) Collect formal anonymous feedback regularly from participants on the program, communicate the results to relevant affected parties, adjust accordingly, and communicate adjustments to participants

Concomitant with the previous strategy, providers should formally evaluate programs and their components to assess quality, enhance program credibility and satisfy accreditation requirements, and inform during-program modifications to optimize the experience [19,50,130,269]. It is helpful if anonymous surveys are administered in class to maximize the response rate and should involve quantitative ratings of sessions based on their stated goals, of faculty, and of activities linked to outcomes, as well as open-ended questions regarding effective elements and suggestions for improvement [27]. Select results may be communicated to affected parties, including faculty, which augments accountability for each person's role in achieving their desired outcomes.

3.9.5. Curriculum

D14. (GS) Provide tools and resources (frameworks, checklists, models, technologies, services, etc.) that participants can sample in class and apply to their work

Despite statistician George Box's claim that all models are wrong, but some are useful [270], providing participants with credible theoretical and practical tools and resources is important to enhance content validity, focus discussion, and guide application and assessment. For example, following a program session on crisis leadership, it would likely be beneficial for participants to use a validated checklist of protocols as the basis for a workplace readiness assessment or group self-evaluation following an incident, rather than using notes taken during a presentation. Participants can also share these tangible takeaways with non-program colleagues. Resources can include those to which participants have access within or through their organization, as well as those publicly available. Along with theoretical models and frameworks, practical resources can include available technologies, websites, and services. Participants are more likely to apply tools at work and be confident doing so if they gain experience using them in class.

D15. Engage with the dynamic and contextual nature of leadership and address emerging important internal and external issues as they arise

Given the dynamic and contextual nature of leadership, along with the theoretical applications of preferred approaches to suit different circumstances, faculty should include emerging issues from participants' professional context as real-life, real-time case studies. Internal matters can include those participants raise, whether interpersonal, process-related, organizational cultural challenges-related, or major initiative-related, and external ones can pertain to new government legislation that will impact the organization directly. This process enhances the relevance of course content to participants' dynamic professional context and demonstrates how they might apply it to work.

D16. Gather input from participants and other affected parties on emerging priority topics and include it in the program as it develops

Following from the design strategy to reserve some program time for emerging priorities, faculty should consult participants and other affected parties regarding priority topics and issues in the internal or external context. A select few should be included in the program, which can manifest in many forms, such as in discussions or designated sessions, such as master classes.

3.9.6. Direct Transfer Strategies

D17. Remind participants of the end-of-program culminating activity so they focus and prepare

While regularly highlighting key program lessons and outstanding questions, facilitators should remind participants of the culminating activity (C3 below) and invite them to consider what they have found most valuable in a given session, further contrasted to previous insights, along with corresponding action items. Along with preparing them for their final presentations, these reflections help focus and consolidate session learning and prompt them to review takeaways from previous content.

3.10. Program Conclusion Leadership Development Strategies ("C", n = 11)

3.10.1. Design

C1. In class, have participants reflect and provide feedback on each component of the program specifically to identify key learnings and ways to optimize, partly to prepare for the culminating activity (C3)

Faculty should reserve program time during the final session for participants to provide feedback on the effectiveness of all aspects of the program curriculum. This involves providing copies of the goals, topics, faculty, speakers, and activities for each component and having participants reflect on key learnings for each part, as well as which were particularly effective or not in contributing to the achievement of outcomes. This information is helpful feedback for quality improvement; and additionally, the reflective and discursive process is equally intended to enable participants to consolidate their learning and prepare for the culminating activity.

C2. Celebrate participants through a formal event at the conclusion and invite senior leaders, supervisors, and sponsors, perhaps with past graduates, to cultivate a community

Having a formal graduation-like ceremony can be helpful in validating the investments all personnel have made, celebrating achievements and impact, and publicly committing to further actions. Having organizational senior leaders and sponsors attend, along with past program graduates, heightens the perceived importance of the event and program and enables participants to express gratitude for their support. Involving past graduates can grow and sustain a leadership community, which has positive organizational cultural benefits.

3.10.2. Direct Application Strategies

C3. Have a culminating activity whereby participants present their key learnings, program impact, and committed action items during the celebration event

The culminating activity can involve participants making brief presentations of their most valuable lessons, key results and impact, including highlights from their projects, and further actions they commit to take. This exercise helps focus and consolidate participants' learning and enhance their accountability during and following the program, particularly when they share their presentations with their accountability teams. Including this as part of the celebration event enables senior leaders to hear the testimonials, which provides preliminary justification of their investment through anecdotal examples of the program impact and ROI.

C4. Remind personnel of the post-program assessments

At the end of programs, to increase participant commitment to achieving results and to augment the outcomes themselves, it is helpful to remind participants and those assessing their performance or receiving results sometime after the program of their process.

3.10.3. Design

C5. Extend development by having each participant update their LDP with post-program career and development goals and plans, aligned to talent optimization strategies

It is important to establish individual and organizational next steps to extend the impact of interventions. Having participants set formal career and development post-program goals and feedback systems can improve outcomes [7,22,50,223,230,271], avoid relapse to previous behaviors [272], and increase participants' intrinsic motivation [203,273]. Meta-analytic data suggest that this process is maximized when assessments from development interventions are integrated into their LDPs, as part of their career pathways, and into the organization's regular performance appraisal and reward systems [12,50,69,130,146].

Organizations should also identify further formal and informal developmental opportunities for graduates [11,34,63,115,122,145,274], which could include specifically designated next steps, such as a subsequent, more advanced educational course, or pursuing a formal credential [7,128,275]. It is helpful to present a menu of available options, such as MSF, coaching, and structured, on-the-job learning, such as action learning projects, stretch assignments, job shadowing, or job rotations [34,44,49,82,122,129,132,272,276].

In any case, further options should align to talent optimization strategies for each participant and the organization overall.

3.10.4. Evaluation

C6. (GS) Formally evaluate the program overall based on its goals, as well as its individual components and their link to outcomes

Evaluation at the conclusion of a program can gauge its immediate effects and is useful for optimizing the experience over time (quality control). Many organizations neglect program evaluation altogether [53], perhaps because success is assumed [50,277], or due to fears of budgetary cuts or professional discredit if unfavorable responses are received [278,279]. Evaluation, however, is essential, and must go beyond participant satisfaction [50,74,130,145], since doing so can highlight aspects of interventions that were beneficial or not in facilitating the achievement of goals and desired outcomes, which can enable providers to modify their curriculum and practices for the next iteration [7,11,80,81,125,130,145,268]. It is also important to inquire about barriers that participants encountered so that these can be addressed for future programs, which was one of the key recommendations in the Yale School of Management leadership review [220]. Post-program surveys should gather anonymous quantitative ratings of the extent to which the program met each of its stated goals, as well as qualitative feedback on unexpected outcomes, elaborations on the numerical ratings, and open-ended suggestions for improvement [27].

C7. (GS) Evaluate participants' progress in relation to the desired outcomes and hold them accountable, recognizing successes and supporting improvement

Along with evaluating the program, it is important to assess participants' desired outcomes in comparison to data collected at baseline and at various stages during the program [27]. This involves their individual desired outcomes, as well as organizational data and those related to their impact projects, contrasted to the control group, when applicable. Evaluation is essential to guide and enhance participants' ongoing leadership development, particularly when they are held accountable for their desired outcomes [7,44,49,50,82,130,131,198,203,244,280–282] and share results with their accountability teams. One example of this is described in the study by Culpin et al. (2014) [124], in which managing directors emailed participants directly after a leadership intervention asking, "What have you done as a consequence of your participation in the training?" Post-program evaluation also provides a new baseline of individual and organizational capacity and outcomes, which can serve as a benchmark for further development [7,201].

Organizations can extend successfully achieved goals and offer corresponding rewards. Intrinsic motivation, such as pride in one's work and achievements, has been found to be more influential on the retention of development learning than extrinsic factors, such as pay increases and promotions [203,273]. Intrinsic rewards can be enhanced through communicating results internally, including to participants' supervisors and sponsors.

Conversely, it is also important to support underperformance through further development, communities of practice, coaching, buddy systems, and/or mentoring as an ongoing organizational commitment to, and investment in, its people [24,49,69,82,125,126,129,130].

C8. (GS) Calculate the ROI of the program and communicate the results selectively

Despite potential intangible benefits of leadership development, there is increasing pressure to attach monetary values to its reported outcomes by calculating the ROI [50,130]. This process helps demonstrate the strategic value of leadership development and can generate further support for future interventions [50,130].

Ensuring that economic outcomes are included in the desired outcomes for participant impact projects and in the evaluation framework, along with the increase in motivation caused by awareness that ROI will be calculated, can contribute to this process [50].

Program ROI can be calculated in several ways. Approaches typically involve comparing the cost of the program, including the opportunity cost of participants being off work, to the net benefits and financial outcomes achieved, such as increased revenue or productivity [130]. For example, Cascio and Boudreau (2011) calculated the mean effect of outcomes and the duration of that effect, multiplied by the number of participants, and compared this result to the performance of an in-house, non-program control group [283]. When monetized performance data were not available, the financial ROI was calculated by multiplying the increased participant performance compared to that of the control group, using a percentage of the participants' annual salary. Jeon et al. (2013) describe monetizing outcomes by enumerated the costs saved by reduced absenteeism and turnover [121]. Avolio et al. (2010) also propose calculations for longer programs and the different levels of seniority of participants [50]. Even when program ROI calculations are negative, organizations may still choose to invest in leadership development because they either value ongoing development and its effect on recruiting, organizational or community image or branding, and staff retention, or their priority targets are not easily monetized [50]. This suggests that ROI calculations are only one factor to consider regarding subsequent investment in leadership development [50,284].

3.10.5. Organizational Support

C9. Communicate the results of programs to affected parties within the organization to celebrate successes, justify the investment, and provide support for future programs

Communicating the results of leadership development is an opportunity to recognize the efforts of designers, faculty, and participants, to demonstrate its value and impact, and to increase credibility and support for future interventions [7,11,50,130]. These results can derive from formal assessments, project results, and anecdotal accounts of impact, including those offered during the culminating activity. Lauding participants' achievements and results can also enhance their intrinsic motivation [203,273] and can help organizations identify internal champions for deeper leadership integration. Results can be shared through internal media communications, as well as directly to senior leaders and to participants' supervisors and sponsors.

C10. (GS) Ensure that there is adequate organizational support and resources to continue to facilitate further development

Despite the many factors that support can contribute to making leadership development a transformational experience for individuals, it is what happens following programs that typically determines the extent to which learning is successfully applied and outcomes are achieved. The frequency of diminishing outcomes after interventions is largely attributable to participants reverting back to previous behaviors [63,285]. For example, Santos and Stuart (2003) found that 64 per cent of 167 financial service managers defaulted to their original work styles after development programs [135]. Regression to a previous state can also result from a lack of supervisor support or an organizational culture that inhibits efforts to innovate and experiment [49,52,184,286].

A clear LDP that extends beyond individual interventions, along with organization support, can counteract this trend [134]. This support begins by ensuring participants have opportunities to apply their learning after the intervention, particularly if this was not embedded [24,50]. A fertile workplace culture that facilitates leadership development means that participants' colleagues must be willing to change too [49]. Proximity to colleagues who are also applying leadership learning increases motivation to operationalize new knowledge and skills. This fosters an open and psychologically safe environment with a common language to discuss leadership ideas, and offers peer support and mentoring [49], as well as augmenting the social contract effect. This support should be reinforced by recognition and reward systems, as well as by the provision of requisite resources to continue to expand capacity and efficacy [69]. The latter refers to providing further formal and informal developmental options for graduates [11,34,63,115,122,145,274], since participants become discouraged if there are inadequate follow-up opportunities and support [115,134,287].

C11. Review program results in the context of the Leadership Integration Blueprint and Roadmap, develop a community and culture of leadership, and build internal capacity

As described in F8 above, the impact of leadership development is maximized when it is fully integrated with talent optimization, embedded as an expectation of all people in the organizational culture, and seen as an ongoing strategic investment in individual and organizational capacity and performance, rather than as one-off events [7,130]. The Leadership Integration Blueprint and Roadmap, that is, the strategy moving forward, are key components of this, which can provide additional context within which to review post-program evaluations and identify designated further development opportunities for graduates. Organizations should also consider how to engage program graduates in cultivating an internal leadership community and how that group may be encouraged to entrench leadership more deeply in the fabric of the organization so that it becomes part of the "DNA" of all staff, regardless of their role or level, as in an ALO. Finally, it is important to build an internal capacity to develop leaders and leadership and to encourage and support innovation. This can involve holding supervisors accountable for developing their direct reports, with the support of HR/OD professionals, and creating structured goal setting and on-the-job development initiatives with this aim.

3.11. After-Leadership Development Program Strategies ("A", n = 5)

3.11.1. Evaluation

A1. (GS) Evaluate the program, its components, and participant outcomes again from the perspective of sustained learning linked to application and results

Data collected six to nine months after a program (post-post) can provide evidence of the extent to which improved outcomes have been sustained, as well as prompting participants to reflect again on their learning [27,53]. This is important since achieving outcomes can take time, resulting in a false negative result if restricted to end-of-program [19,247–249]. Conversely, participants' initial post-training confidence in their abilities, motivation, and self-efficacy can decline after attempting to apply learning to the workplace [7,12,127,259]. For example, the study by Arthur Jr. et al. (2003) found a 90 per cent atrophy in participants' skills a year after a training intervention [28]. Furthermore, entertaining speakers and high-energy sessions typically earn top ratings immediately after; however, this satisfaction does not always translate most effectively (or at all) to workplace application and to improved performance, when assessed sometime after. The inverse can also be true. Post-program ratings also provide another opportunity for participants to describe unanticipated outcomes.

3.11.2. Direct Application Strategies

A2. Providers remind participants, their supervisors, and their sponsors in advance of the post-program ratings of participant outcomes

Response rates and performance outcomes increase when providers inform participants and their supervisors and sponsors prior to sending post-program evaluations and their results. For example, when participants are reminded that in two weeks, their supervisor will rate their performance and/or will be notified of participants' outcomes, the participants' motivation to demonstrate results, including by initiating workplace application, increases. This social accountability strategy is also an opportunity for participants to illustrate how they have put the investment to use to benefit the organization.

A3. Have participants report results of their progress regarding post-program goals

In addition to further reflections on program impact and application strategies, providers should also invite participants to share outcomes related to their post-program goals.

3.11.3. Design

A4. (GS) Consolidate the various forms of feedback and revise the program based on the feedback and evolving organizational needs

Providers should ensure that along with modifications and improvements based on feedback throughout the program, they organize a formal debrief of all program evaluations with key affected parties selectively. Discussion should concern feedback-inspired suggested program revisions, as well as revisions to accommodate evolving organizational needs or a different participant group. Seizing this opportunity primes providers for the needs, gaps, and opportunities analysis of the next one(s).

A5. Sustain the program community of graduates, including through refreshers and involvement in future iterations of the program (e.g., as speakers, mentors, etc.)

Building on the benefits of networking described earlier, involving program graduates in cultivating or broadening a community of internal leaders who can champion further leadership development and integration is an important further step.

4. Discussion

The leadership development literature tends to focus primarily on interventions themselves, often with little or no mention of the application of learning strategies or of leadership development and integration across an organization. While there is increasing evidence that leadership development can be effective in facilitating desired outcomes at different levels, if theory- and evidence-informed approaches and transfer considerations are overlooked, even outstanding programs that incorporate gold-standard elements can underperform or fail. This possibility, along with dated theoretical models and widespread uncertainty regarding reliable evidence, has led to calls for a framework of theory- and evidence-informed approaches to leadership development and strategies that can be implemented before, during, and after programs to maximize their impact and return on investment (ROI). In the absence of such a framework, the objective of this article was to create one, called the "Optimizing System".

To identify strategies that are empirically proven to facilitate the outcomes and ROI of leadership development, five data sources were analyzed: the forthcoming companion article by Geerts (2024), which establishes the theoretical and empirical foundations for the framework [88], and three systematic literature reviews on leadership development for professionals, with a combined data set of 172 unique empirical studies from 2000 to 2020, including 30 high-quality studies. The fifth was a literature review specifically on the application of learning. This article builds on previous research [7,19,32,34] by combining robust theory, gold-standard empirical evidence, meta-analytic data, and leading practice examples from multiple sources to create a novel theory- and evidence-informed framework that can assist practitioners in designing, delivering, evaluating, refining, and supporting leadership interventions to maximize their effectiveness [7]. The Optimizing System and the other included innovative models and frameworks also have the potential to influence further research in this burgeoning field.

4.1. The Optimizing System Framework

The Optimizing System includes unique theoretical models and elements of gold-standard program designs and strategies for maximizing impact. Following a foundational set, the strategies are organized according to when they can be implemented: before, during, at the conclusion of, and sometime after leadership development programs. They are subdivided into major categories: program design, delivery, personnel (participants and faculty), direct application strategies, evaluation, and organizational culture and support (Table 3).

4.2. The Scarcity of Evidence-Based Strategies in Practice

Overall, despite the gold-standard evidence informing these strategies, they are seldom incorporated in programs described in academic publications [27,53], which indicates a significant research/practice divide [288,289]. This inspires two questions. First, is this pool of interventions representative of leadership development practice somewhat generally, or might many organizations be implementing the approaches and strategies regularly but not publishing their results?

Second, why might these strategies not be being implemented consistently? Along with the aforementioned ambiguity regarding which approaches are grounded in the best available evidence [25,27], some authors suggest that organizations may lack the expertise or capacity to research optimal strategies. Others suggest that they may question their value [7] and/or feasibility in terms of the time and cost of incorporating them [85,130], as well as wishing to avoid evaluation fatigue or overburdening staff who would be tasked with analyzing feedback [85,130]. The former justification is more likely if past evaluations did not result in demonstrable changes made in their response [130]. Similarly, organizations may neglect calculating the ROI because they consider it too complex, unreliable [50,130], or politically risky, especially if there are concerns that negative responses may result in budgetary cuts or criticism of those who designed or advocated for them [278,279]. Regardless of the reason, the consequences of these strategies being shortchanged or excluded are that participant outcomes and program impact suffer as a result.

5. Implications for Further Research and Practice

Based on the findings of this research, several opportunities for further research and practice are proposed. The first concerns expanding the pool of gold-standard elements of leadership development (Table 1) and investigating aspects of leadership development for which there is not yet definitive evidence, such as which combinations of developmental activities are most effective at specific stages of people's careers. That is, for whom, to what extent, and in what circumstances are certain components more effective than others.

Second, validating the Optimizing System, as well as the models and frameworks undergirding it, with practitioner and academic experts would be advantageous [288–290]. Along with potentially informing whether any elements of the models should be modified, added or cut, the validation process could also reveal the extent to which they and the strategies are generic versus contextual in terms of sector, profession, level of seniority, and other variables.

Third, it would be helpful to directly compare programs that implement the models and Optimizing System to similar interventions that do not, which could indicate the extent to which the framework can have an impact on outcomes.

Fourth, identifying and propagating leading-practice examples of how organizations can effectively implement the models and frameworks into the design, delivery, evaluation, and support of leadership development, such as with the Inspire Nursing Leadership Program [105], are important research priorities. This would also offer further examples of outcomes at various levels, particularly beyond that of the participant, which can be successfully achieved through leadership development. Extending the scope of leadership development beyond individuals to that of the team, organization, beneficiaries (clients), community, region/nation, and an international/global audience, as well as targeting core outcomes of environmental; equity, diversity, inclusion, and accessibility (EDIA); and economic value, can require a paradigm shift, which will likely take time to be adopted on a broader scale.

Fifth, it is important to investigate how the models and framework, whether as presented here or with modifications, could be optimally applied to different geographical locations and contexts, such as different stages of a crisis, and in reference to different leadership models, such as distributed, relational, transformational, authentic, servant, adaptive, and True North leadership.

Sixth, an ongoing priority is considering how new technologies, such as simulators and Artificial Intelligence (AI), might be incorporated into development programs effectively [7]. There is some evidence that principles of effective design outweigh the specific media of delivery [291], while others suggest that technology-based training is preferred [7].

Seventh, it would be useful to investigate how aspects of talent optimization can be linked explicitly and symbiotically to leadership development programs and evidence-based strategies for deepening leadership integration across organizations and communities, toward the concept of A Leadership Organization (ALO). This research could illuminate comprehensive examples of Leadership Integration Blueprints and Roadmaps that other organizations might follow.

Eighth, although rarely mentioned in the academic literature, it would be interesting to consider the role that leadership development could play in reaching beyond training centers and organizations to positively impact communities and beyond for social change. The possibility of this scope echoes the contention of educational theorists, such as Freire (2007) [95], Palmer (1998) [292], and Merriam and Brockett (1997) [293], who advocate that this is an essential function of education to facilitate. Given the influence that leaders, leadership, and organizations can have on communities and, collectively, on government and policy, as well as the increasing need for cross-sector collaboration, development programs that prepare people to influence on this scale have the potential to be highly impactful [294]. Generating evidence of this, particularly including economic outcomes, may encourage governments to invest in leadership development for multiple organizations, groups, and communities. Optimal strategies to maximize the impact of this scope of leadership development are worthy of further investigation, as are leading-practice examples of successful programs.

A final point of discussion concerns how the Optimizing System and its supporting models might reflect and inform effective leadership generally. For example, involving affected parties' input in important strategic decisions, reinforcing accountability for performance outcomes, and providing organizational support and resources are key leadership practices. Similarly, this article has stressed the critical relationship among leadership development, talent optimization, organizational priorities and strategy, True North elements, and organizational culture, the interconnectivity of which is often overlooked.

6. Limitations

While this article provides several potential contributions to scholarship and practice, some limitations should be considered. First, the literature searches were limited to English-language publications, most of which concerned leadership theory and interventions in Western countries. Consequently, the representative nature of leadership development globally is unclear. Similarly, unpublished studies were excluded, limiting the knowledge base and exposing potential concerns of publication bias in favor of interventions that reported positive outcomes; however, this choice was made to prioritize the most credible available evidence and several included articles described failed outcomes. Third, in multi-component interventions, it can be challenging to assess the impact of individual aspects or combinations. Finally, although the strategies in the Optimizing System framework and supporting models are informed by robust theory and evidence, further validation and empirical support would be beneficial. That said, the framework and models presented here have the potential to credibly guide the design, delivery, evaluation, and support of leadership development to maximize its impact and ROI.

7. Conclusions

The escalating investments in leadership development and the concomitant expectations that it will generate positive outcomes and a demonstrable ROI heighten the urgency for evidence and tools to optimize its impact on organizations and beyond. The greater the stakes, such as sectors where people's lives or well-being depend on effective leadership, the more vital it is for development to be designed based on empirically informed strategies.

There is ample evidence that leadership development can facilitate the achievement of outcomes at the individual, team, and organizational levels; yet, many gold-standard design components are seldom utilized, and they tend to be divorced from discussions of the application of learning strategies, the importance of organizational culture, and the value of integrating leadership and development system-wide. These disconnects and the failure to address "the transfer problem" can have numerous deleterious consequences [130].

The framework presented here is informed by robust theory, gold-standard evidence, meta-analytic data, and leading-practice examples from individual empirical studies with the intention of guiding the design, delivery, evaluation, and support of leadership development to maximize results and ROI. Innovative supporting models are also presented, many of which challenge traditional paradigms. These models include principles of leadership development, progressive levels of mastery, an outcomes-based design, levels of program outcomes, categories of development activities, a program evaluation framework, talent optimization functions, and the concept of A Leadership Organization.

Collectively, these models require paradigm shifts to extend the scope beyond single development interventions for positional leaders that target individual-level outcomes, to viewing leadership as a vital, comprehensive, interconnected component of talent optimization and a catalyst of leadership integration across organizations and communities that can facilitate outcomes at multiple levels and even social change.

The Optimizing System framework presented here also includes an evidence-informed emphasis on expertise and equity, diversity, inclusion, and accessibility (EDIA). This framework can potentially inform the design and support of individual leadership development programs, as well as organization-, system-, or community-wide leadership development and integration.

Given that the impact of leadership development is influenced significantly by how programs are designed, delivered, evaluated, and supported, the hope is that the Optimizing System framework can assist governments, policymakers, providers, those funding development, and other affected parties in offering development that produces the desired results and maximizes the ROI. The further hope is that this ROI will reach outward, beyond individual organizations, to significantly benefit the communities and regions in which these organizations have made their home.

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Opinion

Understanding Leadership from the Inside: Using Ethnographic Methods to Examine How the Interplay between Leaders, Followers, and Group Context Shapes Leadership Outcomes

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Abstract: This paper outlines a novel method for leadership researchers and practitioners to understand how and why effective and ineffective leadership look different in different groups. Leadership is a complex and contextually dependent process influenced by the interplay between leaders, followers, the group, and their environment. The social identity approach to leadership describes how a group's identity shapes the ways in which people can lead effectively. It also implies that (in)effective leadership looks different across diverse groups and teams. Accordingly, it follows that there is no single correct way to lead. To explore these ideas, we propose ethnographic methods, where researchers and practitioners immerse themselves in a group environment, as a novel type of method for examining leadership in action. We suggest the social identity approach as a framework to help guide researchers' data collection and sense-making of leadership behaviours. Additionally, we explain that ethnographic data can be represented well through creative non-fiction stories that capture the context surrounding leadership behaviours. These stories could support leadership consultancy and development programs to demonstrate the complex interplay between leaders, followers, and the group context.

Keywords: leadership; ethnography; leadership development; identity leadership

1. Introduction

Effective leaders propel their teams towards the achievement of collective goals. Coaches, athletes, and management staff who lead effectively contribute to their team's success [1]. In sports, effective leadership has been linked to improved cohesion, confidence, performance, enjoyment, motivation, effort, and well-being [2–6]. Given the critical role of leadership in team functioning, researchers have long sought to identify effective leadership behaviours and ways to develop those behaviours in leaders.

While many positive outcomes have been attributed to effective leadership, the pathways to achieving these outcomes are diverse. For instance, effective leadership can sometimes be autocratic, with decision-making power exercised mainly by a leader, while in other cases, it can be democratic and revolve around group decision-making [7]. Other approaches encourage leaders to build the internal motivation of team members [8] or to transform team members' morals and professionalism through transformational and ethical leadership [9,10]. Effective leadership is therefore not a matter of discerning the 'best' leadership approach but rather a matter of identifying helpful leadership behaviour for a specific group and its context. It follows too that effective leadership in high-performance environments requires leaders to be flexible in their approach to leadership. In this sense, leaders are encouraged to be like chameleons who adapt their leadership style to meet the demands of the group they are leading in a given situation [11].

Leadership occurs in group environments. For instance, a leader is always a leader *of* something like an organisation, a team, or a nation. However, formal appointments of individuals to positions of power (e.g., a CEO, manager, coach, captain, parliamentarian, or head of state) do not limit the potential for other group members to lead. Leadership is about motivating and inspiring fellow group members to *want* to do things for the group's benefit, not getting them to comply [12]. Consider a colleague or classmate who supports, challenges, and inspires their peers to produce higher quality work, a teammate who consoles a player they notice is struggling, or community members who round up friends to support neighbours as they prepare for an incoming flood. All group members have the potential to display leadership, not just those who are in formal leadership positions [12,13]. The yardstick of leadership is not a person's title or office, but the influence they have and are seen to have by others, and those others' perceptions of their dependability.

Leadership is a complex interpersonal process influenced by social, cultural, political, and physical environments [12]. One of the challenges of developing effective leadership programs is that the context shapes the conditions for effective leadership. Alvesson [14] argues that leadership research has often provided simplified, universal, and idealised conclusions that overlook the context in which leadership occurs. Such an approach accepts that wherever a leader works—for example, on a construction site, in an accounting firm, in the army, in a kindergarten, or in a professional sports team—the same leadership qualities and behaviours will apply. It has also been observed that leadership research has typically focused on formal leaders in positions of power (e.g., a CEO, manager, captain, or coach), and has overlooked the agency of other group members as informal leaders and followers with unique values, norms, and behavioural preferences [14–16]. Yet without group members following, there is no leadership [15,16]. A comprehensive understanding of leadership must therefore consider the followers and the surrounding context in which leadership occurs.

To understand how the context shapes leadership, research needs to be situated within the specific environment in which leadership occurs [14]. To this end, we propose using ethnographic methods, in which researchers immerse themselves within a group or team, as an important yet underutilised means to better understand leadership. We suggest that by immersing themselves for an extended period, researchers can gain deeper insights into a group or team's environment and dynamics. In what follows, we describe the social identity approach to leadership as a helpful framework for understanding the relationship between leaders and followers. We then go on to discuss how researchers and practitioners can immerse themselves in group and team environments to understand the context in which leadership occurs, and conclude by outlining how researchers might apply their findings to leadership consultancy and development programs.

2. The Social Identity Approach

As noted above, leadership analyses typically emphasise the importance of the leader and their actions and characteristics for effective leadership. For example, it has been suggested that leaders should generally possess traits such as charisma and intelligence [17,18]. However, as Haslam and colleagues [12] highlight, the meaning of these leadership qualities varies according to the context and perceptions of the followers. For example, a highly successful football coach might be seen as intelligent and charismatic within a football team, yet in a chess tournament, that same coach is unlikely to be seen as either. One reason for this is that qualities such as charisma and intelligence are *attributed* to leaders by followers on the basis of perceived shared group identity [12,19]. In a football team, the team is more likely to perceive the successful football coach as intelligent and charismatic because of a shared 'footballer' identity that values football knowledge. But in a chess tournament, that same coach would not share an identity with the chess players and would not be perceived as 'one of us', and so, as a result, the players are less likely to come to see that leader as intelligent or special in some other way. The point here is that leadership always inheres in a particular group (e.g., a club, a sport, a profession), and it is this group context that structures the relationships between leaders and followers [12]. Therefore, a comprehensive leadership analysis should consider the group around which leaders and followers cohere and the context in which they find themselves.

The social identity approach to leadership provides an avenue for understanding the leader–follower relationship by starting with the assertion that people see themselves not only as unique individuals (as 'I' and 'you' in terms of personal identity) but also as group members (as 'we' and 'us' in terms of social identity) [20,21]. When people recognise each other as part of the same 'us', they can coordinate their efforts and work together towards their group's goals [20,21]. To provide a very basic example, in a football game, distinguishing between 'us' and 'them' is crucial to knowing who to pass the ball to and who to tackle [12]. This shared sense of social identity makes the football game work. Indeed, without social identities, the football game might look more like a flock of seagulls chasing hot chips.

A shared social identity is established not only on the basis of the characteristics that group members have in common but also with reference to the unique qualities that distinguish one group from other similar groups. In short, it is about what makes 'us' special. For example, one organisation may view themselves as 'creative' and 'playful' compared to another organisation that views themselves as 'methodical' and 'structured'. For the employees in the first team, working in a creative and playful way can establish and strengthen a shared social identity. Whereas, if this team were managed to function like the second organisation, those employees might feel misunderstood and coerced into conforming to a style of work that contradicts what makes the organisation unique and special. As a shared social identity becomes woven into the fabric of group members' sense of self, they come to realise that their goals and aspirations are shared—that 'we' are in this together. They understand that working together is essential for success. And this shared sense of 'us' is then the basis for cooperation and trust within the group [12,22].

Effective leaders are perceived by their followers as part of 'us' and to be doing it for 'us' [12]. People will follow a leader who represents the group's ideal qualities and who is believed to have the group's best interests at heart. On the other hand, regardless of a leader's actions, people are unlikely to follow a leader who is perceived to be one of 'them' or to be placing their own self-interest above the group's interests [23]. This leader–follower relationship highlights the danger of focusing exclusively on leadership behaviours—for how can we determine whether a leader's behaviour is effective or ineffective without understanding how a particular group of followers perceive their leader?

Effective leadership also involves creating and cultivating a sense of 'us' among the group that is being led. This requires leaders to reflect on the content of a group's identity, such as its shared values, norms, goals, and preferences for behaviours. This is important in order for a potential leader to be in a position to enact and represent what 'we' are about. Finally, leaders also need to realise the group's shared goals and ambitions by bringing these qualities to life in a way that directs the group towards their shared goals. Hence, the essence of effective leadership is embedded and inseparable from the group itself [12].

Leadership programs that are informed by the social identity approach can help leaders and followers collaboratively uncover their unique qualities and work more effectively as a team [24,25]. However, to enhance their usefulness and minimise the chances of potential backlash, it is important to understand the contextual nuances that influence leadership behaviours. For example, meta-analytic data support the use of on-site (rather than off-site) leadership training [26]. This is because off-site programs often follow a one-size-fits-all approach that fails to capture the context and needs of group members and their organisation. More impactful leadership development is tailored to the context and needs of the group [26].

The social identity approach provides a framework for leaders and researchers to understand how relevant contextual factors such as group identities influence leadership. Leaders and researchers who understand the qualities of a group's identity are better placed to develop leadership strategies and enact behaviours tailored to the group. These behaviours and strategies are most effective when a leader who enacts these behaviours is perceived by their followers as one of 'us' and to be doing it for 'us'. In isolation, examining a leader and their behaviour provides just one piece of the puzzle. For a more complete picture of leadership, we need to consider the relationship between leaders, followers, and the context.

There is of course a wide range of other leadership approaches that are pursued across diverse settings, including those of sport and exercise, education and learning, and business and the workplace. However, as intimated above, many of these other approaches focus primarily on the individual leader and overlook the ways in which the interplay between leaders, followers, the group, and the context influences leadership [14]. Researchers and practitioners who consider the unique qualities of the group and the context in which leadership occurs can obtain a rich understanding of leadership. Unlike other leadership frameworks, the social identity approach to leadership provides an avenue for understanding the relationship between leadership and the group context. Researchers and practitioners can also use this approach to guide the development of the types of questions that provide insight into a group's context. For example, what are the group's current challenges and goals? What values and norms do the group's identity consist of? How does the leader bring these values to life? And how do the followers perceive their leader(s)? As things stand, though, researchers are generally reluctant to answer such questions by examining effective leadership within the specific context where it occurs. So, by addressing this gap, they will be better placed to provide leaders with an understanding of the process through which leadership occurs. In this endeavour, we suggest that ethnographic methods—where researchers immerse themselves in leadership environments for an extended period of time—are likely to be particularly useful.

3. Ethnography to Understand Leadership as an Insider

Ethnography involves researchers immersing themselves in a particular group or culture to generate theory and knowledge through direct experience over time [27,28]. An ethnographic approach allows those researchers to gain firsthand experience through direct and sustained social contact with those in the group [29]. Not least, this is because by interacting, observing, and participating within the group, they gain contextual knowledge of the meaning behind different interactions, behaviours, and events.

Ethnographers often adopt a constructivist approach to research, which assumes that reality is socially constructed and differs between groups. A constructivist perspective is helpful for understanding leadership, as it acknowledges that there is no universal truth about what 'good' leadership is. Rather, this perspective acknowledges that how people experience a certain type of leadership will differ across people and groups.

Researchers who immerse themselves in the groups they examine can observe how the group is able to shape group members' reality [27]. As described by the social identity approach, how we view ourselves and the values, beliefs, goals, and norms that we adopt are shaped in important ways by the groups we belong to and identify with [20]. For example, a player in a local football team may value friendship, playfulness, and teamwork, whereas that same player in a state representative side may adopt group values of individual success and discipline in the hope of being noticed by professional team scouts. So, in their local club, that player will likely be motivated to joke around with their teammates, whereas in their state representative side, they will likely be motivated to showcase high-level physical skills. In this way, the player's values and behaviour are shaped by the different socio-cultural forces around them. Researchers can better understand a group's particular socio-cultural forces by immersing themselves in a group environment for a prolonged period.

Ethnographic research has been used for decades to understand a group's cultural world firsthand and to gather contextual insights that would otherwise be unattainable. An example is Lewin and colleagues' [30] classic social psychology study that examined how different leadership styles affect group dynamics among children. The researchers set up three different groups, each with either a democratic, autocratic, or laissez-faire leader. The researchers then observed these environments over several months and noticed that in the autocratic group, children were aggressive, hostile, and uncooperative, and would only work when the leader was present. In the democratic group, children were more cooperative and took the initiative in tasks such as cleaning up and working even when the leader was absent. In the laissez-faire group, the children were uncooperative, tended to focus on their individual tasks, and became more easily bored.

Lewin and colleagues' [30] research affords insight into the richness of context-specific data that are only accessible by directly observing a group. However, researchers do not need to manipulate that environment in order to do this. This is shown by another classic study in which Festinger and colleagues [31] embedded themselves in a religious cult whose leader, Mrs Keech, predicted an imminent apocalypse that would bring about the end of the world. The researchers acted as genuine believers to examine how people came to believe in such extreme ideas and how they dealt with their disconfirmation once the predicted end of the world did not eventuate. In particular, they captured the emotions of group members and the process through which these extreme beliefs and social bonds were actually strengthened once the prophecy had failed to materialise. These findings contributed to the literature on cognitive dissonance and social dynamics in a unique and powerful way. Unfortunately, though, these types of immersive projects have largely disappeared from contemporary science—including the leadership literature—as researchers have come to prioritise what are seen as more generalisable quantitative methods. Yet as Alvesson [14] argues, for researchers to better understand leadership, we need to examine leadership in its natural habitat—the ordinary and extraordinary environments like Mrs Keech's cult where it really occurs.

There are nevertheless some notable exceptions that have used ethnographic methods to study leadership more recently. Over three years, Smith and colleagues [32] immersed themselves in an inter-organisational research and development team. They observed that an individual's leadership status was shaped by their ability to make meaningful contributions to the group rather than their role or title within the organisation. Accordingly, it was often the informal leaders, not the formal leaders, who influenced their team. However, an employee's capacity to influence their team was quickly undermined if they put their personal interests above the group's interests. For example, group members often sought advice from a colleague who had specialised expertise in their area. By willingly sharing their expertise, group members listened to and followed the directions of this colleague. However, at a later point in time, this same colleague was perceived to prioritise the completion of their PhD thesis above the group's projects, and so they gradually lost influence among the group. By immersing themselves in this organisation, the researchers could witness the leadership that happened in the corridors and common areas of an organisation, not just the directives of executives and managers in company meetings. The research shows how ethnographic methods can provide the contextual depth necessary to better understand leadership and offers a valuable approach for future leadership research and practice.

Alvesson and Jonsson [33] took a case study approach to examine a middle manager's understanding of leadership in an international manufacturing company. They used interviews, reflections, and observations to observe that how managers described their leadership often differed from how they actually practised leadership. For example, a manager said that they strived to lead like a coach by listening to their employees and providing further questions to support employees' problem-solving, instead of providing direct answers that discourage employees from thinking for themselves. However, the researchers observed contradictory behaviours from the manager, who was often passive during meetings, offered little support, and was sometimes critical and controlling of their employees. This is a good example of how observational data can provide unique insights that would not have otherwise been captured.

In a sporting context, Lara-Bercial and McKenna [34] used ethnographic methods to examine youth development in basketball. They noticed how many forces, such as the personal characteristics of players, interpersonal relationships, daily routines, and club culture, influenced player development in different ways. In particular, the researchers highlighted the fact that the club context was constantly changing so that each young player experienced the club environment differently. For example, on one day, a young player might feel connected and motivated to train, whereas on another day, after a dispute between teammates, that same teammate might feel uncomfortable and disconnected from their teammates. If the researchers had not been immersed in this team environment, it is unlikely that they would have noticed the ebbs and flows of the young player's day-to-day experiences.

In another ethnographic study, Rothwell and colleagues [34] observed how a culture of masculinity and disciplined behaviour in English rugby academies contributed to rigid, authoritarian coaching styles that shaped players' thoughts, feelings, and behaviours. The researchers noticed that these coaching styles were deeply embedded in the culture, which limited player autonomy and creativity. However, because researchers immersed themselves in the environment, they observed that often before official training began, players initiated a range of rugby-like games in which the athletes played with creativity and openness, unlike their official training. It was the context of the coaches being present or not that limited the players' freedom to be creative and open to new ideas.

In all of these examples, because the researchers immersed themselves in group environments, they noticed how peoples' behaviour was shaped by the group context at that point in time. If the researchers had not immersed themselves in these environments and instead acted like external researchers who observed and/or surveyed the team members at one or two timepoints, then it is unlikely they would have appreciated the detailed behavioural changes and salient contextual factors (e.g., team conflicts, manager behaviour, and coach presence) that contributed to those behavioural changes. In these cases, as researchers immersed themselves in these environments, they came to live, feel, and experience the group environment in a way that provided contextual data beyond the scope of surveys and one-shot interviews.

3.1. The Role of the Ethnographer

Immersion in the field can vary from the researcher being a full participant to being an observer, or somewhere in between [35]. Ethnography can be theory-driven yet dynamic and adaptable, responding to environmental demands. There is no one-size-fits-all approach to ethnographic research, and this allows researchers to adapt their methods to the specific situation and context. In some cases, the researcher may be an outsider with minimal or no prior experience within the group or culture. Alternatively, the researcher could be an insider and a pre-existing member of the group or culture. For example, a professional boxer could examine the boxing culture while still competing [36]. In this way, professionals like Champ and colleagues [37] have leveraged their pre-existing group membership to gain an inside perspective on the experience of health professionals in a sporting environment.

A researcher's involvement can range along a continuum from observer to participant [35]. As an observer, the researcher stands back and observes the group in action. As a participant, the researcher engages in some or all group activities. For instance, a researcher might participate in some of the training drills with the group. This type of involvement can be flexible, and researchers can adapt their approach depending on what seems most appropriate. Indeed, as researchers spend more time in the field, they often transition from being outsiders to insiders and come to feel more comfortable acting as participants. Participating in group activities can help build connections within the group while also allowing the researcher to observe and experience interactions that might go unnoticed when observing from a distance (e.g., making sense of brief comments and interactions among players during training drills). By participating in group activities, researchers can also assist the group (e.g., helping out during specific training drills) in ways that allow the researcher to contribute to the group and strengthen their rapport with group members. This speaks to the fact that the relationship between the researcher and the group should be reciprocal and mutually beneficial to both parties.

3.2. Methodological Considerations

Researchers should clearly define their study focus by deciding in advance on the theoretical lens(es) through which they will interpret their data [38]. This process helps researchers narrow their observations and analyses, making it easier to distinguish relevant from irrelevant information. Ethnographers often use multiple data collection methods in the field, interconnected with their participant observation. Initially, these observations may be broad, before gradually narrowing down to focus on specific aspects of group life. For example, by first noting general trends and behaviours within a group, a researcher might notice changes in typical behaviour and subsequently focus on discerning these changes. Extended observation allows researchers to experience the ebbs and flows of a season first-hand (often influenced by performance outcomes such as victory and defeat).

Researchers may also engage in informal conversations and interviews with group members. In leadership research, informal conversations with followers can yield rich insights into the ways that the group experiences different leadership behaviours. For instance, a researcher might ask, "What did you think of that?", prompting the respondent to describe their experience. The researcher can then probe further and clarify specific details. Over time, as the researcher becomes more embedded within the group and develops rapport, group members might initiate conversations, providing more opportunities for open discussions about their interests or concerns.

Interviews, whether structured or semi-structured, are another valuable data collection method. These interviews can help gather in-depth information about the significance of particular events within the group. By being immersed in an environment, researchers can observe these events and then ask clarifying and probing questions in the interviews. Moreover, by sharing experiences with group members, researchers can ascertain and understand the cultural language that is being used (e.g., the significance of particular personal references or in-jokes). This language can help them connect with interviewees and conduct more insightful interviews. The flexibility of semi-structured interviews also allows the researcher to ask unplanned questions that probe further exploration [39]. Interviews can often be interwoven with participant observation to expand on the researcher's observations and lived experience [40]. The combination of observation and interview data can be particularly beneficial for understanding group members' perspectives after the researcher has observed specific leadership interactions.

Kelly [41] suggests that when researchers observe leadership behaviours, they are in a position to consider not only the salient, 'grand' actions of leaders (e.g., giving speeches and leading meetings), but also more subtle actions (e.g., informal conversations, words of encouragement, and expressions of care). The social identity approach recognises these subtle actions as an important aspect of the leadership process. For example, even though it may not be as widely heralded as giving an inspiring speech, expressing care and assisting a group member who might be struggling with their work or personal life can be a powerful act of leadership. By expressing care and assisting that group member, a leader could strengthen a shared social identity by demonstrating that they are concerned with a person's membership in the group and that they are in this together. These more subtle leadership behaviours can help leaders build their capacity to influence fellow group members, because those group members are more likely to perceive them as one of 'us' who is leading for 'us'. Researchers and practitioners who adopt ethnographic methods are much more likely to have access to these more subtle leadership acts from both informal and formal leaders.

3.3. Challenges of Ethnography

Ethnography is inherently complex, as the ethnographer's presence influences both the events that are observed and the relationships formed in the field, and these in turn contribute to the ways that the researcher understands and describes the culture [42]. The researcher cannot remain neutral in the process of explaining and representing cultural and social life or detach themselves from analysis and representation; instead, researchers are always implicated in the ways that their cultural understandings are portrayed [43]. This issue of researcher subjectivity is an uncomfortable yet unavoidable reality of the ethnographic process [42]. However, there are moments when ethnographers can leverage their subjectivity to interpret the culture more deeply [44]. Ethnography involves more than merely participating and observing; it requires the ethnographer to immerse themselves in the lived experience of the group, feeling and experiencing from first- and third-person perspectives. This delicate balance of being both an insider and an observer over an extended period is a hallmark of ethnographic research.

To address the subjective biases inherent in ethnography, researchers are encouraged to engage in reflexive practices. Despite the recognised importance of reflexivity in qualitative research, there is a lack of empirical and theoretical work clearly outlining the process. Indeed, there is considerable conceptual ambiguity associated with the term reflexivity itself [45,46]. Nevertheless, reflexivity demands that researchers critically examine their own positioning within the field, considering how their pre-existing experiences, current situation, and research practices influence their analysis [47]. A detailed discussion of reflexive practices is beyond the scope of this article, but is the focus of a number of excellent treatments elsewhere (e.g., Townsend and Cushion [48]; Wetherell and colleagues [49]). Ultimately, though, reflexivity is a process that requires researchers to take time to view and consider the ways in which their own perspectives and identities shape their understanding and representation of the cultures that they study.

3.4. Presenting Ethnographic Research

Ethnographic data can be developed into a thematic narrative, which tells a story constructed from the researchers' observations and analysis [50]. The narrative is built on a main idea that often includes several analytic themes explored throughout the narrative and later discussed in the study [51]. As part of this process, Wolcott [52] suggests that ethnographers should begin with a description of the culture that describes "what is going on here?" (p. 12). The data are then analysed by identifying patterns, contextualising information within a broader analytic framework, and connecting them with the personal experiences of both the researchers and the groups under investigation. Creswell and Poth [51] recommend that findings be both discussed on the basis of the researcher's personal experiences and connected to broader scholarly research on that topic.

To present these results, ethnographers can take on the role of storyteller by developing examples, cases, and vignettes to illustrate the key themes. Here, ethnographers create scenes that engage the readers' minds in a way that positions them in the characters' shoes to experience what it might feel like to be part of that group [53]. All in all, ethnographers "tell a good story" [54]. Specific to leadership research, we see an opportunity for ethnographers to write stories about leadership that illustrate leadership in context. These stories are a way of showing readers what effective and ineffective leadership look and feel like rather than simply listing what effective leadership is. So, by telling a leadership story, readers are immersed in a world where they see and feel how leadership occurs in context.

Researchers can use creative non-fiction to produce stories to illustrate their research findings [55]. Creative non-fiction in academia gained traction as scholars questioned the prevailing norms in human sciences, particularly in regard to the ways social reality is described and how participants' lived experiences might be captured effectively [53,56]. This shift in how we meaningfully communicate research in leadership has led researchers to explore alternative ways to present research, with an emphasis on giving voice to participants and describing the context in which they think, feel, and act [57]. In this regard, writing in the social sciences has been criticised as 'unpopulated', such that research omits the reality of the subjects the research was about. Instead, researchers write about 'fictional things', which can be vague and confusing [58]. A creative non-fiction approach can steer researchers away from this type of writing and bring life back to subjects by describing their story and fleshing out the context in which they find themselves.

The approach that is required to produce creative non-fiction stories fits well with the process of ethnography. For instance, Gutkind [59] explains that creative non-fiction stories require writing to have real-life immersion, reflection, research, and reading and writing—all of which are key aspects for completing ethnographic research. In the field of sport and exercise, Sparkes [56,60] was a pioneer of this method as a way of challenging traditional modes of research representation. He emphasised the need for different writing styles and a broader representation of participant voices. More recently, the application of creative non-fiction in sport and exercise research has been expanding, as noted by Cavellerio [53]. However, our own experience suggests that researchers are often hesitant and uncomfortable exploring new boundaries and expanding beyond orthodox methods when it comes to communicating their research.

Despite this discomfort, we encourage researchers to challenge themselves to explore creative non-fiction. Humans are storytelling animals, naturally drawn to stories [61]. By bringing research to life through stories, researchers can provide the reader with a rich contextual background of the key themes being explored. Furthermore, stories provide a way of sharing research findings in a language that reaches beyond the academic community [55]. It provides an opportunity for researchers to transform their findings into compelling narratives, which are shared between and appealing to leaders and followers themselves, not just fellow academics [53].

4. Integrating Ethnographic Findings into Leadership Development Programs

In choosing to undertake an ethnographic study, researchers are fully aware that their findings are not generalisable to other contexts. Generalising findings to other settings and contexts is not the aim of ethnographic research. Instead, the key characteristic of ethnographic research is its specificity to a particular group and/or culture. This is both its strength and limitation. For while the inability to generalise findings can be seen to limit the applicability of conclusions, the payoff is a comprehensive understanding of a specific context. Moreover, as the quality and quantity of ethnographic case studies grows, researchers and leadership educators will be better positioned to provide a diverse set of examples of different leadership styles in various contexts.

One promising use of leadership case studies in leadership development is to stimulate discussion and problem-solving among leaders. For instance, it is possible to consider incorporating creative non-fiction stories into leadership development programs. Leaders could be presented with a specific issue or challenge, provided with a leadership story, and asked to discuss the strengths and weaknesses of the leadership observed in the story, along with their recommendations. This type of problem-solving engages leaders in higher-order thinking, enhancing their learning experience and perhaps subsequently affirming and/or re-shaping their thinking and behaviour. Furthermore, if conducted within a particular group, this activity could engage fellow leaders in collectively solving leadership challenges within their group, and help them to better understand where their fellow group members are coming from.

In the context of leadership development, the primary aim of ethnographic research is to support and challenge pre-existing research and leadership development programs, by providing detailed and rich accounts of how certain leadership behaviours can be effective and ineffective in a specific situation and context. By incorporating multiple case studies into leadership development programs over time and across settings, leadership educators can provide examples of various leadership behaviours in different contexts. These can demonstrate how and why the effectiveness of different leader behaviours varies across these contexts. In this way, these programs can help leaders to discern which leadership behaviours and processes might be more suitable for the specific situations and the context in which they are operating, and to have a broader and more grounded understanding of the forms that effective leadership can take. As suggested above, by engaging leaders in discussions with these case studies, leadership educators can go beyond describing the 'what' of leadership, to explaining the 'how and "why' of leadership.

In these various ways, an ethnographic approach has the capacity not only to deepen researchers' understanding of leadership but also to support the work of practitioners and leadership consultants working in the field. By immersing themselves in group environments with the specific aim of observing leadership behaviour, practitioners can conduct an audit of how leadership is enacted within a particular group and identify the group's specific needs. These leadership insights can then provide a foundation to advise formal leaders on how to adopt more effective leadership practices and embed these more widely in the team. Throughout this immersive process, practitioners could engage in an iterative cycle of information exchange with formal leaders, continually sharing their insights to collaboratively shape their understanding of leadership in this group. And in doing this, an ethnographic approach ensures leadership development and advice are always grounded in the specific context of the group.

A thorough understanding of the team's context can also help researchers and practitioners to provide tailored recommendations for a given group. As part of a group's leadership development and education, practitioners could share their leadership observations with the entire group. Doing so could help to develop a group with more inclusive and shared forms of leadership. By highlighting the influence of informal leaders, practitioners can reinforce and encourage further leadership throughout the group. This feedback to informal leaders may reveal an unrealised understanding that informal leaders exhibit leadership qualities and behaviours that benefit their group. Feedback shared with the entire group can broaden the group's perception of leadership beyond formal titles and positions of power, and instead encourage the idea that all group members have the potential and agency to lead and influence others within the group.

In sum, by shedding light on group members' lived experiences, practitioners and leadership consultants who adopt an ethnographic approach can help groups and formal leaders understand how leadership outcomes are often shaped by followers, the group, and the broader context. By embedding themselves within a group and sharing these leadership insights, researchers and practitioners can guide the group with a tailored roadmap for improving their leadership.

5. Conclusions

The present paper encourages researchers and practitioners to adopt methods that examine the dynamics between leaders, followers, and the group context to better understand leadership and associated outcomes. Researchers who use ethnographic methods can capture some of the complexity, dynamism, and fluidity of leadership in action. In line with these suggestions, Figure 1 outlines a process that researchers and practitioners can follow when using ethnographic methods to examine leadership.

First, researchers and practitioners should consider the strengths and limitations of ethnographic methods and how they could best support their leadership research. Next, they should consider an appropriate setting for their research and reflect on how they might engage that group. Here, once a researcher is engaged with a group, they could follow a continuous cycle while collecting data. Researchers should be clear about their role within the team, but be conscious of the capacity (and need) to adapt this in the course of the immersion. For example, a researcher might initially take a more passive role as they observe the group dynamics. Then, as they gradually build rapport with the group, they might take on more active roles and participate in team activities.

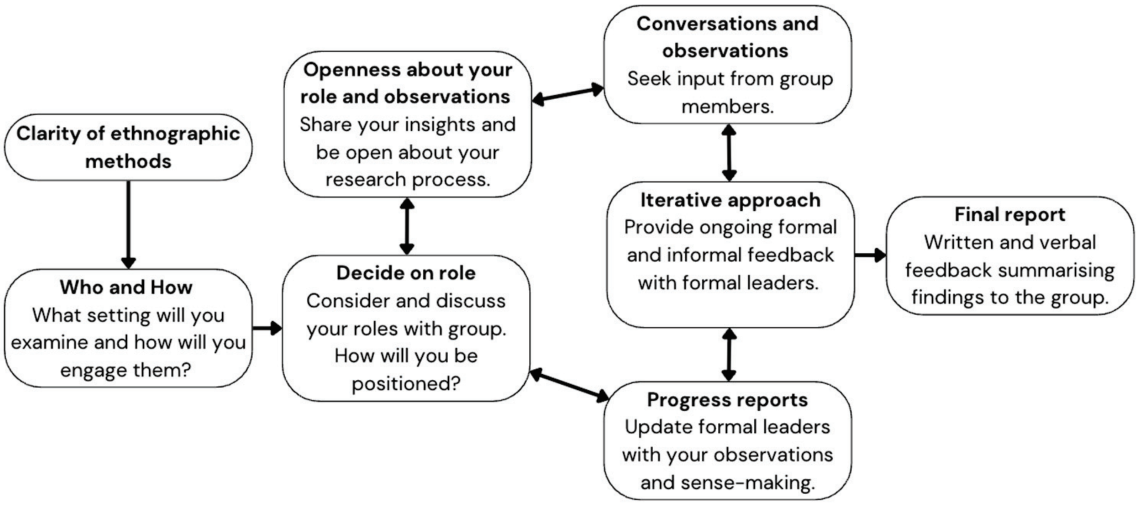

Figure 1. Ethnographic process to examine leadership.

Participating in group activities also allows researchers to experience leadership within the group. As part of developing rapport with the group, researchers could be open and transparent about their role and observations. Doing so can help them build trust among the group. While sharing insights with group members, researchers can initiate discussions with group members that provide insights and suggestions for the researcher's interpretations. The researcher can also engage in an iterative process with the formal leader(s) in which they share formal and informal feedback, and together, the leader and the researcher can make sense of the data. Indeed, by involving formal leaders in the data collection and analysis process, researchers are giving back to the group, building rapport, and collecting insightful data. Feedback can also be an ongoing process where researchers provide progress reports to the group or to particular members (e.g., formal leaders). Doing so can support the sense-making process and also demonstrate transparency in the research process.

Throughout this entire process, the researcher should also consider how they can work with and within the group in an unobstructive and unobtrusive way. There is no one way to do this, and to a large extent, this requires social skill on the part of the researcher to discern how they might best navigate their way through the research process and their membership in the group. At the conclusion of the project, researchers can share a final report with the group or its formal leader(s) and discuss their conclusions. Doing so ensures that the group and the researcher benefit from the research, and allows the researcher to clarify their interpretation with the group and its leaders. It may benefit the entire group to share feedback and a final report; however, the researcher should consider what forms would be most beneficial and consult the formal leader(s) about the possibility and utility of sharing these insights with the broader group.

In sum, by embedding themselves within groups, ethnographers can create meaningful stories and narratives that illustrate how leadership outcomes are shaped by the interplay between leaders, followers, shared identity, and group context. These leadership narratives can support leadership development practices by providing context-specific examples of leadership in action. By including these examples in leadership development practices, leaders can observe how leadership effectiveness is intertwined with their relationship to followers and the context. Furthermore, these leadership narratives have the capacity to engage leaders in problem-solving activities that are based on real-world scenarios that can enhance a leader's ability to form and adapt their leadership approach to meet the demands of the context. Through this approach, leadership development can incorporate an interactive and reflective process that prepares leaders to navigate the complexities of their environment and that helps them and those who support them to create more leaderful teams.

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behavioral sciences

MDPI

Review

How to Make an Internal Team Coach: An Integration of Research

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Abstract: Team coaching has been found to increase group effort, improve interpersonal processes, and increase team knowledge and learning. However, the team coaching literature is renowned for its inability to define team coaching itself—making it difficult to solidify its place in the world of team science. So far, there is no consensus on what specific training would serve internal leaders best, and how they would connect to the team coaching literature. We know leadership and team training are effective in improving organizational outcomes, but the gap in the literature lies in identifying what specific competencies internal team coaches need, and what training could fulfill these. In this piece, we seek to (1) identify what competencies internal team leaders need based on the outcomes we know team coaching yields, (2) identify specific behaviors that can fulfill these competencies, and (3) integrate the literature to form an evidence-based guide on what training to provide to internal team coaches. By doing so, we hope to provide a definitive understanding of what internal team coaches need to be successful.

Keywords: team coaching; leadership training; team training

1. Introduction

Collaboration demands have surged by over 50% in recent years [1]—underpinning a clear need for effective teamwork. However, as organizations continue to require and seek out "team players", many have erred in assuming that teamwork is an inherent skill [2]. On top of this erroneous belief, many individuals who lead teams are also promoted or hired on the assumption that their past task performance translates to effective *leadership* performance [3]. With this, a conglomerate of issues can arise, as team members do not know how to act as a team, and team leaders do not know how to lead one. These misconceptions have paved the way for executive coaching. Executive coaching uses questioning to help clients unlock their professional potential and has gained substantial traction in the organizational world, generating nearly USD 3 billion in profit in 2019 [4]. Profit aside, executive coaching is widely recognized as an effective intervention that yields a variety of positive work outcomes, such as increased work satisfaction, better time management, and increased employee productivity [5,6]. Notwithstanding, its "sister-like" approach, *team coaching*, has been largely underutilized and underdeveloped [7].

Leadership can be understood as a process of social influence that involves directing people towards a common purpose [8] (p. 68). Leaders enact leadership in a variety of ways, from laissez-faire hands-off approaches to more involved ways, such as team coaching. Team coaching can be understood as a way of leading that emphasizes "direct interaction with a team intended to help members in the coordinated and task-appropriate use of their collective resources in accomplishing the team's work" [9] (p. 269). Until recently, team coaching had been known as a "black box" [10], where team performance improved, but it was difficult to determine why. Recent advances have integrated team coaching work and determined that there are three empirically supported ways in which team coaching works [2]: it improves group effort/motivation (i.e., [10]), it improves interpersonal processes via increases in psychological safety (i.e., [11]), and lastly, it improves team knowledge and learning (i.e., [12]). Altogether, these three processes can improve team performance [2].

As conceptualized by Hackman and Wageman [9] and supported by the literature, team coaching can be effectively carried out by an internal team leader [13]. This approach differs from executive coaching, where typically, an external consultant is hired to develop one individual at a time [14]. The benefits of using an *internal team leader* as an *internal team coach* (known as the leader-behavioral approach) are particularly valuable for certain teams, such as those who have well-defined boundaries (e.g., the task is clearly defined) and teams that are more "compact" (e.g., on the smaller side, 4~10 members). The use of internal team coaches can eliminate the need for later external intervention. On top of this, internal coaches can bring a wealth of task-related knowledge that makes them highly attuned to the team's dynamic [2]. For example, a surgeon who operates as an internal team coach knows their team's weaknesses and strengths simply by working with them rather than having to observe them, and they understand the technicalities involved in the shared goal of a successful surgical procedure. See Table 1 for clarifying definitions.

Table 1. Team coaching terminology.

Terminology	Definition
Team coaching	A task-focused leadership process approach that helps team leaders accomplish a shared team goal by increasing group effort and motivation, improving interpersonal processes, and increasing team knowledge and learning [2].
Internal team leader	A leader of a team with a shared goal. Anyone who leads a team is an internal team leader, as opposed to an external coaching consultant brought in to help a team. Example: A surgeon leading a surgical team.
Internal team coach	An internal team leader leading a team with a shared goal implementing strategies and actively using team coaching techniques, such as goal-setting, team norming, and active learning. Example: A surgeon leading a surgical team using team coaching as their leadership strategy.
External team coach	An external consultant that uses team coaching as their main developmental tool to help a team advance towards their shared goal. Example: An external consultant coaching a surgical team to improve their team performance.

In comparison to executive coaching, team coaching has been slower to "take-off." Though there are a variety of factors at play, the literature has long grappled with a lack of clarity in defining team coaching [7] and having a consistent approach to implementing the intervention [15]. Until recently, this heterogeneity made it difficult to determine what outcomes team coaching can and cannot yield [2]. Yet, on top of this, team coaching has not been extensively studied empirically, with some exceptions (e.g., [13]). Given that external coaches usually undergo extensive certifications and training to perform their work [14], it is difficult to recommend the use of internal team coaches without first understanding what competencies they should hold and what tasks they should execute. Therefore, to continue strengthening the team coaching literature, this paper seeks to identify what competencies internal team coaches need based on the outcomes we know team coaching yields—from increasing group effort to improving interpersonal processes to improving team knowledge and learning. By doing so, we answer a call to understand the core competencies of a team coach [16].

It is important to state that there are a variety of existing team coaching models outside of the Hackman and Wageman [9] framework—such as the Systemic Team Coaching model [17] or Thorton's [18] psychodynamic perspective. We proceed in using the Hackman and Wageman [9] internal approach alongside its empirically corroborated propositions [2] not only because there is simply more evidence behind the leader-behavioral approach [19], but also because this framework is task-focused and useful for teams that have certain characteristics, such as a clear task and a compact membership structure. We do not negate the strengths of other frameworks, and in fact, this review purposefully includes a plethora of team coaching work, from external to internal approaches to organize it under this overarching framework. We hope that by identifying the key competencies of an effective team coach, we provide homogeneity in the team coaching as a leader-behavioral approach whilst incorporating a variety of perspectives and advances made in recent years. Hence, our goal is to take team coaching's diversity and organize under this framework.

2. An Integration of Leadership, Team Training, and Team Coaching Research

To our knowledge, there is no set standard for how to train an internal team coach. The discrepancies in defining the approach have made it difficult to move forward, and the significant lack of empirical work greatly constricts the conclusions we can reach. Nevertheless, the leader-behavioral approach is well positioned because it inevitably involves three streams of research: leadership, team science, and team coaching literature. The leadership training literature has decades of empirical support and a plethora of meta-analytic evidence suggesting that leadership training works (see [20]). The team training literature is also heavily supported by empirical (e.g., [21]) and meta-analytic evidence (e.g., [22]). Moreover, the team coaching literature also contains important insights that use a variety of frameworks outside of the Hackman and Wageman [9] approach. Given that the team coaching literature is nascent compared to the other two, we undertake an integrative approach, where we systematically review these three streams of literature to put forward the core competencies an effective internal team coach should have. In this review, we define a competency in alignment with prior team research, which are the knowledge, skills, and abilities (KSAs) "critical for team [leaders] to interdependently interact with [their team] in such a way that leads to positive team-based outcomes" [20] (p. 518).

Nevertheless, it is important to understand an assumption of this methodology is the idea that what would work in a leadership training program, a team training program, or another type of team coaching program (e.g., external approach) would apply to an internal team coach. We recognize the limitations of this assumption—and encourage further empirical work to validate the below competencies—but given the lack of existing research, we move forward in using prior research to inform this new approach. By doing so, this research also presents the strength that the competencies provided represent overlap between all three streams of literature, speaking to their potential generalizability.

3. Methodology

3.1. Search Strategy

This systematic review was performed according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines [23]. Three keywords were utilized: "Leadership training" or "Team coaching" or "Team training", and three databases were searched: Academic Search Complete, PsycInfo, and Business Source Complete.

3.2. Exclusion and Inclusion Criteria

The initial search yielded 12,144 articles. The authors automatically removed any articles that were not peer-reviewed, in English, in an academic journal, and whose full text was not available through the university database. Once duplicates were automatically removed, this yielded a total of 1821 articles (see Figure 1). We then excluded articles that included announcements, commentaries, corrigenda, or articles that included information about mental health, substance abuse, family law, minor information, spirituality, and disability training. We only assessed articles that contained information about leadership training, or team training, or team coaching, or coaching, and/or team/leadership competencies. Then, we proceeded to only include articles if they contained information about improving motivation/effort, improving interpersonal processes, or improving knowledge and learning, and/or general team/leadership competencies.

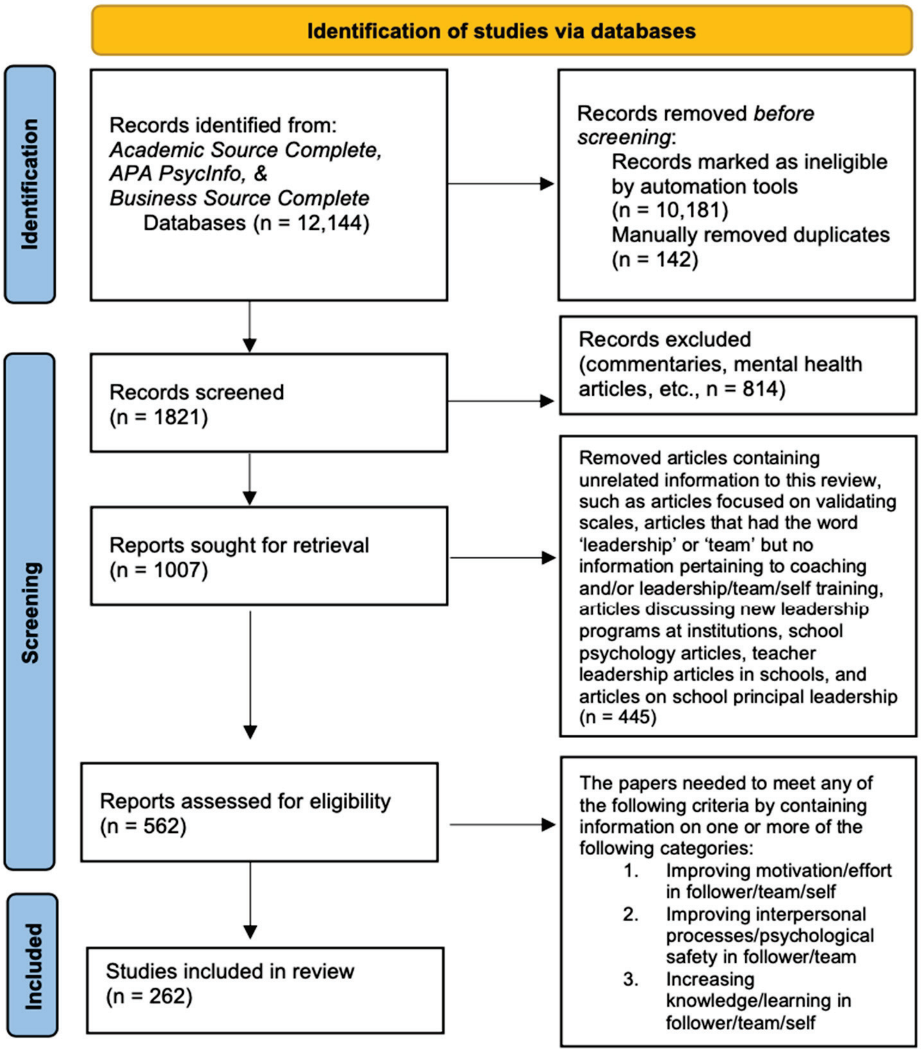

Figure 1. Systematic review flowchart.

3.3. Consolidation of Themes

As acknowledged before, we purposefully decided to include a wide variety of approaches; therefore, articles that used both internal and external coaching approaches were considered. Moreover, coaching strategies outside and including the Hackman and Wageman [9] model were included. Notwithstanding, the wide range of research methods and perspectives made it difficult to capture all competencies and intricacies pointed out by the three research streams. For this reason, all four coders were instructed to focus on extracting information from the articles that explicitly focused on *how* to actually increase/improve each of the three areas, rather than focusing on general performance improvements. For example, if an article noted a training resulted in "improvements in group motivation" but did not explicitly address how this was achieved, that was noted but not included for our thematic analysis. On the contrary, if the article noted "improvements in group motivation" and specified this was achieved via goal setting, this was included for our thematic analysis. All coders took notes on each article and then the coders met to consolidate the notes (see Supplementary Materials). Two coders did the first half, and the two coders did the last half (all articles were double-coded). From this, the two leading authors discussed commonalities among all articles and extracted the nine competencies presented below.

4. Overview of Internal Team Coach Competencies

The systematic review revealed a variety of methods through which leaders and teams are being trained to improve the three specific processes team coaching has been known to improve. Overall, the literature yielded a total of nine main competencies internal team coaches need to have to properly coach their teams, with three under each category. While the majority of these have been previously highlighted by the literature (e.g., initiating structure) [24], it is their combination that makes an internal team coach separate from simply being a team leader—as not only are they leading their team into success, but purposefully ingraining in their team members how to complete tasks autonomously and self-regulate (e.g., allows autonomy, reflective practice). Below, we describe each core category of competencies, alongside detailing each competency, followed by a general explanation on how to train these behaviors. Table 2 provides a summary of these competencies and their corresponding area.

Table 2. The nine internal team leader competencies.

Increasing Effort and Motivation	Improving Interpersonal Processes	Increasing Knowledge and Learning
Initiates structure by setting team goals, team chartering, and clarifying aims.	*Acknowledges and is aware* of their own needs and that of the team.	*Organizes team information* by establishing a shared mental model.
Allows autonomy in team member work while committing to team goals.	*Maintains interpersonal sensitivity.*	*Facilitates information sharing* by cultivating a positive environment.
Offers support for team goal completion.	*Engages in open dialogue* with their team.	Engages in *reflective practice* by debriefing and providing feedback to the team.

5. Competency Area #1

5.1. Increasing Effort and Motivation

A *team* is a group of two or more people who interact with each other, rely on each other, share a common purpose, and view themselves as a unit [25]. A key part of distinguishing a leader who has employees working for them vs. a leader who is leading a team is an underlying common purpose—a *shared goal*. Organizational psychologists understand motivation as a goal-striving process that involves direction, intensity, and persistence in activities to achieve said goal [26]. At the team level, this becomes increasingly complicated, as an internal team leader must be able to articulate what the team's goal is and how the team is going to achieve it. However—, an internal team leader who wants to engage in team coaching must go beyond establishing a goal or delineating who does what. An internal team coach will engage in three key behaviors: initiating structure, allowing autonomy, and offering continuous support for the team's goal completion. In other words, an internal team coach does not simply lead, but guide, and moreover—allows for others to guide themselves.

5.1.1. Initiates Structure

Organizational psychology has long established that effective leaders initiate structure, dating back to path-goal theory [24]. An effective leader will initiate psychological structure by engaging in behaviors such as specifying "procedures to be followed, clarifying [. . .] expectations of subordinates, and scheduling work to be done" [24] (p. 321). In reviewing the literature, it became clear that leader effectiveness (e.g., [27,28]) and team effectiveness (e.g., [29,30]) hinge on setting clear goals, necessary to keep team members motivated. The team coaching literature reiterated this (e.g., [31,32])—albeit making it abundantly clear that, to even begin guiding one's team, an internal team coach needs to engage in initiating structure via goal setting. However, the literature revealed a variety of ways in which a team coach can do this—going beyond simple goal setting and highlighting methods such as team chartering (e.g., [33]) and continuously clarifying aims (e.g., [34]) and concerns (e.g., [35]). Therefore, an effective internal team coach will not just set a goal but agree on it with their team, clarify expectations around team behavior and the mission at hand, and make an effort to ensure everyone is caught up on the mission as it progresses. Notwithstanding, the way of delivery in establishing and reinforcing structure matters, marking the need for allowing autonomy amidst a team mission.

5.1.2. Allows Autonomy

An internal team coach allows autonomy in how team members connect to the team's mission and allows for flexibility in their work process. By doing so, the internal team coach can help team members take responsibility for their progress. All three streams of literature reiterated the importance of autonomy/flexibility for effective performance. For example, one leadership intervention found that facilitating autonomy and other psychological needs positively impacted work engagement and performance up to two months post-training [36]. In virtual teams, working autonomously was also identified as a critical competency [37]. In healthcare teams, self-management allowed for empowerment and motivation within the team [38]. The general coaching literature noted that coaching can help individuals become autonomous in their learning processes [39]. Altogether, these findings align with self-determination theory (SDT), which holds autonomy as necessary for motivation [40]. As another example, in an external team coaching approach, Körner et al. [31] noted the importance of emphasizing *responsibility* for team coaching to be effective down the line, as this allows people to understand and accept the process. These approaches suggest that allowing flexibility and choices in how team members complete their tasks will motivate members (see [41]). Therefore, an internal team coach must not only initiate structure but also allow autonomy within said structure and facilitate team member connections to the goal by allowing everyone to "bring a piece of the pie" to the table. This is a key boundary between leading and team coaching: not simply delegating tasks but helping others learn how to approach them.

5.1.3. Offers Support

In one external team coaching approach, Woodhead [42] found that the coach supported the team in maintaining dialogue, completing their goal, maintaining a safe environment, and decision making. Another team coaching approach involving a discussion of goals, consideration of consequences, and evaluation suggests team coaching could support goal attainment for a team [35]. In the leadership training literature, leadership support was positively associated with team functioning [43]. The team training literature noted mutual support as imperative for handling positive and negative situations [44]. Hence, another theme emerged: the importance of a team coach's support throughout the goal-attainment process. However—the type of support offered should be focused on the task rather than on interpersonal relationships.

Hackman and Wageman's [9] original team coaching approach focused on the team task rather than interpersonal relationships, deemed a "structural view". This structural perspective argues that conflict arises due to higher-order process issues, like an unclear team goal, rather than interpersonal differences (see [2]). This description does not negate the existence or importance of interpersonal relationships within a team but instead argues that if a team focuses on the task and is clear on what needs to be done, interpersonal relationships will facilitate rather than cloud goal attainment. In keeping with this original definition, and with recent work on team dynamics finding *task cohesion* is more predictive of team performance compared to *social cohesion* (see [45])—internal leaders who seek to implement team coaching behaviors should offer support for the completion of the task, attempting to clarify steps around the goal to avoid conflict. One exciting way to do this as an internal team coach is to have a vision for the team. For example, Aripin et al. [46] described a successful leader as someone who explains, directs, and demonstrates the organization's goal and vision, inspiring employees and providing them with purpose and direction. The ability of a leader to think creatively and come up with new concepts, alongside having the ability to combine this with strategy and goal setting, can be conducive to organizational development [47]. Therefore, an internal team coach can support the team's mission by helping members visualize the "end game", offering expertise when needed—and not as an imposition on other's roles. In other words, the internal team coach must guide others in the right direction, not force them down that path.

6. Competency Area #2

6.1. Improving Interpersonal Processes

Many researchers in the team coaching field believe that prioritizing interpersonal relationships within a team can yield positive results (e.g., [18]). Nevertheless, as stated above, a structural view of team coaching necessitates focusing on the task rather than team member relationships. However, whether a focus on relationships is helpful or not is not a debate endemic to the team coaching field, as others have also long argued over the effects of interpersonal conflict on performance, with some finding it beneficial (e.g., [48]) and some not (e.g., [49]). In this section, we discuss how internal team leaders can stay focused on the task while fostering positive interpersonal relationships and psychological safety. We do this not from a psychodynamic perspective but from a task perspective, where teams can learn to self-regulate by fostering a safe environment. This process begins by being aware of the team's needs, maintaining interpersonal sensitivity, and monitoring teamwork behaviors over time.

6.1.1. Acknowledgement

Recent literature has emphasized the importance of leader well-being for follower performance (e.g., [50]). Dalgaard et al. [51] recognized this and developed a training program for managers to improve their well-being, arguing that by doing so, leaders' ability to promote staff care also improves. Though exhibited in different ways, this awareness of one's own needs and limitations repeatedly came up in the literature not only as an essential precursor to overall performance but also effective teamwork (e.g., [52]) and effective leadership (e.g., [53,54]). Therefore, an internal leader must know their needs and limitations as a primary step before engaging in team coaching. This relates to one's needs and limitations about the team goal. For example, if the goal is to build a rocket, and the team leader is not an engineer, a leader who engages in team coaching would be aware of their limitations, establish boundaries, and use this self-awareness to empower the team in other ways. They would give autonomy to the engineer in the team to lead under certain circumstances and empower them to speak up when necessary.

Moreover, an effective internal team coach must also develop awareness and understanding of the team's needs. This can be achieved by assessing team member styles (see [32]) and understanding a team's reward preferences (see [55]). For example, while a leader might reward their team for making progress by hosting a pizza party, a leader who engages in team coaching is aware of what team members want as a reward and will gauge whether this would be in line with the team's desires. This is because an internal team coach maintains an open dialogue with their team and engages in goal setting with them, not *for* them. As another example, if a deadline is impossible given organizational constraints, an effective internal team coach will engage with their team to attempt to remove barriers rather than simply leaving them there [10]—also tying to the prior competency of *offering support.*

6.1.2. Maintains Interpersonal Sensitivity

Though a focus on interpersonal relationships should not be the goal of an internal team coach, they must maintain interpersonal sensitivity to enable effective performance. Sensitivity came up as a critical competency in multiple streams of research (e.g., [47,56,57]). Therefore, an internal team coach should exhibit and model norms of respect to all team members, regardless of who they are. Nevertheless, it is essential to note that engaging with the competency of interpersonal sensitivity is much more effective when woven into a team's norms (see [58]). A leader can demonstrate interpersonal sensitivity in various ways, from establishing rapport [57] to simply asking team members how they feel about where they are at (e.g., [32]). By asking questions and remaining aware of who needs what, as well as offering support when needed (see *offering support* competency), an internal team leader can maintain interpersonal sensitivity that, while not actively playing a role in the completion of the task, facilitates it by creating a psychologically safe environment (see [11]).

6.1.3. Engage in Open Dialogue

One of the main strengths of internal team coaching is that a team will learn how to self-regulate rather than rely on external interventions or training to engage in effective team processes [2]. To accomplish such a degree of self-regulation, an internal team coach must maintain open lines of communication with their team. In opening goal setting and norm-setting as a team process rather than a strict leader process, team members develop their own relation to the team task. For example, in an external coaching intervention, Woodhead [42] found that, eventually, team members developed a deep sense of trust with each other that enabled collaborative decision making and allowed the team to put the interests of the team first (as opposed to their individual needs). While in this case, an external actor enabled this, internal team coaches can also do this in their teams (see [59] for a combined approach), as evidenced by the team literature that found that inclusive communication enabled a shared sense of responsibility for the team's performance [38]. Moreover, the team and leadership training literature suggest that open communication can be trained (e.g., [44]) and promoted [60].

7. Competency Area #3

7.1. Increasing Knowledge and Learning

For a team to accomplish any goal, they must be able to share and integrate knowledge. Long-standing research in team science indicates that this is achieved via team cognition, the team system's overlapping representations, the team's interdependent tasks, the roles and responsibilities of each team member, and their shared experiences [61]. Part of team cognition is a team's *shared mental model*, defined as knowledge structures that allow teams to have a shared understanding of the task at hand. For an internal team coach to aid and influence team knowledge and learning, they must understand how team cognition and shared mental models develop over time. Moreover, they must facilitate their growth and aid the team in reflecting during goal and after goal completion. This section describes what an internal team leader must understand to facilitate these processes.

7.1.1. Organizes Team Information

A challenge for teams is adjusting to changing demands and conditions. One reason this is challenging is that, in a team, it can be difficult to discern who knows what. A critical competency a team leader needs to have to engage in internal team coaching is the ability to organize team information. One way to organize team information is via a shared mental model that an internal team leader can facilitate via information sharing and exchange [61]. An internal team leader should promote information sharing, helping embed psychological safety into the team's culture (see [41]). This is even more important for teams in turbulent and complex environments, where teams heavily rely on their shared mental model and team leader to function effectively [33]. This is not a stand-alone competency; it is heavily dependent on initiating structure and properly establishing team roles. However, as opposed to traditional ways of leading, team leaders who seek to engage in team coaching should allow people to get involved in the process of knowledge sharing (see [32]). Internal team coaches see this process as collaborative and not as an imperative. They help organize the team, but they also rely on their team. External coaching approaches have established the importance of self-understanding and expanding awareness (see [62]), and the team training literature suggests that, when people know and understand what everyone is contributing to the overarching goal, they will support other's contributions [63]. Therefore, while it is not the job of a leader to know everything, it is their job to make sure team members know who to ask and organize this process.

The team coach can organize team members' expertise, connecting team members strategically [10]. For example, the leader can make a specific attempt to connect the engineer with the team scientist to execute the launch of a product, helping them form a working relationship. Moreover, by being purposeful about initiating structure, team coaches can even align certain team member expertise and potentially even better synchronize their efforts when they work together (see [35]). Team members who are better at integrating knowledge will learn from each other and gain new knowledge and perspectives of the team and the complex problems they are solving (see [64]). In essence, what will generate new knowledge and subsequent learning will be the team coach's ability to encapsulate the team's knowledge and disseminate it to the appropriate team members who are working on a component of the overarching team tasks.

7.1.2. Facilitates Information Sharing

Psychological safety—a reiterated theme in all three streams of literature (e.g., [65–67])—is vital for knowledge creation because it allows people to share information without fear of reprimand (see [11]). Hence, a leader who wants to engage in team coaching and increase team knowledge and learning must facilitate knowledge sharing by cultivating a positive environment. This begins by playing into the interpersonal competencies discussed above. Moreover, other extant literature suggests fostering psychological safety and a positive environment by being willing to listen to different team members' perspectives on different issues [58]. Creating a positive environment is not a one-and-done process. Effective teams will take the opportunity to learn from their mistakes and engage in reflective practices [58], making sure the team understands what happened, what could be done better, and what adjustments will be made, as discussed below.

7.1.3. Reflective Practices

Active learning is when a leader structures how the team learns and refines knowledge. The team training and simulation literature finds that when teams set time aside to reflect on their plans and how everyone contributed to the goal, knowledge can increase (see [63,68]). Moreover, leaders who engage with learning as a continuous process could potentially continue to enhance knowledge. For example, Seeg et al. [69] found that a post-training intervention six weeks after training enhanced knowledge transfer. Internal team coaches can learn from this, remind their teams of past experiences, and apply this knowledge to future challenges rather than starting with a slate anew every time something comes up.

Team reflection and planning are critical for laying the groundwork for team functioning [35,70]. Internal team coaches engage in active learning and can do so via feedback and debriefing. This can be done via feedback and team debriefing to promote knowledge integration and learning (see [41]). When a team coach provides constructive feedback on teamwork, they can create a culture in which information is freely exchanged, and feedback is viewed as an opportunity for learning. Therefore, when mistakes or failures occur, the team coach can use feedback and debriefing to learn for the team and correct mistakes. The effectiveness of the feedback will depend on the tone after the teamwork breakdown and how the team coach presents the information to the team—necessitating the above critical competency of interpersonal sensitivity.

8. Training the Competencies

All three streams of literature contained a plethora of ways in which leaders, coaches, and teams can improve their dynamics. However, one idea was so widely reiterated that it is essential for organizations to understand one crucial step prior to implementing internal team coaching as a strategy. Leaders must conduct a needs analysis before engaging in team coaching (see [31]). Whether organizations choose to implement a formal training workshop detailing how to perform one or whether internal leaders decide to undertake this practice themselves, both approaches must delineate the importance of understanding what the goal is, where the problems lie, and what can be performed to approach the goal and surrounding issues. Other than this, all three streams of literature contained a variety of ways to train these specific behaviors. However, a particularly strong sub-stream of literature was the simulation literature that emphasizes *learning by doing*.

Leaders who want to engage in internal team coaching must practice by doing. They must involve their teams in goal setting, norm-setting, feedback sessions, debriefs, and so forth. Organizations who want to engage in more formal internal team coach training should teach team coaches how to set specific goals, give effective feedback (e.g., give task-centered feedback and make it a two-way street) [71], and conduct effective debriefs. They can teach these behaviors by strategies such as role-playing and a varying degree of simulation techniques (see [72])—as what matters is not the perfect replication of physical environments or situations [73], but allowing for practice prior to a real-time engagement. A promising point of simulation-based training (SBT) techniques is their accessibility. Training does not have to be an expensive endeavor. Organizations simply have to allow leaders a space in which they can practice these techniques and learn about these competencies. Nevertheless, it is important to note that team coaching is an approach, and not the approach. Different team developmental interventions (TDIs, see [20]) can also be helpful, depending on the issue that an organization is facing. Team coaching can be both a formal training intervention and a process intervention where an individual simply chooses to engage in certain behaviors [2]. However, depending on what the end-goal is, it is possible that team training interventions are better suited, or if a leader is not dealing with an intact team, a leadership intervention might fit best. All-in-all, team coaching is a best fit for a leader that leads a compact team with a specific goal, and the evaluation of needs is necessary prior to any intervention.

9. Limitations

The competencies put forward by this review assume that research from the leadership and team training sphere translate into the team coaching sphere as a leader-behavioral approach. This is a strong limitation of the research put forward—but given the lack of empirical evidence in the team coaching sphere, we believe it was necessary to keep moving forward. Given that many internal team coaches do not undergo formal training, putting together a list of key competencies allows the literature to understand what behaviors leaders need to exhibit to call themselves team coaches. However, a much-needed pathway for future research given the assumption of this paper is to develop a scale that evaluates these behaviors in internal team coaches to attest to their existence. Moreover, such a study should measure these competencies in team coaches and most importantly—note whether they correspond to each of the three areas noted here. It is important that these competencies build on each other and lead to an improvement in team performance, and for this, empirical research with control groups is necessary. By doing so, research can attest to the existence of these competencies empirically.

Another important limitation of this review is the generalizability of our findings. Given that these competencies were extracted from a variety of literature streams, we are confident that they are applicable across a variety of settings where the task is clearly defined. However, it should be noted that there has been very little research on understanding where team coaching is useful. The few empirical studies that have been conducted on team coaching have been focused on the healthcare and innovation sphere, which are two areas in which the task tends to be clearly defined. Therefore, more insights are needed on whether these competencies (and team coaching at large) are useful in other organizational settings, such as corporate settings.

10. Future Directions

The need for more empirical research to solidify the team coaching approach has been previously remarked [2] yet needs to be reiterated. However, advancements are being made, and more recent research has attempted to be more descriptive and transparent in their approaches (e.g., [31]). To continue streamlining the literature, researchers should make their approach transparent (i.e., describing whether they are taking a task-focused or psychodynamic perspective, etc.). Moreover, in reviewing the team coaching literature, few authors discussed why they undertook an internal vs. an external team coaching approach. We encourage authors to include this debate in their research, which can help organizations understand when one might be needed over the other. As brought up by the reviewers of this paper, an especially useful empirical lens would be to undertake a comparative study that delineates under what circumstances internal coaches work and under which conditions external coaches are needed.

On top of streamlining the literature via the two points discussed above, there are a variety of ways in which researchers can continue to strengthen team coaching via empirical research. Given that team coaching is a task-oriented approach meant for teams with a specific task in mind and who are more compact, it would be interesting to explore whether this method of leadership works for virtual teams or fluid teams. On top of this, and as remarked by this paper's reviewers, there has been a complete dearth of research focusing on team coaching across cultures, with some exceptions (e.g., [74]). Therefore, a clear research need involves understanding how these competencies show up across cultures, such as "initiating structure" and potential differences among vertical vs. horizontally organized cultures.

11. Conclusions

This paper presents a unique perspective on team coaching, viewing it as an internal leadership approach. Individuals can effectively lead their teams by establishing a structure that allows autonomy and support, maintaining interpersonal sensitivity, and fostering open dialogue. Additionally, we propose that internal team coaches can enhance team performance by organizing information, facilitating information sharing, and embracing reflective practices as part of a continuous learning process.

This paper delves into the practical aspects of team coaching, aiming to identify the key competencies, behaviors, and actions that internal team leaders can adopt to enhance team dynamics. Building on previous research that has established the effectiveness of team coaching in improving performance, this paper provides a comprehensive list of strategies for motivating one's team, managing interpersonal processes within it, and fostering team knowledge and learning.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/bs14060452/s1; We have provided a summary table that summarizes each paper's main ideas corresponding to this manuscript, alongside the theme they represent. Table S1: Papers included in the review.

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The Influence of a Reflective Identity Leadership Intervention on Perceived Identity Leadership, Social Identity, and Psychological Safety in Cricket

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Abstract: The purpose of this study was to investigate the influence of an identity leadership-framed reflective practice intervention on perceptions of leadership, social identity, and psychological safety in cricket. Building on previous evidence, an eight-week design included three intervention group coaches and their athletes (n = 32) and three control group coaches and their athletes (n = 34). Measurements of perceived coach identity leadership, social identity, and psychological safety were completed by cricket athletes at week 0 and week 8 for both groups. Intervention group coaches completed three identity leadership-framed reflective tasks in weeks one, three, and five, while the control group coaches continued their regular practices. Controlling for baseline scores, our analysis indicated that compared to the control group, the intervention group athletes reported significantly greater coach identity leadership behaviours, social identity, and psychological safety following the intervention. Social validation data highlighted shared identity, relationships, and learning as potential mechanisms for the positive results seen.

Keywords: coaching; teamwork; leadership; cricket

1. Introduction

"Cricket is not a sport for everybody" noted the Holding up a Mirror to Cricket report recently published by the Independent Commission for Equity in Cricket (ICEC). As Bishop [1] highlighted in response to this, leadership in cricket needs to care about the values of their organisation and people above any profits or short-term targets. Indeed, the primary role of leadership in any domain is to create an environment of shared belonging to promote performance and wellbeing-related behaviours to intrinsically occur [2]. One way to energise the collective and create a sense of "we-ness" in sports environments is through identity leadership [3]. Speaking to this point, a review by Stevens et al. [4] reported growing evidence that a variety of performance and health-related outcomes (e.g., effort, wellbeing, and performance) are positively influenced by individuals who engage in identity leadership. Leaders who focus on the "must wins" and the "medal count" may be likely to overlook the fundamental human necessity of belonging and may not recognise that performance and psychological well-being are two sides of the same coin. Therefore, developing ways in which sports leaders can enhance their social identity-development skills with their teams is critical. Building on the applied research of Brown and Slater [5], in the current study, we examine the influence of a social identity-informed reflective practice intervention that is tailored to enhance identity leadership behaviours in the novel setting of elite and amateur cricket.

1.1. The Social Identity Approach to Leadership

Traditional approaches to leadership have typically focused on the qualities of the leader in isolation, which somewhat overlooks the importance of context and connection to the group [2]. Moving on from the individualistic and traditional approaches to leadership, within identity leadership, scholars have proposed that successful leadership is bound up within group processes [3]. Accordingly, within the identity leadership perspective, it is recognised that optimal leadership behaviours vary according to the content of the group's identity and context, and at its core, successful leadership involves creating a shared social identity [2]. Social identity can be understood as an individual's knowledge that they belong to a certain group that has psychological value and significance to them [6], and in cricket, can be encapsulated by the extent to which athletes identify psychologically as a member of their cricket team.

Identity leadership comprises four specific behaviours: (1) defining what the group stands for (i.e., entrepreneurship); (2) embodying the central qualities and attributes of the group (i.e., prototypicality); (3) advancing and standing for the group's goals and interests (i.e., advancement); and (4) implementing activities, structures, and events that enable members to live out their collective identity (impresarioship) [3,7]. The positive influence of individuals engaging in identity leadership behaviours has been well-documented in the literature. Outside of sport, in a meta-analysis involving 128 studies, Steffens et al. [8] reported a moderate to large positive effect of prototypicality—which is the extent to which a leader is seen to embody shared a social identity—on evaluative and behavioural outcomes such as leadership effectiveness. In sport and exercise, being led by an individual who demonstrates identity leadership behaviours has been shown to improve performance and the maintenance of greater effort [9] and increase group identification and attendance [10]. As well as these motivation and performance-related indicators, researchers have found that when athletes report that their leaders engage in identity leadership, this contributes to positive appraisals of competitive events [11] and greater psychological safety [12].

Overall, the social identity perspective may be well placed to facilitate the overlap between performance and health, and, by engaging in identity leadership, it may prove possible to simultaneously improve both performance and health-related outcomes [4]. Taken together, this evidence suggests that the success of the group may depend on the leader's ability to improve their interactions and shape a team environment that allows athletes to feel valued, connected, confident, and safe [13]. One concept that speaks to this point and has been examined in the context of identity leadership, i.e., [12], is psychological safety.

1.2. Psychological Safety

The primary use of the term psychological safety was derived from the work by Edmondson [14] in the field of organisational psychology. Psychological safety represents a shared belief amongst a group that they are safe to voice ideas and concerns and engage in interpersonal risk taking. Psychologically safe environments increase learning behaviour, performance, communication, innovation, and individual wellbeing [15]. Those environments with lower levels of psychological safety tend to promote fear, conformity, and an accentuated power distance between leaders and followers [16]. Thus, the leader's role in promoting psychological safety is therefore crucial.

Indeed, Edmondson and Lei [17] noted that leadership is a key antecedent of psychological safety. Research across the organisational context has highlighted the importance of connecting with others [18], engaging in supportive behaviours, and fostering bonds between team members [15]. Nevertheless, some studies have challenged the concept of psychological safety, highlighting its complex nature across different contexts. For example, psychological safety has been found to have an impact on effort levels [19] and the development of unethical behaviours [20]. In a large study consisting of 170,000 teachers, Higgins et al. [21] found that psychological safety was not necessarily supportive of performance over time, and it was more likely that lower levels of psychological safety and higher perceived levels of accountability led to the best performances over time.

Psychological safety is not the absence of being critical but is better reflected in high-quality support through trust and high-quality connection [22]. In a sports team environment, where internal competition is high, an athlete's ability to have candid conversations and navigate conflict makes it possible to enhance psychological safety [23]. The coach and team environment are therefore crucial to facilitating honest conversations, high levels of team performance, and positive athletic experiences [24]. Having a coach who can reflect on their ability to positively influence the environment is important as sports have been shown to rely on potentially beneficial exposure to environments where it is not entirely safe to fail [25].

Furthermore, researchers have provided support for further investigating the link between leadership and psychological safety in sports. Gosai et al. [13] collected data from 166 team sport athletes and found that certain elements of leadership such as consideration, intellectual stimulation, and fostering acceptance of group goals were positively associated with psychological safety and coach–athlete relationship quality. Examining the social identity approach to leadership and psychological safety, Fransen et al. [12] adopted a cross-sectional design with 289 handball athletes. The results indicated that coaches, captains, and informal leaders all had a unique contribution to strengthening team members' identification with their team. Through this shared sense of 'us", in turn, athletes felt psychologically safe in their team to speak up, provide input, and take risks. The study by Fransen et al. [12] has provided important initial evidence of the link between identity leadership and psychological safety that warrants further investigation, and this reflects one area that we sought to build upon. The current study will add further evidence on the associations between identity leadership and psychological safety by assessing the influence of a social identity-informed reflective practice intervention on identity leadership, social identity, and psychological safety. If the intervention influences changes in identity leadership over time, which are also mirrored by changes in psychological safety (i.e., both variables increase from baseline to post-intervention), this would provide further evidence of the positive association between both concepts.

1.3. Reflective Practice

Reflective practice within sports coaching is positioned as an individual meta-cognitive strategy, progressing from simply considering 'what coaches do' to also including 'what, and how coaches think' [26]. Reflection is an essential part of coach learning [27] but can be challenging and complex due to the wealth of personal experiences that coaches carry [28,29]. To illustrate, with 12 high-level coaches, Nash et al. [30] identified that it is the combination of how to reflect, and upon what criteria, that makes reflective practice a powerful tool to develop expertise. Reflective practice can lack effectiveness if the details regarding what reflection is and how to effectively do it go unstated [26,31]. Despite the appeal of reflective practice, limited empirical evidence exists to support how reflective practice develops effective leadership [32].

Critics of the traditional approach to reflective practice have suggested that it prompts a natural gravitation towards what one lacks, perceiving the coach as a 'problem fixer' and ultimately constructing a world where problems become a central focus [33]. Strength-based reflection, which is designed to focus on positive aspects of performance, has been found to create an open-minded and dynamic practitioner [33] as well as increase personal satisfaction and performance [34]. Coach education courses could do more to fully realise the benefits of reflective practice by allowing coaches to develop craft and tacit knowledge, creating flexibility and emotional awareness to respond in the moment [30,33].

Brown and Slater's [5] novel reflective practice intervention created opportunities for sports coaches to reflect at a team/group-based level. The researchers found that reflecting on coaching practice through a social identity lens elicited significant improvements in athletes' rating of their coaches' engagement in the identity leadership behaviours of advancement, entrepreneurship, and impresarioship. Providing a focus for coach reflective practice is a useful way for coach education to go beyond the technical and tactical and move towards developing a sense of "we" and "us" within each context. That said, Brown and Slater [5] did not measure additional variables beyond identity leadership, and so the influence of the social identity-informed reflective practice intervention on pertinent outcomes such as social identity and psychological safety remains unknown.

1.4. Leadership Development Interventions

Despite the growing extant literature on the consequences of identity leadership, social identity, and psychological safety individually and collectively, there remain comparatively few applied interventions and studies to assess the efficacy and utility of developing these key behaviours and concepts. Within the social identity paradigm, researchers have aimed to take theory to practice through the creation of identity leadership interventions such as the 3Rs [35] and the 5Rs [36].

The 3R model involves working with leaders and their teams through the phases of Reflecting, Representing, and Realising to enhance their identity leadership skills and behaviours, and ultimately, create a shared sense of social identity [2]. In one study over a two-year period, implementing the 3R model on two occasions in an international disability sports team, Slater and Barker [35] found that, compared to baseline data, an athlete's social identity and the number of hours practised away from formal camps increased as a result of the intervention. Despite the elite context, which can be seen as a strength, the research was conducted with a single team each year, and this resulted in a small sample size. In addition, using the 5R framework, Mertens et al. [37] addressed the small sample size and moved knowledge closer to cause and effect by conducting an experimental test of the effectiveness of 5R^{s} that was found to strengthen athletes' identification with their team. There were some limitations that can affect the conclusions made from this study. Two limitations that Mertens et al. [38] set about addressing were the use of a waitlist control group for all coaches who were willing to take part in the study and the inclusion of female teams. The results from Mertens et al. [38] indicated that the 5R shared leadership program was useful for developing high-quality leadership, nurturing player's health, and improving overall team functioning. Haslam et al. [39] measured additional variables within their 5R study, most notably teamfullness (of which one element was psychological safety). The results indicated that leaders, relative to the control condition, reported medium-sized increases in team engagement and teamfullness. Overall, these studies highlight the benefits of collaborating with the leaders and their teams, and that developing one's identity leadership could provide the tools to enhance leadership success.

1.5. The Current Study

Building on the preceding backdrop and the identity leadership-framed reflective practice intervention developed by Brown and Slater [5], we aim to apply the same intervention within cricket specifically, in male and female teams, and with the addition of social identity and psychological safety as novel variables. There is a clear need to build on this work as identity leadership and psychological safety may be aspects that contribute to effective environments that can be used as a springboard to flourish in sports [13]. We hypothesised that compared to the control group, the identity leadership-framed reflective practice intervention will elicit a significant increase in athletes' perceptions of their coach engaging in identity leadership behaviours (H1), social identity (H2), and psychological safety (H3) from baseline to post-intervention.

2. Method

2.1. Participants and Design

We adopted a 2 (group: experimental vs. control) × 2 (time: pre vs. post) design. Using a medium to large effect size (d = 0.66) reported in Brown and Slater [5], we conducted apriori power analysis using G*Power 3.1.9.7. We set an alpha of p = 0.05 and a power of 0.8, resulting in a required sample size of 67. Due to the typical sizes of cricket teams and anticipated retention rates, we aimed to recruit six U.K. coaches. A total of 6 coaches and 85 of their athletes were recruited for the study, consisting of (1) 2 'competitive elite' adult female teams [40]; (2) 2 adult amateur male teams that competed at division one or above in their county competition; and (3) 2 independent school male first teams, which competed at the U18 level. One team from each of these three clusters was randomly allocated to the intervention group and one to the control group. Our retention rate was 77.6%, resulting in a final sample of 66 athletes (intervention $n = 32$, control $n = 34$).

2.2. Measures

2.2.1. Identity Leadership

The Identity Leadership Inventory—Short Form (ILI-SF) [7] was completed by athletes to assess perceptions of their coach's identity leadership behaviours using a scale from 1—strongly disagree, to 7—strongly agree (e.g., "The leader acts as a champion for the group"). Each item assesses one identity leadership behaviour, and the scores across the four items are averaged to produce a single mean score for identity leadership [7]. Results from a range of studies show that the ILI and ILI-SF have good construct and discriminant validity globally, with the short form well-suited to repeated measurement, which is inherent in intervention research [7,41].

2.2.2. Social Identity

The athletes completed the Social Identity Questionnaire for Sport (SIQS) [42]. The SIQS is a 9-item, positively worded questionnaire and athletes answered the questions in reference to their cricket team using a 7-point scale from 1—strongly disagree to 7—strongly agree (e.g., "I feel strong ties to other members of this team"). The SIQS can be used to assess the three aspects of social identity: (1) in-group ties; (2) cognitive centrality; and (3) in-group affect, or as an overall score for social identity. In this research, the SIQS was used as a global construct to analyse the athletes' general strength of social identity in relation to their cricket team. Support for measuring social identity as a global construct is provided [42] and used in Mertens et al. [38].

2.2.3. Psychological Safety

The Team Psychological Safety Questionnaire [14] was used to assess the athlete's perceptions of psychological safety within the athletes' team. Players completed a 7-point scale from 1—strongly disagree to 7—strongly agree (e.g., "It is safe to take a risk on this team"). The measure has been used extensively across other contexts and by Fransen et al. [12] in sports. Fransen et al. [12] investigated the reliability and structural validity during their cross-sectional study and found that after exploratory factor analysis, the removal of item 6 provided greater validity and reliability as opposed to the original 7-item questionnaire. Although it is possible to argue that some items may not be as relevant in the sporting context as they are in other team settings, the measure is popular within the literature, and as there is limited research in the sporting context, and in accordance with Fransen et al. [12], the adapted 6-item measure was used in this study.

2.2.4. Social Validation

A social validation questionnaire was used to investigate the effectiveness of the overall intervention process and was given to all participants within the intervention group [43]. Adapting previous examples [44], the questionnaire featured eight questions, which were measured on a 7-point Likert scale from 1—do not agree at all to 7—agree completely (e.g., "The coach is strongly motivated to engage with this team"), and eight open-ended questions (e.g., "Please describe whether the coach helps you to feel as though you belong to the team?"). Drawing on the principles of reflexive thematic analysis [45], the data were analysed guided by six phases, which included (1) familiarisation of data; (2) initial codes: (3) creation of themes; (4) reviewing themes; (5) defining theme names; and (6) producing the report, which can be found in the Results section. The qualitative data collected via social validation were based on Brown and Slater [5] and the purpose was to complement the quantitative data gathered. We sought to optimise the quality, trustworthiness, and rigour of the qualitative data [46]. The data were gathered and analysed by the first author, and they shared their analyses with the second and third authors in August and September 2023 to debate, discuss, and act as critical friends. This critical friend process was not to verify the data but rather to question and explore the generated codes and themes in the context of participant data/lead researcher experiences. This journey continued during the write-up phase of the research paper. Further, the lead researcher reflected on his own biases and experiences during the journey of data analysis and write-up.

2.3. Procedure

Initial information was sent to pathway development offices, technical directors, and head coaches of cricket teams along with invitations to engage in an initial phone call to discuss the nature of the research. Interested coaches then received further information and consent details if they were willing to participate. After completing this, players were given information regarding the study, parental information and consent (U18 teams), and informed consent. The athletes who wished to participate completed the baseline measures using an online link on personal devices or using paper copies, which were then sealed and taken by the lead researcher (first author). Following the collection of baseline data (i.e., week 0), the two coaches within each cluster—(1) adult male, (2) adult female, and (3) U18—were randomly assigned to the intervention group or the control group. All players completed the measures at baseline and post-intervention (i.e., week 8), with the intervention group only completing social validation post-intervention. At both the baseline and post-intervention sessions, athletes were instructed to read all of the information, that participation was voluntary, to seek clarification regarding any confusing terms or questions, that their identity would remain anonymous throughout the process, and that they could withdraw.

2.4. The Intervention

Following the collection of baseline data (week 0), the three coaches in the intervention group received task one in week one via email. The coaches had seven days to complete this activity, which was directly emailed back to the lead researcher. The coaches subsequently completed task two in week three and task three in week five. The identity leadership-informed reflective tasks were in line with the intervention used in Brown and Slater's [5] study. Task one was a combination of strength-based reflection and the four principles of identity leadership [3,34] with coaches required to answer questions such as "what do I want to start doing?" and "what do I want to do more of?". Task two combined a targeted reflective narrative with identity leadership behaviours [47,48] that required coaches to identify a specific instance in their coaching that they believed highlighted identity leadership components using the format of identification, description, significance, and implications [49]. Coaches were asked to identify a situation that fitted one or more of the identity leadership behaviours, followed by a rich description of thoughts, feelings, and circumstances experienced. Task three combined a reframing exercise through an identity leadership lens [50,51], which required each coach to identify a new occurrence and consider the perspective of someone else in the group. Coaches would then reflect and comment on their own actions in relation to each of the four identity leadership behaviours. Tasks were completed digitally in the coach's own time across seven days, which was then emailed back to the lead researcher. The procedural elements of the intervention are shown in Table 1. All tasks are available from the first author on request.

Table 1. Overview of the intervention procedure including activities, measures, and consent.

Who	Recruitment	Information and Consent	Week 0	Week 1	Week 3	Week 5	Week 8
Coaches	Initial contact and research information.			Intervention Group: - Identity leadership discussion with coach. - Reflection Task 1: Four key principles and a strengths-based reflection.	Intervention Group: - Reflection Task 2: Social identity-based reflective narrative.	Intervention Group: - Reflection Task 3: Reframing reflection.	Follow up email to thank coaches for their time and effort.
Athletes		Participant information and informed consent.	Baseline Measures Intervention Group: - Identity leadership - Social identity - Psychological safety - Social Validation Control Group: - Identity leadership - Social identity - Psychological safety	Continued training and matches as normal			Post Measures Intervention Group: - Identity leadership - Social identity - Psychological safety - Social Validation Control Group: - Identity leadership - Social identity - Psychological safety.
Parents (U18)		Participant information and informed consent.					Follow up email to thank parents and participants for their involvement.

3. Results

To assess H1, H2, and H3, we conducted a one-way ANCOVA (group: intervention vs. control) to examine post-intervention differences in perceived coach identity leadership, social identity, and psychological safety, controlling for baseline scores. We adopted ANCOVA as this covariance approach is the optimum statistical estimation in baseline to post-intervention randomized control trial designs, particularly—as we found in the current study—when baseline scores for the intervention and control group are different [52]. In other words, while there is debate surrounding whether a 2 × 2 mixed model or ANCOVA is best practice in designs such as ours, we deemed ANCOVA as the best approach for our data because the intervention and control group reported significantly (all p's < 0.001) different baseline scores across all variables. Adjusted Bonferroni post-hoc pairwise comparisons were planned to follow up on any significant result. See Table 2 for descriptive statistics and effect sizes.

Table 2. Descriptive statistics and effect sizes (Cohen's *d*) for identity leadership, social identity, and psychological safety across the control group and SIL intervention group.

Variable	Control Baseline Mean (*SD*)	Control Post Mean (*SD*)	Effect Size (*d*)	Intervention Baseline Mean (*SD*)	Intervention Post Mean (*SD*)	Effect Size (*d*)
Identity Leadership	4.87 (0.82)	4.94 (0.71)	0.09	4.12 (1.04)	5.37 (0.77)	1.20
Social Identity	4.97 (0.61)	4.88 (0.61)	−0.15	4.01 (1.17)	5.06 (0.67)	0.90
Psychological Safety	4.83 (0.88)	4.86 (0.77)	0.03	3.89 (1.42)	5.18 (0.82)	0.92

3.1. Identity Leadership

Consistent with H1, a one-way ANCOVA (group: intervention vs. control) indicated a significant difference between the groups on identity leadership, F (1,63) = 44.15, $p < 0.001$, $\eta^2{}_p = 0.412$. Controlling for baseline scores, at post-intervention, the intervention group ($M = 5.37$, $SD = 0.77$) reported greater identity leadership compared to the control group ($M = 4.94$, $SD = 0.71$). Compared to baseline data, the increase in the intervention group reflected a large practical improvement ($d = 1.20$) in identity leadership.

3.2. Social Identity

Consistent with H2, a one-way ANCOVA (group: intervention vs. control) indicated a significant difference between the groups on social identity, F (1,63) = 20.96, $p < 0.001$, $\eta^2{}_p = 0.250$. Controlling for baseline scores, at post-intervention, the intervention group ($M = 5.06$, $SD = 0.67$) reported greater social identity compared to the control group ($M = 4.88$, $SD = 0.61$). Compared to baseline data, the increase in the intervention group reflected a large practical improvement ($d = 0.90$) in social identity.

3.3. Psychological Safety

Consistent with H3, a one-way ANCOVA (group: intervention vs. control) indicated a significant difference between the groups on psychological safety, F (1,63) = 34.35, $p < 0.001$, $\eta^2{}_p = 0.353$. Controlling for baseline scores, at post-intervention, the intervention group ($M = 5.06$, $SD = 0.67$) reported greater psychological safety compared to the control group ($M = 4.88$, $SD = 0.61$). Compared to baseline data, the increase in the intervention group reflected a large practical improvement ($d = 0.92$) in psychological safety.

In summary, the results indicated that when controlling for baseline scores, at post-intervention, the intervention group reported significantly higher levels of identity leadership, social identity, and psychological safety compared to the control. Accordingly, the intervention brought about large practical (effect size range: $d = 0.90$–1.20) increases in how the athletes reported their coach's identity leadership and their own feelings of social identity and psychological safety in their cricket team.

3.4. Social Validation

Thirty-two participants responded to all of the questions on a 7-point Likert scale regarding the effectiveness of the intervention. Percentages revealed that these participants responded with somewhat agree, agree, and strongly agree. Statements included important to create a shared sense of identity (93.75%), bringing people closer together is important (100%), the coach has a positive influence on this team (93.75%), the coach is strongly motivated to engage with this team (96.87%), the coach can bring the team together (90.62%), I can contribute my ideas to the team (90.62%), the coach values my contribution to the team (90.62%), and I feel a sense of belonging with this team (96.87%).

Three higher-order themes and associated sub-themes were created (see Figure 1): (1) relationships, (2) learning, and (3) shared identity. The first theme, relationships, was influenced by the coach, specifically by getting to know the players: “he has tried to get to know me better this year and has taken more of an interest in how I view the game”; using positive affirmations: “he often checks in about my life and also about areas of my game that I am really good at”; and through attentive listening: “he has made a big effort to listen to the guys more and not be so uptight about his own philosophy” and “he clearly values our input and always keen to let us have our say”.

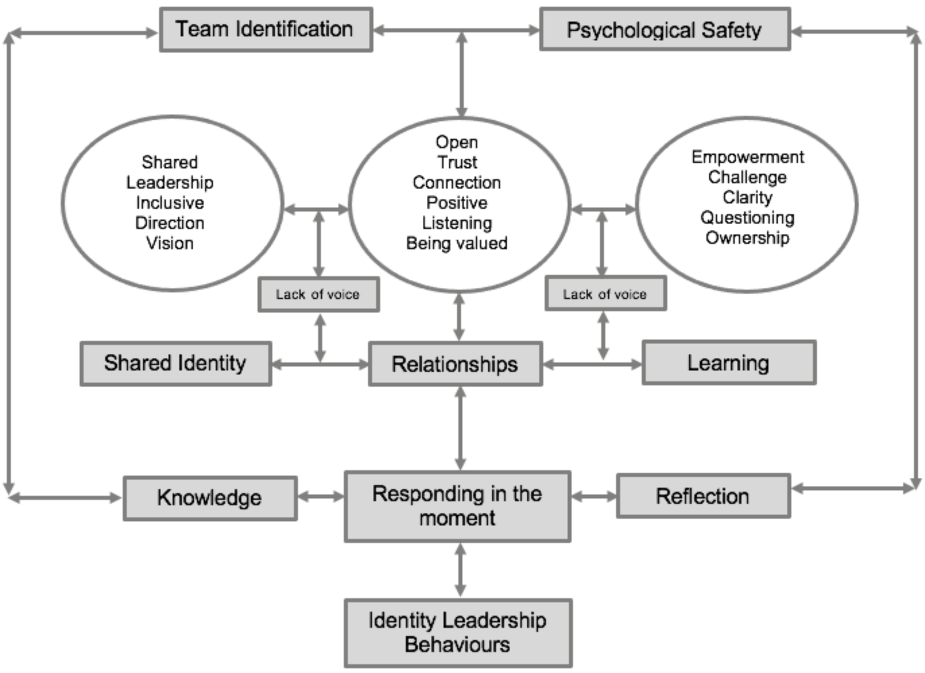

Figure 1. Visual representation of themes developed from responses to social validation results.

The second theme was that of learning in relation to allowing the players to take ownership: “giving us the chance to set the goals for the season was a good way to get us all together and buying in”; providing feedback to players: “he provides us with clear feedback to strive to get better” and “the coaching staff do push me to become better, making sure that I improve every time I leave and make sure I’m learning more about my game”; and ensuring that players have role clarity: “we have a role all of the time, even in training, our roles are clear, and our intentions are clear”.

The third theme was that of shared identity through the connection with all players “he communicates with all of us on an individual level and I feel that we all feel like one connected group”; enthusiasm for the development of the group: “he does not seem to favour anybody and I think there is a real fairness and eagerness to see everybody in the team improve” and “ideas are respected and willing to be listened to”; and the creation of a playing identity: ‘he has allowed us to create a style of play that we think will be the most enjoyable for us to play this season" and "everything is driven by the way we want to play our cricket".

The final sub-theme that is important to include here is the lack of voice through relationships with others in the team: "sometimes, it depends which group I am assigned to when planning and post-match chats" and "I do feel safe but only to certain people within the team"; and not fully believing in the team's direction: "I think we also need to talk about plan b and c. I feel like if I mention this I will be seen as negative and not 'fitting in' to the team's style of play". These valuable points highlight that even in an environment that has been measured as psychologically safe, there are still individuals who feel that they are unable to speak up.

4. Discussion

The purpose of our study was to examine the influence of an identity leadership-framed reflective practice intervention—as developed by Brown and Slater [5]—on identity leadership, social identity, and psychological safety in cricket. In other words, we aimed to explore if engaging in tailored reflective activities through a social identity lens could lead to increased perceptions of coach identity leadership and, in turn, strengthen bonds between team members and create an environment where all cricketers can feel safe to be their authentic selves. In line with our hypotheses (H1–H3), the results indicated that when controlling for baseline scores, the intervention group reported significantly higher levels of identity leadership, social identity, and psychological safety compared to the control group following the intervention. Further, in terms of the practical meaningfulness of the data, the intervention produced large increases in how the athletes perceived their coach's identity leadership, the athletes' strength of social identity, and their psychological safety.

This current research contributes to our understanding in at least three ways. First, we evidence that applying an identity leadership-informed reflective practice intervention directly and independently with cricket coaches can lead to athletes' enhanced perceptions of leadership. Second, as well as leadership, the intervention positively influenced key performance and health-related variables of social identity and psychological safety, and further documents the positive association between identity leadership and psychological safety. Third, we outline potential mechanisms of change for the intervention and evidence that the reflective intervention has utility in cricket, in elite and amateur settings, and in male and female teams. We structure the following discussion based on these three contributions.

Within the social identity paradigm, there is growing attention being paid to leadership development programmes including the 3Rs [35] and the 5Rs [36,38]. The findings from the current study add further support for the social identity approach in the development of leadership programmes in sports, and, specifically on the influence of collaborating with sports coaches directly and independently. Both the 3R and 5R programmes typically involve larger-scale programmes of work including a range of activities with leaders and, often all, athletes. In our study, as with Brown and Slater [5], the intervention was delivered to the head coach independently, and then they were tasked with applying their reflections in practice. Accordingly, the head coach is at the core of the influence and utility of the intervention, and there is clear scope for this programme to be delivered as part of coach education pathways in personal development. Moreover, the identity leadership-informed reflective practice intervention in the current study has brought about comparable, and arguably larger (in effect size terms), improvements compared to more intensive and larger-scale 3R and 5R programmes. The use of targeted reflections with the head coach aimed to initiate an identity leadership-based, contextually focused, reflective process to bring about changes in behaviour. In turn, this approach may have provided deeper and more focused grounds for reflection on, in, and for coaching action [32]. Our findings indicated that the coaches were able to action these changes with their teams given that their athletes, without knowing the specific details of the intervention, reported greater levels of identity leadership post-intervention.

Previous researchers have found that the identity leadership-informed reflective practice intervention improved three of the four identity leadership behaviours [5]. We enhanced our understanding of the positive influence of the reflective intervention by documenting that, compared to a matched control group, the tasks engaged in by the coaches led to the strengthening of cricket athletes' social identity and psychological safety (as well as identity leadership). In other words, in addition to leadership, there are downstream effects of the identity leadership-informed reflective practice intervention on coaches and athletes over an eight-week period. Furthermore, the positive influence of the intervention on both identity leadership and psychological safety (albeit at a smaller magnitude for psychological safety) provides evidence that a positive large practical shift in identity leadership produced a similar large positive shift in psychological safety. This provides further support for previous evidence that has indicated that identity leadership and psychological safety are positively related [12].

Figure 1 highlights some potential mechanisms for the positive influence of the intervention. These reflect initial and potential mechanisms at play. It can be suggested that creating a collective vision, as part of the key theme of shared identity, is an example of entrepreneurship, which is an act that seeks to unite rather than divide the group [3]. Participant responses on the social validation data highlighted that having a set of guiding principles could create certainty amongst the group whereby all athletes are clear on the team's direction and their role. Certainty is noted as a key boundary condition and an essential ingredient that enables psychological safety to contribute to performance and learning [17]. Shared leadership could have also been a vital part of this process. By allowing players to take ownership and contribute to the collective vision, feelings of connectedness could have been strengthened along with enhanced motivation to speak up and offer knowledge. This may explain the improvements we document, and it builds on the work by Fransen et al. [12] who found that identity leadership displayed by coaches, captains, and informal leaders all contributed to strengthening social identity and a sense of psychological safety. In other words, allowing players to contribute to the collective vision may have enhanced perceptions of agency and contribution to team processes, thus enhancing psychological safety. Haslam et al. [39] found that leaders who gave team members an opportunity to contribute to its direction reported increases in teamfullness, which consisted of psychological safety, team goal clarity, and an inclusive team climate. Inclusiveness has been shown to enable performance [53] and positively impact psychological safety in health care [54] and is noted as a key strategy when developing high-quality youth sporting experiences [55]. Indeed, creating a collective vision and a sense of "we" and "us" may enhance inclusiveness and allow group members to live out their shared sense of social identity.

Another potential reason for the positive findings in the current study could be due to collective goal-setting and collaborative feedback. Athlete responses in the social validation data spoke of the benefit of the use of collective goal setting, providing regular opportunities to discuss progress and facilitate feedback. Providing structures and activities for group members to live out their shared sense of social identity is termed impresarioship [3]. Allowing players to provide ideas and contribute to team goals could have created acceptance amongst the group, and it is the fostering of acceptance of these collective goals that can contribute to psychological safety [13]. The results in this study suggest that participants were positively engaging in the feedback process, and if this feedback is aligned with group goals, then the coach's intentions are clear. The understanding of intentions is crucial when giving and receiving honest feedback [16,17]. Cricket coaches in this study may have opened dialogue with their athletes and allowed them to engage with the feedback process, thus developing interpersonal skills. Understanding the role of feedback to different individuals, creating reciprocity, nurturing the feedback relationship, and having role clarity were all mentioned as key components of coaches who are willing to show that they care [22]. Perhaps through identity leadership, cricket coaches had increased awareness in the moment and thus demonstrated care for group members.

This ability to display and encourage openness is also critical to the coach–athlete relationship and has been found to positively influence psychological safety [23]. Providing clear roles is an example of impresarioship, and having roles can lead players to internalise a sense of shared group membership, which has been shown to be a basis for in-role performance and organisational citizenship behaviour [41]. Role clarity could have played a part in positive social identity results, but it has also been shown to be a key antecedent of psychological safety [56]. An example from player responses includes the sharing of personal cricket journeys, which is an example of personal disclosure mutual sharing (PDMS). Examples from cricket highlight the importance of this activity, which has been found to develop social identity, friendship identity, and collective efficacy [57], and this study could have contributed to the positive results. It could be argued that PDMS can also foster psychological safety through the mechanisms of vulnerability and comradeship by demonstrating emotions, taking risks to share their journey, and accepting their own and others' struggles [58]. Examples of prototypicality can also be highlighted in this study. As a result of the reflective task, one of the coaches planned a number of presentations to athletes to be delivered by past players and members of the cricket club's community. Leaders who are seen to embed themselves into the community could enable the perception that they are embodying the attributes that define what it means to be a member of this group and, in turn, display prototypicality [3]. These examples of impresarioship and prototypicality suggest that opportunities have been created by the leader for athletes to communicate freely, propose new ideas, and voice their feelings to promote the idea that coaching is about people sharing knowledge and constantly learning from each other [23].

This said, the sub-theme 'lack of voice' highlighted that, even in a team that has made significant improvements in psychological safety, there is still potential for others to feel a lack of direction within the team. This could be due to other factors such as personal performances and organisational fit [59], supporting the notion that psychological safety is dynamic, fragile, and reliant upon a variety of contextual factors [25]. Members of the team may feel psychologically safe when interacting with the coach, but because of the construct's dynamic nature, this may change depending on other interactions. If the environments were truly psychologically safe, then all members would be able to offer constructive disagreements, regardless of which members of the group they are working with [12]. Even though our results highlight significant improvements in psychological safety, it is perhaps too simplistic to categorise the holistic environment due to the highly variable individual responses [25].

4.1. Limitations and Future Directions

Our study has a number of limitations. First, there was no performance measurement included. Psychological safety has been shown to play a critical role in workforce performance [18], and using objective measures such as performance metrics is a crucial step (e.g., runs scored, wickets taken), but there are limited examples of this in sports. Future research may wish to examine the influence of the intervention on performance markers. Second, we adopted social validation as a measurement to add insight from an athlete's perspective, but we did not glean the coach's experiences of the intervention quantitatively or via social validation. As a form of triangulation, it could be argued that information gathered from coaches in this way could provide invaluable insight regarding the effectiveness and satisfaction of the intervention and highlight methods employed to bring about change [43]. Further, this research project was conducted in the UK, and there remain opportunities to enrich our understanding of cultural perspectives [60] within the application of identity leadership in sports. There is a need to conduct research with under-represented populations—not solely in cricket—but in various sports systems in the UK and across the globe. There are many potential intersections and opportunities to explore the application of leadership development within sport, and we hope that is embraced by future researchers and practitioners.

As noted by Brown and Slater [5], this eight-week intervention is relatively short-term. Due to the potential fluctuation of athlete perceptions and, perhaps, performance slumps, a more detailed, longer study that includes a follow-up measurement phase (i.e., 3 or 6 months following the intervention) would be valuable to understand the longevity of the positive influence of the intervention. Further, although we gathered the tasks completed by the coaches and the athletes' perceptions, we did not attend training or competitions. Therefore, beyond the athlete's social validation data, we do not have an insight into what precisely the coaches altered in terms of their behaviours. In the future, researchers may wish to consider conducting observations. Observations have the potential to shine a light on the challenges that coaches, athletes, and teams face throughout the course of a season. Capturing in situ observations of critical incidents of identity leadership across the season would limit the constraint of relying on participant recall alone and might result in a more comprehensive understanding of cricket specifically [61].

4.2. Conclusions

The present study has shown that an identity leadership-framed reflective practice intervention, working with cricket coaches directly, can simultaneously develop coaches' identity leadership skills, athletes' identification with their teams, and the psychological safety of the group. Circling back to the ICEC report with which we started this article, in the pursuit of making cricket a game for everyone, targeted reflective practice through an identity leadership lens may assist cricket coaches in developing their identity leadership skills, and, crucially, be the creators of a caring and psychologically safe environment.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/bs14080655/s1.

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Article

Developing Servant Leadership through Experience and Practice: A Case Study in Service Learning

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Abstract: Servant leadership is characterized by a core altruistic calling and central attributes of genuine caring, humility, and empathy, and in recent years, has become a style of leadership recommended to be addressed in sports management classrooms because of its associated positive outcomes and emphasis on ethical behavior and decision-making. As the relevance and popularity of servant leadership continue to grow, it gives rise to matters of how this approach to leadership can be better studied and taught to current and aspirant sports professionals. Thus, the purpose of this qualitative case study is to analyze a community-based service-learning project as a mode for developing servant leaders as part of a college sports management curriculum. Nineteen upper-level college sports management students participated in this study by serving as mentors in an after-school program for underprivileged elementary school students for 12 h across the course of six weeks. Participants then completed a written reflection upon the conclusion of the service project. Content analysis of these reflections suggests that service learning may be a positive method for developing servant leaders. The article closes with a discussion of findings, proposed future research questions, as well as ideas for future service-learning projects aimed at developing servant leaders.

Keywords: servant leadership; sports management; mentoring; service learning; leadership development; experiential learning; promoting leadership

1. Introduction

As business organizations search for forms of leadership that are more pro-social, the focus of leadership studies and practice has shifted from authoritarian styles to less egoistic and more positive forms of leadership centered on fellowship and developing subordinates by meeting their needs and promoting their personal and professional growth [1–3]. One style of leadership that aligns with this shift in the modern workplace and that has garnered heightened interest amongst management scholars over the past decade is servant leadership (SL). Servant leadership embodies the core principles of prioritizing others and ethical conduct, which means leaders who embody this style place service to others above personal authority and domination [4]. As the relevance and popularity of SL continue to grow, it gives rise to matters of how this approach to leadership can be better understood and developed in aspirant business professionals such as students [1].

Though numerous academic models of SL have emerged since its inception [5–12], conceptual ambiguity compounded with a proliferation of overlapping descriptive terms within these models can make understanding the exact nature of SL challenging [1]. Indeed, the seeming paradox of the servant as leader and the leader as servant, which represents an inverted leadership hierarchy, can be a challenging concept to grasp when authoritative leadership styles have been dominant for decades in business cultures throughout the world. Thus, because the idea of SL may be confusing at first, especially to inexperienced, aspirant business professionals, focused attention needs to be given to how SL can be better understood and how SL qualities can be developed and put into actual practice in professional settings. Directing scholarly attention to experiential, community-based service learning, for instance, may be an effective mode for developing the next generation of business professionals who can lead with a servant's heart [1].

Though certain individuals may possess desirable leadership characteristics from birth, such as empathy or being a great listener, many attributes crucial for effective servant leadership can be developed via systematic experiences aimed at promoting the development of specific knowledge and skills [13–16]. Vertical development through experiential learning, for example, can help future leaders become better equipped with knowledge and how that knowledge can be applied in practice to enhance and extend their servant leadership potential [17]. Accordingly, the purpose of the present case study is to explore how a community-based service-learning project implemented as part of the curriculum of a college course influenced potential future business leaders' (i.e., undergraduate students) SL development.

The specifics of the service-learning project succeed a brief review of the relevant literature and theory. Next, the qualitative results (i.e., the student reflections completed at the end of the project) are presented through the lens of a servant leadership framework [1]. A discussion of the qualitative findings, limitations, and directions for future research is then provided before concluding with ideas for future service projects focused on servant leadership development in aspirant business professionals.

1.1. Theoretical Foundations

The current study incorporates both experiential and service learning to explore SL development. Classroom learning was combined with active learning while also requiring participants to engage with the local community and produce reciprocal service outcomes. As a result, participants combined classroom learning, active learning, and service learning to gain a detailed understanding of key leadership concepts and their real-world applications.

Experiential Learning Theory (ELT) [18] informed the development and execution of the case study. This theory explains the benefits an individual (in this case, the study participant) may receive from participating in a community-based service-learning project. Part of the value of experiential learning is that individuals, such as students, obtain a broad knowledge base and intellectual skills as well as personal and social responsibility through the integrative learning process [19]. In fact, students who have participated in learning communities (e.g., senior culminating experiences, and service-learning projects) have perceived greater knowledge retention and personal development [20].

According to Dewey [18], experiential learning occurs through a cycle of experience, reflection, and application, where learners engage with real-world situations to derive meaning and understanding. In this study, ELT was operationalized by first designing a service-learning project that took students out of the classroom environment and placed them in a real-world mentoring role within a community-based setting. This immersion into a practical, hands-on environment allowed students to experience firsthand the challenges and rewards of working with at-risk youth, aligning with Dewey's emphasis on learning through direct engagement with authentic tasks.

The second phase of operationalizing ELT involved structured reflective practices, which were integral to transforming the service experience into a meaningful learning opportunity. After completing their service hours, students were required to engage in reflective writing, prompted by specific questions designed to encourage deep consideration of their experiences. This reflective process is a crucial component of ELT, as it facilitates personal growth and cognitive change by prompting students to analyze and internalize the lessons learned from their experiences. By connecting these reflections to broader leadership concepts, students can synthesize their practical experiences with theoretical knowledge, thereby enhancing their intellectual skills and fostering a sense of social responsibility. This deliberate alignment of experience, reflection, and application in the study mirrors the cyclical nature of ELT, making it a foundational framework for understanding how servant leadership attributes can be cultivated through service learning.

1.2. Servant Leadership Review

Conceptualizing Servant Leadership

The concept of SL is ancient, with roots stretching back thousands of years. An early reference comes from the Tao Te Ching, written around 500 BC in China, where Lao-Tzu asserts that the highest type of ruler is one of whose existence the people are barely aware [21]. This ancient philosophy introduced the notion that true leaders serve others selflessly, without seeking recognition. In the modern era, Robert K. Greenleaf, a former AT&T executive, is credited with popularizing the concept of SL in the business world. In his influential essay, "The Servant as Leader", published in 1970, Greenleaf coined the term "servant leader" and went on to describe this leadership style as one that prioritizes the personal growth and well-being of others, emphasizing ethical conduct and the importance of doing good [22]. Greenleaf's description of a SL is simple yet profound: "The servant leader is servant first... It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead... The best test, and difficult to administer is this: Do those served grow as persons?" [4] (p. 27).

Since the emergence of Greenleaf's ideas in the 1970s, various academic models of SL have been proposed. These models have adapted and expanded the original concept, adding unique perspectives and attributes. Notable contributions include works by Barbuto and Wheeler [7], Ehrhart [6], Laub [5], Liden, Wayne, Zhao, and Henderson [8], Sendjaya, Sarros, and Santora [9], Van Dierendonck [11], and Sun [12]. Each model has contributed a new dimension to the definition of SL, making the concept more robust and multifaceted (Table 1).

Table 1. Timeline of Common Servant Leadership Models.

Year	Author(s)	Model Description	Key Attributes
1970	Greenleaf [22]	The Servant as Leader	Serving first, personal growth of others, moral high ground, ethical leadership
1999	Laub [5]	Organizational Leadership Assessment	Valuing people, developing people, building community, displaying authenticity, providing leadership, sharing leadership
2004	Ehrhart [6]	Servant Leadership Behavior Scale	Emotional healing, creating value for the community, conceptual skills, empowering, helping subordinates grow and succeed, putting subordinates first
2006	Barbuto and Wheeler [7]	Dimensions of Servant Leadership	Altruistic calling, emotional healing, wisdom, persuasive mapping, organizational stewardship
2008	Sendjaya et al. [9]	Servant Leadership Behavior Scale	Voluntary subordination, authentic self, covenantal relationship, responsible morality, transcendental spirituality, transforming influence
2008	Liden et al. [8]	Servant Leadership Questionnaire	Conceptual skills, empowering, helping subordinates grow and succeed, putting subordinates first, behaving ethically, emotional healing, creating value for the community
2011	Van Dierendonck [11]	Servant Leadership Survey	Empowerment, humility, standing back, authenticity, forgiveness, courage, accountability, stewardship
2013	Sun [12]	Integrated Servant Leadership Model	Calling to serve, agape love, humility, empathy, integrity, trust, vision, empowerment, service orientation
2018	Robinson, Neubert and Miller [1]	3 Sphere Model and Teaching Recommendations	Altruistic calling, Genuine Caring, Humility, Empathy Service Learning and Reflection

To illustrate the evolution and diversity of SL models, a timeline can be seen in Table 1. The broad range of attributes associated with SL, from empathy and healing to stewardship and community building, has led to numerous efforts to integrate these diverse perspectives. Such efforts have resulted in the model on which this study is focused. The focus of this study is a model created specifically for the purpose of developing undergraduate students' SL abilities [1]. The three-sphere model revolves around a core motivation of altruistic calling which may reveal itself in leaders as the perception that one's vocation, or mission in life, is to serve others. In the second sphere of the model are the central attributes of SL. These are constant over time and across contexts and include genuine caring, humility, and empathy (see Table 2 for definitions). The model concludes with a third sphere. In this sphere, the necessary leadership qualities beyond the core and central attributes may be utilized based on the population of followers, context, and situational variables. For example, leadership approaches such as establishing clear structures or asserting authority, may be essential when rebuilding an organization. However, these methods may not come naturally to someone who is inherently a servant leader.

Table 2. Categorical Definitions, Results, and Select Statements.

Attributes and Results	Definition and Statements
Altruistic Calling (16 of 19, 84%)	one's deeply held beliefs that create a strong urge toward a particular way of life. When calling is altruistic in nature, a person is then motivated to promote the well-being of others, even at risk or cost to one's self.
Statement 1	"In the future I wish I could spend more time with a group like that and even mentor maybe just one kid and watch them grow up and learn with your help. I would also like to serve again next year because I know how helpful and how much it means to the kids that I was there helping".
Statement 2	"Overall my experience at Doyle was amazing I would definitely do this again. This experience was something I didn't know I needed".
Statement 3	"I hope to continually make efforts to volunteer and go and help the kids in any way that I can".
Statement 4	"I definitely want to try and volunteer here again next year. . . Overall, it was a very rewarding experience for me and I'm very glad I was able to participate".
Statement 5	"This will sound selfish, but I was able to give them my time. I am a full-time college student athlete who also has two jobs and is involved in other organizations. For me to say I was excited to add another thing on my to do list for Mondays would be a lie. However, the Doyle Center immediately became the most important to me".
Statement 6	"I haven't done too much volunteering, but after this I might volunteer more to see if I can have an impact on others like the kids we volunteered with".
Statement 7	"Holding this with me to my future goals even furthers my dream of giving back to my hometown and developing areas. I'll definitely be trying to go back to see the kids and again and volunteering as much as I can!"
Genuine Caring (9 of 19, 47%)	Based on a selfless, unconditional love known as agape love [23]; not merely behavior, but an expression of one's true inner attributes [24].
Statement 1	"I was a little timid on my first visit not really knowing what to expect from the program, as well as, the kids in it. However, once they arrived from school, I jumped right in to help and created a bond with several of them within even the first few minutes. I enjoyed my time working with these kids and hope that they will all prosper in the rest of their lives".
Statement 2	"I see them as siblings and I just want the best for them".
Statement 3	"It allowed me to see how much of an impact I can make just by showing them that I care about their success in their life and that feeling is something that can't be matched".
Statement 4	"They have someone to help them with homework and to ask them about their day, someone who cares about them".
Statement 5	"Saying goodbye to them was the hardest thing. Because I grew attached to them. I just wanted to keep seeing them grow and become better students and people".
Statement 6	"Nothing is better then having one of the kids run up to you and give you a hand made thank you card that they made in art class that day; it means the world to me and shows that even though I was there for a class assignment I had a major impact on theses kids lives in just 6 visits or fewer".
Humility (9 of 19, 47%)	Having a modest opinion or estimate of one's own importance; keeping a realistic perspective on one's position and capabilities; involves prioritizing the needs of others above one's own [25].
Statement 1	"Getting to meet the kids and understand the way they are growing up and living life everyday was honestly a very humbling experience for me as well".
Statement 2	"I like to think I am grateful, but after spending time with the kids I learned quickly that I am not".
Statement 3	"I feel like I was very lucky as a child growing up because most of the kids didn't have anyone but us. It was very sad to see that. I feel like I learned that don't take your life for granted because there is always another kid or adult that wishes they can be in you place".
Statement 4	"I learned to never take what I have for granted and to never be selfish in life because life is literally what you make it".
Statement 5	"This experience very much humbled me".
Statement 6	"Though it does show to me just how much I might have taken that for granted in my own life, it is hard to picture how much more I had going for myself than these kids do for them. It really shows how much in my early life I took for granted".

Table 2. *Cont.*

Attributes and Results	Definition and Statements
Empathy (15 of 19, 79%)	Intellectual identification with or vicarious experiencing of the feelings, thoughts, or attitudes of another; ability to be aware of the emotional states of others without those states being explicitly communicated [12]; allows leaders to understand the point of view and psychological perspective of others [7].
Statement 1	"One of the biggest things that impacted me is seeing myself in these kids and it is an experience I will never forget".
Statement 2	"They all taught me things Gee taught me to sympathize and reason with people, Sophia taught me life can be fun you just have to make it fun, Joseline taught me to smile, Danny and his sister taught me family is important, and Yasmine taught me freedom. They taught me more about myself than I could have ever expected. In life I was very strict and up tight about things good or bad I just wanted things to be perfect everyday all day. Working with them allowed me to remember what it was like to be a kid and not have things to worry about, even if it was just a few hours".
Statement 3	"I wonder if these kids get the attention they need at home and I feel like they really enjoyed being at Doyle. Especially being from a low income area, I wonder if they have father figures or an older brother or an uncle who cares for them".
Statement 4	"Even though we are supposed to be teaching them things, I learned so much from them. The biggest thing they taught me without even knowing it was patience... At first, I would get somewhat frustrated, but I quickly learned how to be patient with them because they may not have a structured home life where their parents sit down and teach them".
Statement 5	"The kid I worked with the most was Sophia, she really seemed to like me, and I was able to help her learn because she has dyslexia and so do I, so I was able to teach her some tricks to learn and read more efficiently".
Statement 6	"I have also noticed how these students look up to us, we are role models for them, and also how I could relate to their lives. I grew up in single parent home just like some of the children. I wanted just like them to have older people to help me with homework or hangout. It was an awesome time getting to know these students. I know that Akaziah loves to read about and play soccer. Her brother Dani loves to be outside and play tag, in which we played almost every day we were there. Gerrado loves wolves and playing basketball. His sister Joclyn is great with multiplication and wants to be a veterinarian when she gets older".
Statement 7	"While there I did make a bond with a few of the students and they became the kids that asked me to help them regularly with their homework. Their names were Sophia and Joseline and they were sisters. Joseline was the older sister and Sophia was the younger sister. One interesting thing that I learned about Sophia is that she learned in both Spanish and English. Some of her reading material would be in Spanish and she would have to translate it to English. Which for me was kind of hard because I did not know a lot of Spanish so, Sophia was teaching me something".
Statement 8	"Coming from a community where rural, underprivileged kids are prevalent throughout, this allowed me to immerse myself into their lives and a "behind the scenes" look on what they go through on a daily basis and what they have to deal with at school and at home".
Statement 9	"Some things that I personally have learned from the experience is that you never know what someone else is going through until they tell you themselves. I found that regardless of where you come from or where you are, kids are just the same wherever you go. They are all just waiting for a person to look up to and learn from. They all just want a place to have fun and to play with their peers".
Statement 10	"Getting to play with kids was my favorite thing because it made me feel like I was a young kid again and brought back my imagination".

In summary, SL is an enduring concept that has evolved significantly over millennia. From its ancient roots in the Tao Te Ching to its modern-day interpretations and models, SL emphasizes selfless service, ethical conduct, and the growth and well-being of others. The continuous development and adaptation of this leadership philosophy highlights its relevance and potential for fostering positive organizational and societal change.

1.3. Benefits of Servant Leadership

Numerous positive outcomes within a business environment have been linked to SL. This form of leadership can foster an open and trusting environment [26–28] as well as a culture of innovation [29]. Additionally, at the individual and team level, SL enhances organizational citizenship behavior [6,30], encourages collaboration between team members [31–33], and increases team and leader effectiveness and performance [31,34–38]. Servant leadership may also positively influence employee job satisfaction of employees [34,37] and decrease turnover intentions [39].

1.4. Servant Leadership in Sport

Regarding the significance of SL in sports, where the emphasis on winning can often overshadow the development of student athletes, consider the philosophy of the National Collegiate Athletic Association (NCAA). This nonprofit organization is responsible for regulating college athletes across the United States and emphasizes the importance of prioritizing the holistic development of student athletes. Its core purpose is "to govern competition in a fair, safe, and sportsmanlike manner, and to integrate intercollegiate athletics into higher education so that the educational experience of the student athlete is paramount" [40] (p. 3). Several of the NCAA's core values include integrity, sportsmanship, respect, and fostering an inclusive culture [40]. Given this mission to serve student athletes, scholars have argued that SL could be the optimal model to support the NCAA's mission and address the ethical issues in intercollegiate athletics in the United States [41]. Servant leadership emphasizes serving others, prioritizing the well-being and growth of individuals, and leading with a moral compass. This leadership style aligns with the NCAA's values and its aim to enhance the educational experience of student athletes.

Further, in a review on leadership in sports, Peachey, Zhou, Damon, and Burton highlighted that the most frequently cited leadership article in sports management literature advocates for SL in intercollegiate athletics [42]. However, the gap between the advocacy for SL and its actual implementation in educational content suggests a need for more emphasis on this leadership style in sports management curricula, empowering educators to better prepare students to lead with integrity, prioritize the well-being of athletes, and create inclusive and respectful sport environments. Servant leadership could serve as a powerful tool to address ethical challenges in intercollegiate athletics, ensuring that the focus remains on the holistic development and education of student athletes. As the NCAA continues to strive for fair and safe competition while upholding its core values, embracing servant leadership could help fulfill its mission more effectively and foster a more ethical and supportive environment in collegiate sports.

The scholarship on SL in sports shows promise even though it is still a relatively new area of leadership research within the sports management discipline. In the realm of interscholastic sport, for example, servant-leader coaches were shown to produce players who were more satisfied, had higher intrinsic motivation, were more task-oriented, and demonstrated more self-confidence than non-servant-leaders [10,43]. Servant leadership has also been shown to enhance coach–athlete relationships, specifically contributing to the individual growth and moral development of athletes [44], as well as improving ethical climate and trust in followers [45]. This style of leadership has also been shown to enhance athlete satisfaction [46], positively influence student athletes' immersion in the sport and athletic achievement [47] and improve coaching success [48]. Further, SL by interscholastic athletic directors has been revealed as an effective style by followers (head coaches) and resulted in head coaches who were more committed and had greater job satisfaction [49].

Recommendations have been put forth for fostering the growth of SL, advocating for students to participate in volunteer activities that entail direct engagement with the individuals they serve, with a preference for multiple visits, as suggested by Robinson, Neubert, and Miller [1]. These recommendations for experiential learning not only guide the service experience but also provide a framework for analyzing participant reflections, as outlined in the three-sphere model of SL [1]. Rooted in an altruistic calling, the SL model emphasizes the qualities of genuine caring, humility, and empathy. Definitions of core and central attributes of servant leadership according to the SL model are detailed in Table 2. This project functions as a follow-up and quasi-test of this service-learning approach for nurturing the development of servant leaders. The study is anchored in the SL framework, aiming to assess whether, in this context, service learning enhances student experiences regarding servant leadership.

2. Materials and Methods

2.1. Service-Learning Project Description

The service opportunity was coordinated by the instructor with the help of a service-learning coordinator office housed on campus. The Institutional Review Board (IRB) approved the study proposal, determining that it posed no potential harm to participants. IRB deemed that no identifying information would be used, and that no person would know whose statements might be used in the article, except for the student who wrote the reflection. Furthermore, because the study analysis occurred after students had concluded their college education and graduated, the IRB granted a waiver of informed consent and authorized the utilization of the reflections utilized for this study.

This case study included nineteen upper-level college students enrolled in a sports management course at a liberal arts university in the Southwestern United States. College students participated by serving as mentors for at-risk elementary school students (i.e., students who have higher a probability of failing a class or dropping out of school due to socio-economic concerns or domestic challenges such as parental absenteeism) during a local community center after-school program aimed at helping these students with homework and after-school recreation. As part of the class but before the service project began, students were presented with information on the importance of mentoring and guidelines for how to serve as an effective mentor by developing a partnership between someone with experience and someone who wants to learn. Servant leadership was not explicitly integrated into the course curriculum, ensuring that student reflections remained impartial and did not lean towards discussing SL attributes.

Students volunteered, forming groups of 3–4, at the community center for two hours a day, one day per week, over six weeks. This resulted in a total 12 h of service time. Mentors started each afternoon by helping students with homework assignments, lasting about an hour. Mentors then lead recreational activities outside such as kickball, basketball, running relays, and obstacle courses. Mentors and students also used the post-homework time for one-on-one conversations and relationship building. Student volunteers were required to keep a daily log of their activities and complete a final reflection evaluating the role and impact of the service-learning project on their personal growth and development. Participating mentors were also instructed to complete a final reflection of 300–400 words. For the final student reflections, students were prompted with the following questions: "Focus on how this service project impacted you. What have you learned from the experience?"; "What were you able to give, and what benefit did you receive in giving your time to help students?"; "What did you learn from the experience?"; "How has this impacted your perspective?"; "How will the experience impact your future?". Completed final reflections were submitted online via Canvas, the institution's academic online learning platform, and later collected for analysis.

2.2. Analysis

Content analysis serves as a method to dissect textual data and unveil underlying themes. Unlike thematic analysis, content analysis follows a top-down approach where themes are derived beforehand, often guided by theoretical or analytical interests [50]. Thematic analysis, in comparison, would have required the researchers to analyze the data, code them, identify them, review the themes in connection to the data, and then label the themes accordingly. Given that the current case study explores the interplay between service learning and the cultivation of SL, themes were predetermined based on an SL model that encompasses key characteristics of servant leaders like altruistic calling, genuine caring, humility, and empathy [1]. This approach aligns more with content analysis than thematic analysis. Definitions of SL attributes utilized for analysis are provided in Table 2.

Following the submission of reflections by mentors, the data were organized into an Excel spreadsheet, with any identifiable information removed to ensure participant anonymity. The researchers, working separately from each other, systematically categorized statements into the pre-established themes. Virtual meetings were then convened amongst the researchers to compare findings and address any discrepancies in coding and research agreement so as to avoid concerns about interrater reliability. This comparative process aids in identifying plausible themes and assessing statement alignment with each theme [51]. The comparative process was replicated three times over a two-month timeframe to facilitate both immersion and detachment. Each meeting lasted approximately 45 min. Immersion in the data is crucial for gaining a comprehensive understanding, while distancing enables researchers to evaluate the analysis from an objective standpoint [52,53]. During the first meeting, altruistic calling and genuine caring were coded with different color highlights. In the second meeting, humility and empathy were classified. Finally, during the third meeting, complete consensus was reached among researchers regarding statements that aligned with the established themes, and which statements were selected to be included in Table 2.

3. Results

Results were gathered from 19 upper-level (junior and senior) sports management students enrolled in a sports management course who also participated as mentors in an after-school program for at-risk elementary school youth. The mentors included 13 males and 6 females. Participants identified as White (11), Hispanic/Latino (7), and Black (1). Data were grouped into four themes: Altruistic Calling, Genuine Caring, Humility, and Empathy. Categorical definitions, summative results, and select statements are presented in Table 2.

Evident in the results is that service learning may have a positive impact on SL development. Participant statements present in the reflections were determined to fit within each of the pre-determined themes. While not every reflection touched upon all available themes, each reflection contained information that addressed at least one SL theme.

3.1. Altruistic Calling

Statements associated with the theme of altruistic calling showed up in 16 of the 19 reflections (84%). Expressions fitting into this category centered on students' aspirations to sustain their service in diverse roles as students and in their forthcoming careers and personal lives. Moreover, comments highlighting the gratification and fulfillment of participants derived from the activity were prevalent. They felt they had positively influenced the students they mentored, which reinforced their sense of making a meaningful impact. The abundance of statements associated with serving again in the future suggests that students not only enjoyed the experience but that they felt like they were able to make a difference for someone less fortunate. This altruistic calling lies at the core of being an SL [1], and this project may have helped to awaken and develop this sense of altruistic calling in participants. At a minimum, participating in this service-learning project created an awareness of a previously unrealized desire present in participants. For example, in Statement 2, the participant mentions not only a desire to serve again, but that it was an experience that the participant did not know was needed. The idea that this project increased a desire to serve again is integral to developing the core motivation behind SL.

3.2. Empathy

The next most popular theme after altruistic calling was empathy. It was revealed in 15 of 19 statements (79%). Selected statements contributing to this theme centered on the social bonds forged between mentors and participants of after-school programs encompassing an intellectual grasp or empathetic experience of the feelings of after-school participants, a connection with the student life situations within after-school programs, the cultivation of patience through understanding, reciprocal learning, and the formation of connections between mentors and mentees based on shared learning disabilities.

The direct contact between mentors and mentees over multiple meetings in this case allowed for relationships to be forged and the mentors were able to vicariously experience the emotional states of followers. As these emotional states were communicated over time they became more thoroughly understood. Consider Statement 5. This statement refers to a situation where the mentor and mentee were able to connect because they both had been diagnosed with dyslexia, a learning disability characterized by difficulties with accurate and/or fluent word recognition and poor spelling and decoding abilities.

Additionally, numerous participants indicated that working with these children helped them recapture the experience of childhood and identify with the students (see Statements 1, 2 and 10). The mentors also noted they learned from their students (see Statements 2, 4, 6, 7 and 9). The ability of a leader to intellectually identify with followers and understand their psychological perspective is crucial to becoming a servant leader, as servant leaders must first understand the perspective of followers to better meet their needs and help them grow. Thus, the current results reveal that through the service-learning interactions, participants experienced growth in this key facet of SL.

3.3. Genuine Caring and Humility

Though genuine caring and humility appeared in lower frequency than other themes (9 of 19, 47%), these characteristics still manifested in nearly half of the mentors. As shown in Table 1, this service-learning project nurtured a genuinely caring attitude in mentors toward followers. Statements that focused on the reciprocal caring relationships developed between mentors and after-school program students were included in this theme. Development in this area helps aspirant leaders prioritize followers' needs first, which is a core component of SL.

As well, many participants mentioned humility specifically (Statements 1 and 5), and others mentioned an increased understanding of the positive situations they may have taken for granted when they were children and before participating in this project (Statements 3 and 6). These statements remarked on the mentor's evolving perspective, heightened appreciation for their own circumstances and opportunities, and gratitude for a childhood abundant in opportunities that might have been overlooked previously. An increased awareness of these qualities helps further develop SL in participants by encouraging reflection and fostering a deeper understanding of the emotions and thought processes of others. This heightened awareness can enhance leaders' knowledge of their followers' needs allowing them to take a proper course of action to meet those needs.

Finally, though not a predetermined theme, students expressed enjoyment with the service-learning project and were unanimous in stating how the project positively impacted their development and the perceived development of the students they mentored. Thus, the service-learning project was not only impactful for the students' development of SL, but it also impacted their motivation to engage in prosocial, community-centered service efforts in the future. This demonstrates that the principles of SL, although often focused on the workplace, can extend beyond professional settings. The project fostered a sense of responsibility and care for the broader community, encouraging behaviors that may not necessarily involve colleagues or subordinates. As a result, students not only grew as leaders within the context of their careers but also as compassionate and proactive members of society, embodying the essence of SL in diverse aspects of their lives. This dual impact underscores the versatility of SL, suggesting that cultivating these qualities can lead to widespread benefits, both professionally and personally.

4. Discussion

In this study, a community-based service-learning project was incorporated into the curriculum of a college course to determine whether it would influence SL development in aspirant sports business professionals. The experience resulted in the participants showing growth in core facets of SL like altruistic calling, genuine caring, humility, and empathy. The participants also reported enjoyment in the service-learning project itself and an intent to be prosocial toward their community in the future.

Several reviews on SL leadership in sports (i.e., [1,42]) have advocated for the positive benefits of SL to intercollegiate athletics and the professional development of future sports professionals. For example, Robinson et al. [1] called for greater attention regarding how exactly SL can be incorporated into sports management curriculum and for evidence that it benefits the development of leadership skills in students. The current results support such calls by demonstrating how, in a case study scenario, service-learning opportunities can facilitate SL development in future business professionals. Moreover, the results support Dewey's [18] beliefs on experiential learning as well as the operationalization of ELT to a sports management classroom, having demonstrated that student learners can indeed engage with real-world situations to derive meaning and understanding about a phenomenon. In this case, the phenomenon being SL.

The results of this study also support previous SL research even if the research was focused on athletes and coaches more so than sports management students. In the past, researchers have shown SL improves athlete growth and moral development [44], athlete satisfaction [46], and coach job satisfaction [49]. The students partaking in the SL-centered service-learning opportunity experienced similar outcomes. From their qualitative responses, it was clear they grew and experienced moral development, as evidenced by the participants indicating they would like to remain engaged with their local communities in the future. The participants were also satisfied with their experience and how the social exchanges and mentoring roles helped them develop SL skills. Thus, though not performed in an athletic context, the SL outcomes are similar and can be used to increase the generalizability of SL research to populations other than college athletes and coaches.

4.1. Study Limitations

This case study provides evidence that service learning may be a fruitful practice for developing SL, but the study is not without limitations. Though this is a case study, it would be beneficial to include a larger population in future studies. As well, this study relied on self-reported data. Future studies might consider gathering information from students, or an observational approach by including an observer to take notes on mentor-student interactions to include in the analysis. Further, it would be interesting to utilize a control group for comparison.

For the purposes of analyzing a proposed teaching method, themes for this study were determined a priori as suggested in prior research [1]. Though this strategy served its purpose, additional, different themes may have been protracted with a thematic analysis based on an inductive approach. It is possible that themes contained in the dataset may have been overlooked due to the pre-determined lens through which the data were viewed. The current case study results are promising, which should encourage future research in this area that includes a thematic analysis approach. Such analysis may reveal other important implications for developing future leaders.

An additional point to consider is that the themes analyzed in this study overlap somewhat, making categorization difficult. For example, discerning between empathy and genuine caring proved challenging, especially when considering statements that highlighted the bond formed between mentor and student. Upon completion of the analysis, the researchers categorized statements associated with emotional understanding as empathy. Statements categorized under genuine caring focused on wishing the best for followers. Through the review and process of immersing and distancing, researchers were able to reach a consensus on where terms should be classified, alleviating some of this concern. After several meetings, the researchers agreed on the final best fit for where to include statements. Even if some possible overlapping of statements and different themes exist, the selected statements in this case study still fall within the SL framework. In the future, researchers could provide definitions of themes to participants and ask more specific questions regarding each of the themes considered in this study. Following this process might more specifically target the development of participants in each of these areas and alleviate potential overlap.

Lastly, though informative, the three-sphere model does not explicitly detail how SL may interact with other leadership styles, such as transformational or ethical leadership, to influence follower (subordinate) reactions and behaviors. Thus, in the future, alternative theoretical approaches may prove useful to understanding SL development. For example, implicit leadership theory (ILT) considers follower perceptions and responses to leader behaviors. Followers form ILT of what leaders should (or should not) be and how they should act in a particular environment. Alignment between follower ILT and actual leader behavior results in better relationship formation and constructive follower behaviors [54]. Future scholarship should consider how SL may, either alone or in tandem with other leadership styles, influence subordinate reactions to leadership. For instance, if followers have ILT that includes self-regard and career advancement, then an approach to leadership that elevates followers' needs like servant leadership may align well with follower leadership expectations and result in positive follower reactions.

4.2. Directions for Future Research

The present case study included sports management students completing a management course. In the future, investigations of the relationship between service learning and leadership development are needed across various populations and disciplines. Additionally, the question remains as to whether participants become more like SL in the future. That is, do participants really volunteer more as suggested by their reflections? The journals capture the moment, but evidence is needed as to whether the statements shared in the reflections become physical actions associated with the inward reality expressed during the service-learning experience. Follow-up also needs to be carried out to see if the participants, noted as aspirant business professionals, become more like SL when placed in leadership roles. Indeed, what becomes participants' leadership styles as they move into the professional world? Longitudinal studies that follow participants into their professional careers, even if it is a small number of students, could help address these questions.

Along with the possibility of in-depth, longitudinal research, researchers might consider the development of an SL growth scale. An instrument such as this, one with items ranked on a Likert Scale, could include statements about how student experiences during a service project connect to facets of SL such as altruistic calling, genuine caring, humility, and empathy. An example item for altruistic calling might read, "After participating in this service activity, I have become more aware of my desire to serve in the future". Though this instrument would not address the long-term implications of service-learning experiences and the development of SL, it would complement the qualitative results found in reflection journals and give researchers a tool to demonstrate a correlation between specific service activities and SL.

Finally, future studies should consider what those being served (e.g., the at-risk youth being mentored) gain from the experience. One of the best tests of SL effectiveness is to determine if followers are more likely to become servant leaders themselves [4]. Numerous questions about those being served are ripe for exploration. What do mentees get out of the service-learning project? How is their development impacted? Do they perform better in school? What is the connection between their school performance and the mentor–mentee interactions? Are they more likely to become servant leaders themselves because of their mentor–mentee relationship? Addressing questions about mentee perceptions of their mentor, which could align with ILT, and how this relationship is perceived to have influenced mentee school performance, life satisfaction, and development as a leader would make for an interesting avenue of future exploration.

4.3. Suggestions for Service-Learning Projects

Service-learning experiences represent a relatively simple and cost-effective way for students to develop SL and connect with their local communities. The current case provides a service-learning example that connected student mentors with at-risk elementary school youth. Another service-learning project that may be beneficial to students is to have them host a Special Olympics Unified Field Day. The Special Olympics Unified Sports website describes unified sports as an inclusion initiative focused on bringing together those with and without disabilities to participate on the same team, aimed at fostering friendships through the development of understanding and empathy [55]. Students in a sports management setting could arrange and oversee an event. Requirements of the learning experience might include analyzing ADA compliance requirements, formulating emergency preparedness plans, gathering volunteers, and organizing specific activities. Ultimately, any activity where the service would meet the needs of those being served while bringing students into direct contact with them could serve as a quality service-learning opportunity.

Students involved in this case study were also not directly informed about SL prior to or after the service project. Alternatives to consider are teaching about SL beforehand or teaching about SL after the service project concludes. The former approach would allow students to place an emphasis on developing SL attributes in themselves as they serve and lead. Students could then complete a reflection based on the SL model. The latter approach would have participants learn about SL and then analyze their reflections for SL themes, thus connecting the practice of serving with reflection and analysis based on an informed understanding of SL attributes.

5. Implications for Servant Leadership Development

The findings from this study highlight the significant role that community-based service-learning projects can play in the development of SL qualities among aspiring sports management professionals. By actively engaging students in meaningful service activities that prioritize the needs of others, the study underscores how experiential learning can facilitate the growth of core SL attributes such as altruistic calling, empathy, genuine caring, and humility. These attributes are critical for future leaders who aim to foster ethical, inclusive, and supportive environments in their professional lives. The reflective component of the service-learning experience further reinforces the internalization of these values, encouraging students to consider the broader social impact of their leadership actions. This approach not only nurtures the personal and professional growth of students but also aligns with the broader objectives of sports management education, which seeks to prepare individuals to lead with integrity and a commitment to the well-being of others.

Furthermore, the study's implications extend beyond the classroom, suggesting that incorporating structured service-learning projects into leadership development programs could be a powerful tool for cultivating SL across various disciplines. The research indicates that when students are given opportunities to get out of the classroom environment and engage with and reflect on real-world challenges, they are more likely to develop a leadership style that is both empathetic and ethically grounded. Institutions and organizations aiming to develop future leaders should consider integrating service learning as a key component of their training programs, as it provides a practical framework for students to practice and refine SL skills in a controlled yet impactful setting. By doing so, these programs can contribute to the creation of a new generation of leaders who are not only capable of making strategic decisions but also committed to serving and uplifting their communities.

6. Conclusions

The aim of this study was to investigate a proposed teaching strategy focused on developing SL via community-based service learning [1]. From the analysis of the reflection journals, it appears that participating in a service-learning project may be an influential practice for developing SL. Following the completion of their roles as mentors and subsequent completion of written reflections, the findings underscore the efficacy of service learning as a robust approach for instructing students about servant leadership as well as cultivating SL attributes within themselves. Instructors hoping to advance SL development in their students may want to consider including this process of service learning and reflection in future course planning. For research, one avenue scholars might consider is the development of an SL growth scale that could empirically measure whether students perceive their development in aspects of SL such as genuine caring and humility. Through deductive scale development [56], which has been performed extensively with scale development in sports management research, scholars could create a measurement tool that would complement in-depth qualitative exploration into the facilitation of servant leaders in sports.

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Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki. The Ethics Committee of the the Institutional Review Board of Schreiner University approved the study proposal, determining that it posed no potential harm to participants (26 March 2024). IRB deemed that no identifying information would be used, and that no person would know whose statements might be used in the article, except for the student that wrote the reflection.

Informed Consent Statement: Since the study analysis occurred after students had concluded their college education and graduated, the Institutional Review Board granted a waiver of informed consent and authorized the utilization of the reflections included in this study.

Data Availability Statement: The data that support the findings of this study are available from the corresponding author upon reasonable request.

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behavioral sciences

MDPI

Review

Outcomes of Art-Based Leadership Development: A Qualitative Metasummary

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Abstract: Art-based leadership development, grounded in experiential learning, offers a learner-centered approach to leadership training by integrating relational, aesthetic and embodied dimensions. This systematic review investigates evidence on the outcomes of art-based leadership development, addressing the critical need for empirical validation of its effectiveness. A qualitative metasummary was employed to review 31 empirical studies published between 2008 and 2023. The studies were sourced from databases including Business Source Complete, ERIC, PsycINFO, Scopus, and Web of Science. The Quality Assessment for Diverse Studies (QuADS) tool was used to assess the studies. The analysis revealed that art-based methods significantly enhance reflective and reflexive practices, higher-order cognitive skills, emotional intelligence, and interpersonal competencies. Representing leader development, art-based initiatives facilitate holistic self-discovery and transformative shifts in mindset, offering a valuable complement to conventional skill-based approaches. Despite these promising benefits, the review highlights a need for more rigorous empirical studies, particularly longitudinal and quantitative research, to substantiate the long-term effectiveness of art-based methods.

Keywords: art-based leadership development; art-based learning; experiential learning; competence development; leader development; leadership development; leadership skills; leadership training; qualitative metasummary; systematic review

1. Introduction

The expectations placed upon leadership development are contingent upon the theoretical understanding of leadership [1,2]. Theories of leadership have evolved from a focus on individual traits, skills, or behavior [3–7] to conceptualizations of leadership as a relational, conversational, collective, and shared phenomenon. Post-heroic theories posit leadership as a complex social process and multidirectional collective activity [8–14] that necessitates the process of sensemaking in dynamic, complex, and volatile environments [2,15–19]. In recent perspectives on leadership, the aesthetic and corporeal dimensions of leadership are acknowledged, thus embracing an embodied view of knowledge, sensory engagement, and experiential learning [20–22].

The differing perspectives are reflected in the fundamental distinction between leader development and leadership development as two intertwined and complementary concepts, which, however, are often not differentiated from one another [23]. While leader development places emphasis on enhancing individual qualities and related behaviors, leadership development builds on this foundation. Leadership development places the advancement and evolution of leadership abilities in both individuals and groups at the forefront, emphasizing the social processes between leaders and followers [24–26].

In general, traditional development programs are designed as normative trainings that are primarily expected to enhance leadership knowledge, intrapersonal competencies, and skills as well as to expand leaders' behavioral repertoires [19,24,27–31]. Traditional programs tend to build on clearly defined skills and behavioral norms [16], suggesting the use of standardized tools for various leadership situations as they are following a rational, deterministic approach [32–34].

Against the backdrop of shifting leadership paradigms, mainstream approaches to leader or leadership development have been criticized as leader-centered, emphasizing self-development over understanding followers, and oversimplifying the complexity of leadership dynamics [32,35–38]. Traditional leadership programs frequently prioritize cognitive skills, instrumental knowledge, and logical reasoning while neglecting emotional intelligence, relational competencies, and aesthetics [39–41].

The overemphasis on fact-based propositional knowledge [42] comes at the cost of cultivating experiential knowledge and essential interpersonal skills [41]. The application of a technical approach to leader development, which prioritizes instrumental knowledge, superficial skills, and standardized methods, may inadvertently compromise the cultivation of humanistic values, such as compassion, empathy, and moral integrity [32,36]. Traditional leadership development programs frequently neglect the significance of experiential and relational elements within the leadership context. Such programs also fail to challenge leaders' fundamental self-perception and moral stance, despite the fact that these elements shape leadership practice [1,36].

A counter-model of leadership development is holistic in nature. It encompasses sense-making, embodied learning, and aesthetic reflexivity [16,33,36,41,43–45]. Transformative leadership development provides individualized, learner-centered opportunities for reflection and experiential learning [46–48] that extend beyond the competency paradigm [49]. Moreover, interventions are expected to be engaging and substantial, avoiding the pitfall of descending into mere edutainment [50,51].

The significance of leader identity in development is widely acknowledged [52,53]. Consequently, there is a pressing need for programs offering identity workspaces [54] and mindset work [1]. In the context of modern leadership, the capacity to embrace ambiguity and uncertainty is of paramount importance. This necessitates the cultivation of a growth mindset conducive to open-mindedness, adaptability, and resilience [55–57]. From this perspective, leadership development entails challenging mental models and questioning established behavioral patterns [1].

The integration of the arts into leadership development is expected to fulfill such expectations by challenging mainstream approaches. Although there has been a history of using arts as a metaphor for leadership (e.g., [58,59]), scholars first began linking the arts to management education [60] and leadership andragogy in the early 1990s [61–65]. Following the turn of the century, there was a growing interest among practitioners and researchers in art-based leadership andragogy [48,66]. It can be presumed that Romanowska and colleagues [67] were the first to introduce the term "art-based leadership development" into the scientific discourse. Nevertheless, the core concept is not necessarily labelled as art-based (e.g., [68,69]) but also referred to as art-informed [70] or art-infused [71].

Art-based pedagogy and andragogy are rooted in experiential learning [72] and are learner-centered and multimodal [73,74]. In the context of leadership development, art-based methods engage the senses through aesthetic experience, immersing learners in playful explorations of implicit leadership theories [19,75–77]. Art-based methods originate in artistic practice, which distinguishes them as a unique approach. Facilitators utilize artworks as a subject of reflection or engage aspiring and practicing leaders in artistic creation to explore non-artistic issues [78–80].

Numerous examples illustrate a form of engagement with visual and performative art that takes artworks as a starting point for inquiry and discussion [81–84]. Other interventions involve participants in creating drawings [35,69,85], collages [45], zines [86], dolls [87], masks [61,88], and statuary arts [89], usually as representations of leader identity.

Theater-based approaches, including applied drama and improvisational techniques, address interpersonal skills and an agile mindset [18,90–94]. The reading of literature [95–98] and poetry [99] as well as poetry writing [100] and storytelling [101] are predominantly employed to enhance creativity and provide a deeper understanding of self and human nature.

Movies and TV series offer illustrative material for reflection on leadership behavior [39,48,102–104]. Similarly, music [105,106], particularly coral conducting [22] and choir singing [107], as well as dance [108–114] provide dynamic platforms for exploring leadership and followership through collaborative practice and embodied experience.

A substantial corpus of conceptual papers and application reports has been produced which collectively asserts the benefits of art-based methods in leadership development. Art-based methods are assumed to foster cognitive leadership skills such as visioning, problem-solving, and decision-making [78]. However, their specific potential appears to lie in holistic self-discovery. Art-based leadership development is presumed to stimulate self-awareness [16], uncover subconscious behavior patterns [34,43], and make the embodied dimension of leadership accessible [115]. Art-based andragogy is posited to supplement technical leadership skills by raising aesthetic awareness, activating emotional intelligence, and fostering a transformative shift in mindset [16,20,48,69,109,116].

Nevertheless, empirical evidence supporting these notions has thus far only been subjected to systematic investigation to a limited extent [117,118]. On the one hand, there appears to be a paucity of research that extends beyond individual learner feedback and anecdotal evidence. On the other hand, there is a preference for qualitative research designs [22,75]. Those who espouse art-based andragogy maintain its efficacy, yet there has been comparatively limited research to substantiate its immediate and long-term impact [119–121]. In light of the growing significance of evidence-based practice in leadership development, this viewpoint is increasingly untenable [122–125]. Obscure empirical evidence and a lack of quantitative research may prevent the promising art-based approach from gaining traction [126,127].

In order to substantiate the credibility of art-based leadership development and to highlight existing research gaps, a systematic review of empirical studies on art-based leadership development was carried out. The objective of this review was to assess the empirical evidence on the outcomes of art-based leadership development from the perspective of participants. A skillset orientation to leadership development would justify the search for empirical evidence with an accountability logic calling for a measurable return on investment and quantifiable results [1,2,128,129]. In contrast, this review is intended to inform research and confirm the efficacy of art-based practice [130] without necessarily adhering to a reductionist framework that neglects the nuanced and often intangible effects of art-based methods.

In accordance with the aforementioned approach and in order to provide a comprehensive overview of the state of empirical research, this review includes quantitative, qualitative, and mixed-methods studies. Given the diversity of research approaches in art-based leadership development, the concept of qualitative metasummary by Sandelowski and colleagues [131] is employed to synthesize the findings and present a holistic understanding of the field. Details on this method will be presented in the following section.

This review did not focus on specific learning outcomes (see [132]), but considered all kinds of effects of art-based methods in leadership development as depicted in empirical studies, including participants' immediate reactions to art-based learning environments. The findings indicate that art-based initiatives have a significant impact on enhancing reflective and reflexive practices and interpersonal competencies in learners. With a focus on leader development, art-based approaches facilitate holistic self-discovery and a transformative shift in mindset, suggesting them as an effective supplement to conventional skill-based methods. Despite the promising benefits, there is a notable deficiency in robust empirical evidence, and a need for more longitudinal and quantitative research to validate the long-term effectiveness of art-based approaches.

2. Materials and Methods

2.1. Study Design

This review adheres to the methodological framework for conducting systematic reviews as delineated by Kitchenham and Charters [133]. The approach encompasses the following stages: study selection, identification of research, quality assessment, data extraction, and data synthesis. The data extraction and synthesis are based on the principles of qualitative metasummary, a quantitatively oriented aggregation of qualitative and quantitative research findings [131]. The protocol for this systematic review was registered on INPLASY (INPLASY202460123). The reporting follows the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) statement [134].

2.2. Eligibility Criteria

As the concepts in question are not clearly delineated [23], this review encompasses empirical studies on leader development, leadership development, and leadership training. In order to ensure the inclusion of only those studies that are relevant to the topic at hand, research on the arts in management education and training is not considered unless leadership is explicitly mentioned. This is in accordance with the conceptual distinction between leadership and management [135–137].

As childhood and adulthood relate to different stages in aesthetic development, and the outcomes of child-centered and youth education are not necessarily comparable with effects on adult learners [138–140], the scope is on art-based andragogy, limiting the field to higher education and professional development.

The present study excluded intervention designs that are not considered art-based, such as photovoice [60,141]. Studies on leadership development in the arts and leadership pedagogy/andragogy in arts education were not considered because art-based pedagogy/andragogy, by definition, relates to transferring artistic practice to non-artistic fields [142].

The literature screening covered studies presenting effects of art-based leadership development on learners such as experience and satisfaction, competence development (knowledge, skills, attitudes), and transfer to practice [143,144].

In order to provide a comprehensive overview of robust empirical research on the subject under investigation, the review includes quantitative, qualitative, and mixed-methods studies. Papers presenting anecdotal evidence, descriptive observations, or opinion polls without scientific rigor were excluded from the sample.

2.3. Literature Search and Screening

A systematic search for primary research studies was conducted in electronic databases relevant to business, education, psychology, and interdisciplinary studies. The databases searched were Business Source Complete, ERIC, PsycINFO, Scopus, and Web of Science. The Boolean phrase (leadership AND (development OR training OR education OR pedagogy OR learning) AND (art OR arts OR painting OR sculpture OR music OR dance OR drama OR poetry OR movie)) was applied to titles and abstracts. The complete search strategy is displayed in Table S1. The database search was limited to articles with available abstracts.

In order to ensure a comprehensive literature review, the database search was complemented with the web-based academic search engine Google Scholar [145–147]. The same keywords and limiters were applied, and the results were sorted by relevance (see Table S1). Articles were selected based on titles and snippets, following a cut-off rule.

In order to ensure the quality of the research, only peer-reviewed journal articles in the English language that were published between January 2004 and December 2023 were considered. This approach takes into account the increasing body of relevant research that has been produced since the early 2000s, which was identified through a scoping search. Dissertations, book chapters, and other articles that have not undergone independent review were excluded.

The database searches and Google Scholar search together yielded an initial 1719 potentially relevant articles. Subsequently, titles and abstracts were screened against the inclusion criteria, resulting in 69 articles in total for full-text screening. After the screening process 33 articles remained for evaluation. As three reports originate from the same parent study [32,67,79], the sample includes 31 studies altogether. The search outcomes are presented in Figure 1, which follows the format of a standard PRISMA flow diagram [134].

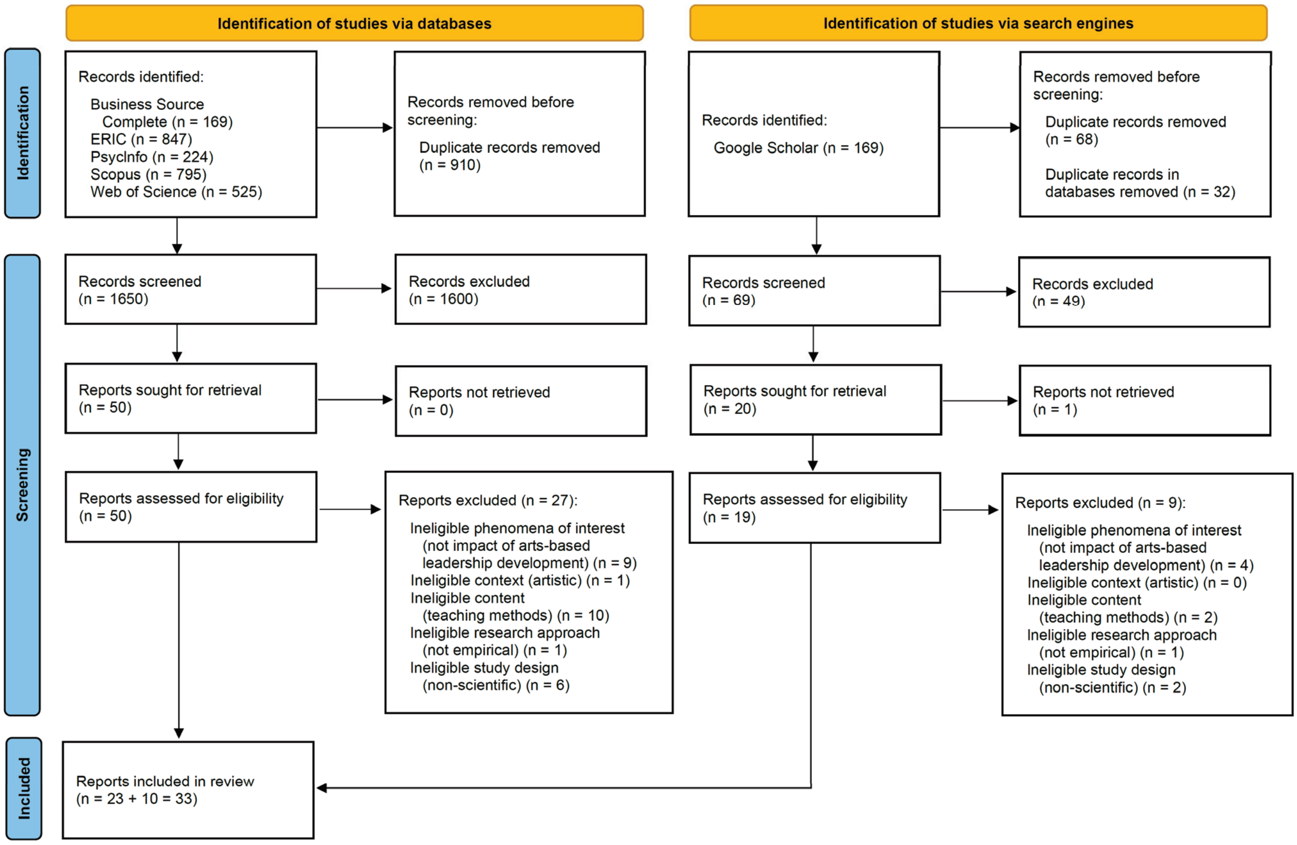

Figure 1. PRISMA flow diagram for literature search and selection.

Screening was conducted by the author and a second reviewer using a review software, the Joanna Briggs Institute System for the Unified Management, Assessment and Review of Information (JBI SUMARI) [148]. The concordance for title and abstract screening was initially established at a rate of 99%. In the event that a conflict could not be resolved through discussion, the reviewers included the relevant studies for further examination [149,150]. The full-text screening yielded a 100% match.

2.4. Quality Assessment

The studies included in the review were evaluated for their methodological quality, evidence quality, and reporting quality using the Quality Assessment for Diverse Studies (QuADS) tool [151–153]. The Quality Assessment for Diverse Studies (QuADS) tool was developed for use in systematic reviews that encompass a broad range of study designs. Its integration enables a consistent and comprehensive evaluation, facilitating comparison [151].

QuADS is a thoroughly tested, valid appraisal instrument that has proven its informational and reliability value in the field of psychology [151]. As art-based leadership development draws on psychological constructs to facilitate holistic growth in leaders, QuADS is an appropriate tool. It has been employed in multiple reviews of educational interventions (e.g., [154,155]) and is a useful tool for measuring the effectiveness of such initiatives.

The QuADS framework comprises 13 criteria that encompass a comprehensive range of elements pertaining to the quality of research design and transparency of reporting. These include research objectives, theoretical framework, sampling methodology, data collection procedures, data analysis techniques, and limitations. Each criterion is evaluated on a scale of 0 to 3, with a maximum total score of 39 for each study [153].

The author and a second reviewer independently assessed all studies for quality based on the QuADS assessment matrix [153]. We followed the recommended iterative process and began with an arbitrary selection of two methodologically distinct studies. To establish a shared understanding of the criteria, we discussed our scorings and repeated the comparison based on another three studies before we assessed all remaining studies [152]. Initially, the interrater-agreement percentage was 97.9% on average for the entire sample. Any discrepancies were discussed and resolved through mutual agreement [149]. The assessment results are presented in Table 1.

As the QuADS criteria are not weighted and there is no defined threshold score to classify a study as high or low quality, the assessment results will be discussed with a focus on criteria that are particularly relevant for demonstrating the effectiveness of art-based methods [151,152]. These are the QuADS criteria no. 4, goal-adequate study design, no. 5, appropriate sampling, no. 7, data collection method, and no. 11, method of data analysis. These aspects have a particular impact on a study's rigor and the generalizability of its findings [156].

In order to ensure a comprehensive analysis and achieve a more nuanced understanding of the evidence base, all studies were retained for further analysis, regardless of their quality [131,157,158].

2.5. Data Extraction

In the field of data analysis, large language models, such as OpenAI's GPT series, have demonstrated comparable performance to humans [159]. These models significantly enhance the literature review process through the accurate and efficient summarization and categorization of studies [160,161]. Therefore, data were extracted using GPTs to create a data-extraction matrix. This matrix includes the following variables: author(s), year of publication, geographic region of first author, intervention type, study design, participant characteristics and sample size, data collection, data analysis, aim of intervention, and key findings on outcomes. The data-extraction matrix is presented in Table 2.

The relevant data on the study characteristics and research design were extracted with the GPTs LitReviewGPT [162] and AskYourPDF Researcher [163] in parallel. The results were compiled and verified for accuracy in full by the author [157], demonstrating high correspondence with the wording of the studies. In certain instances, there was a discrepancy between the reported study type and the actual implementation. For instance, some studies that were labeled as grounded theory by the authors actually aligned more with qualitative descriptive studies due to the absence of essential grounded theory processes, such as theoretical sampling [164]. In such cases, the classification of the study design and data analysis was corrected by the author and then verified by a third reviewer.

The data on outcomes were extracted with the GPT AskYourPDF Researcher [163] and were checked for accuracy by the author and the second reviewer after a thorough reading of all studies [165]. Gradual prompt engineering was employed to ensure that the generated excerpts were based on empirical findings unique to the study in question, rather than the authors' discussion of prior research [131]. For each study and outcome, the GPT generated a snippet and an even more condensed catchphrase. Any catchphrases that were incomprehensible outside the context were slightly adjusted. Any missing results were added with snippets and catchphrases quoted verbatim from the studies.

The 33 outcome summaries constituted the foundation for a codebook utilized in the course of data analysis. All codes (catchphrases) and code descriptions (snippets) are presented in Supplement 3 (Supplementary Materials). The codes are included in the data-extraction matrix (see Table 2).

Table 1. QuADS quality assessment of studies. Source [153].

Author(s)	1	2	3	4	5	6	7	8	9	10	11	12	13	Total Score/39
Andenoro & Ward (2008) [166]	2	3	3	1	1	1	1	1	1	1	1	1	0	17
Cranston & Kusanovich (2013) [167]	1	2	1	2	0	1	1	0	1	1	2	0	0	12
Cranston & Kusanovich (2014) [168]	2	2	1	1	0	0	1	1	1	1	2	0	0	12
Dennis (2014) [169]	1	2	1	1	0	0	1	0	0	0	0	0	0	6
Feltham (2012) [170]	1	2	2	1	0	1	0	0	1	0	2	0	0	10
Firing et al. (2022) [171]	1	2	3	3	1	1	3	3	1	2	3	0	1	24
Garavan et al. (2015) [69]	3	1	3	3	3	0	3	1	3	0	3	0	3	26
Harz et al. (2023) [172]	2	1	3	3	1	3	3	3	3	3	3	0	3	31
Hirsch et al. (2023) [57]	2	2	2	3	0	0	2	2	0	0	1	0	0	14
Hurdle & Greenhaw (2023) [173]	3	3	3	3	1	0	3	2	3	1	3	0	3	28
Kaimal et al. (2014) [174]	1	1	3	3	1	1	3	2	1	0	3	0	1	20
Kaimal et al. (2016) [175]	1	1	3	3	1	0	3	2	1	0	3	0	1	19
Katz-Buonincontro (2011) [50]	1	1	1	0	1	2	0	1	0	1	2	0	0	10
Katz-Buonincontro & Phillips (2011) [176]	1	2	3	3	0	1	3	0	1	2	3	0	1	20
Katz-Buonincontro et al. (2015) [177]	1	2	3	0	1	0	0	0	1	1	1	0	1	11
Kilic (2023) [40]	3	3	3	3	2	3	3	3	3	1	3	0	0	30
Leonard et al. (2013) [106]	2	1	3	2	0	0	2	2	2	3	3	2	0	22
Medeiros et al. (2012) [178]	0	2	3	2	0	0	0	0	0	0	0	0	0	7
Munro et al. (2015) [179]	2	2	3	2	1	3	3	1	0	0	0	0	1	18
Parush & Koivunen (2014) [68]	2	2	3	3	0	0	3	1	0	0	3	0	0	17
Peña & Grant (2019) [180]	3	3	2	2	1	0	2	1	0	0	3	0	3	20
Rajendran & Andrew (2014) [51]	1	2	3	2	0	0	2	1	1	0	3	0	1	16
Romanowska et al. (2011) [67]	0	3	3	3	3	2	3	3	3	1	3	1	3	31
Romanowska et al. (2013) [32]	3	3	3	3	3	2	3	3	3	1	3	1	3	34
Romanowska et al. (2014) [79]	3	2	3	3	3	2	3	3	3	2	3	1	3	34
Sandberg et al. (2023) [181]	3	2	3	2	2	2	3	3	3	2	3	0	3	31
Schyns et al. (2013) [35]	3	2	1	3	0	3	3	2	1	2	3	0	0	23
Singh & Widén (2020) [182]	0	2	3	2	0	0	2	2	1	0	1	0	0	13
Sutherland (2012) [183]	3	1	2	3	0	0	3	3	1	2	3	0	1	22
Sutherland & Jelinek (2015) [22]	3	3	3	3	2	0	3	3	1	3	3	0	1	28
Winther (2018) [184]	1	3	2	1	0	2	2	1	1	0	0	0	0	13
Winther & Højlund-Larsen (2022) [185]	2	2	2	2	0	3	2	1	1	1	1	0	0	17
Woods et al. (2023) [45]	3	2	3	3	0	3	3	3	1	3	3	0	1	28

Note. QuADS criteria:
1. Theoretical or conceptual underpinning to the research.
2. Statement of research aim/s.
3. Clear description of research setting and target population.
4. The study design is appropriate to address the stated research aim/s.
5. Appropriate sampling to address the research aim/s.
6. Rationale for choice of data collection tool/s.
7. The format and content of data collection tool is appropriate to address the stated research aim/s.
8. Description of data collection procedure.
9. Recruitment data provided.
10. Justification for analytic method selected.
11. The method of analysis was appropriate to answer the research aim/s.
12. Evidence that the research stakeholders have been considered in research design or conduct.
13. Strengths and limitations critically discussed.

Table 2. Data-extraction matrix.

Author(s)	Approach	Study Design	Sample	Data Collection	Data Analysis	Aims of Intervention	Outcome
Andenoro & Ward (2008) [166] USA	Watching movies	Case study	Undergraduate students n = 31	Focus groups	Content analysis Constant comparative method	Critical thinking skills Leadership competencies	Enhanced engagement Improved critical thinking skills Broader leadership perspective Real-world application of theories Increased reflective thinking Enhanced empathy High satisfaction with course design
Cranston & Kusanovich (2013) [167] Canada	Applied drama	Qualitative descriptive study	School leaders, leaders of educational institutions, teachers, nascent educational administrators n = 14	Pre- and post-workshop open-ended questionnaires Nonparticipant observer field notes	Content analysis Recursive analysis	Ethical decision making Understanding of school leadership	Enhanced empathy Increased reflective thinking High satisfaction with course design Improved ethical understanding Real-world application
Cranston & Kusanovich (2014) [168] USA	Applied drama	Qualitative descriptive study	School leaders, teachers in leading roles n = 16	Participant journals	Content analysis Recursive analysis	Ethical decision making Understanding of school leadership	Enhanced ethical understanding Increased empathy Improved reflective thinking Greater engagement Relevance of risk-taking Development of practical skills Enhanced collaborative decision-making High satisfaction with course design
Dennis (2014) [169] Australia	Dance Movement-based practice Improvisation	Qualitative action research study	Emerging leaders Four programs with n = 24–40 each	Observation Interviews Participant reflective comments	Phenomenological analysis	Relational and task-based leadership capabilities Capacity to tolerate ambiguity and uncertainty Motivation and productivity	Enhanced self-awareness Improved interpersonal efficacy Emotional transformation Increased personal agency Reflective practice Cultural exploration
Feltham (2012) [170] UK	Applied drama	Qualitative descriptive study	Individuals connected with the training event n = 5	In-depth interviews	Thematic analysis	Leadership skills	Improved interpersonal skills Enhanced reflective practice Increased empathy Enhanced emotional intelligence Behavioral change Increased confidence Stress management Improved well-being
Firing et al. (2022) [171] Norway	Applied drama	Case study	RNoAFA cadets n = 14 (thereof informants n = 8)	In-depth interviews Participatory field observation	Thematic analysis Constant comparative method	Coping with complexity and volatility	Transformative learning Holistic identity development Increased empathy Enhanced emotional awareness Enhanced social awareness Community building Overcoming anxiety Managing uncertainty

Table 2. *Cont.*

Author(s)	Approach	Study Design	Sample	Data Collection	Data Analysis	Aims of Intervention	Outcome
Garavan et al. (2015) [69] UK	Drawing	Quasi-experimental study	MNC leaders $n = 164$	Pre-test post-test surveys	Statistical analysis	Emotional intelligence Leader identity Openness to experience Feedback orientation	Improved emotional intelligence Enhanced leader identity Increased feedback orientation
Harz et al. (2023) [172] USA	Listening to music Artist talk	Qualitative descriptive study	Medical and dental students $n = 122$	Post-test survey	Content analysis Statistical analysis	Awareness of empathy, human dignity, communication, and teamwork	High satisfaction with course design Enhanced empathy Holistic perspective Improved reflective practice Appreciation for the arts Awareness Broader perspective Wellbeing
Hirsch et al. (2023) [57] USA	Watching movie clips Clay molding	Qualitative descriptive study	Organizational leaders from business and law enforcement $n = 10$	Participant reflective journals Interviews	Thematic analysis	Negative capability	Development of negative capability Increased self-awareness Emotional regulation Integration of body and mind Enhanced reflectivity Utilization of creative processes
Hurdle & Greenhaw (2023) [173] USA	Watching movies	Case Study	Students $n = 9$	Participant-written assignments	Content analysis Concept coding	Understanding the stages of group development	High satisfaction with assignment Effective learning tool Vicarious learning
Kaimal et al. (2014) [174] USA	Music-making Tango dance	Case study	School leaders, principal interns $n = 20$	Observation Participant reflective papers Interviews	Thematic analysis	Leadership-arts integration Creative thinking enhancement	Enhanced reflective practice Increased creativity Increased innovation Empowerment Increased agency Broadened perspectives on leadership
Kaimal et al. (2016) [175] USA	Engaging with paintings Drawing	Case study	Principal interns $n = 14$	Feedback survey Observation Interviews	Thematic analysis	Creativity Imagination	Enhanced reflective practice Increased empathy Broadened perspectives on leadership Empowerment Transfer to professional context
Katz-Buonincontro (2011) [50] USA	Improvisational theatre	Case study	Educational leadership students $n = 30/11$	Interviews Observations Improv videos Extant documents	Grounded theory Constant comparative method	Leadership empowerment	Emotional catharsis Enhanced empathy Heightened sensory perception Reflective thinking Increased creativity Sense of community
Katz-Buonincontro & Phillips (2011) [176] USA	Drawing Pottery making Improvisation Improvi-sational theatre	Comparative case study	Educational leadership doctoral students $n = 21$ Educational leadership students $n = 140$	In-depth interviews Participatory field observations Participant reflective journals Workshop photographs Blackboard discussion threads Course evaluations Videos of improv role-plays	Grounded theory Constant comparative method	Problem-solving skills	Enhanced reflectivity Improved problem-solving skills Increased creativity Increased risk-taking Heightened sense of visual perception

Table 2. *Cont.*

Author(s)	Approach	Study Design	Sample	Data Collection	Data Analysis	Aims of Intervention	Outcome
Katz-Buonincontro et al. (2015) [177] USA	Drawing Collage Photo-captioning Cabinetry Pottery Viewing visual art Improvi-sational theatre	Comparative case study	Educational leadership students *n* = 77	Participant reflective journals Class discussions Participant artworks Transcriptions of improv exercises	Arts-based inquiry Thematic analysis	Leader identity Vision-building skills Problem-solving skills	In-depth personal reflection Increased observational skills Encouraged risk-taking Reconnection with creativity Leadership paradigm definition Enhanced understanding Insight into leadership practice
Kilic (2023) [40] Turkey	Drawing Role-play Story-telling Music Dance	Mixed-methods action research study Quasi-experimental sub-study	Business leaders *n* = 15	Pre-test post-test inventory Pre-test post-test questionnaire Pre-test post-test Affect Grid Interviews Observation Participant drawings	Statistical analysis Thematic analysis	Creativity Communication skills Resilience Social sensitivity	Enhanced creativity Improved communication skills Healing effect Increased social sensitivity Enhanced reflectivity Sense of community
Leonard et al. (2013) [106] UK	Gamelan music-making	Qualitative descriptive study	Post-Qualification students (nurses, social workers), trainers *n* = 31	Post-intervention questionnaire	Thematic analysis	Teamwork Collaboration Creativity Distributive and participatory leadership skills	Enhanced reflective learning Increased emotional engagement Improved teamwork Improved collaboration Increased willingness to take risks Learning transfer to real world
Medeiros et al. (2012) [178] Brazil	Reworking paintings	Quantitative descriptive study	Medical students *n* not reported	Post-test questionnaire	Statistical analysis	Humanist skills	Enhanced ethical humanist skills Improved teamwork Improved leadership Improved communication
Munro et al. (2015) [179] UK	Applied drama	Quantitative exploratory study	Managers *n* not reported	Pre-test post-test inventory Pre-test post-test questionnaire	Statistical analysis	Communication skills	Heightened emotional awareness Increased emotional competency Increased awareness of cognitive and sensory preferences Enhanced communication effectiveness Adaptability in communication modes
Parush & Koivunen (2014) [68] Finland	Choral conducting	Case study	Managers, conducting students *n* not reported	Observations Interviews Feedback questionnaires	Thematic analysis	Self-exploration Self-improvement	Heightened aesthetic pleasure Memorability Increased self-confidence Increased risk-taking
Peña & Grant (2019) [180] USA	Painting	Qualitative phenomenological study	MBA students *n* not reported	Participant reflective journals	Narrative analysis	Self-exploration	Disorienting dilemma Sense-making Self-awareness Self-efficacy
Rajendran & Andrew (2014) [51] Australia	Watching movies	Qualitative action research study	Management students *n* = 30	Focus groups	Thematic analysis Constant comparative method	Knowledge on leadership theory Cultural understanding Open-mindedness Reflection	Enhanced memorization Improved understanding Contextual understanding Learner autonomy Engagement and motivation Practical learning experience

Table 2. *Cont.*

Author(s)	Approach	Study Design	Sample	Data Collection	Data Analysis	Aims of Intervention	Outcome
Romanowska et al. (2011) [67] Sweden	Witnessing performance art	Experimental study	Managers and their subordinates n = 48 + 192 = 240 at baseline	Pre-test post-test questionnaires Pre-test post-test blood samples	Statistical analysis	Mental and biological stress	Improved mental health Enhanced coping strategies Better performance-based self-esteem Favorable biological outcomes Reduction in stress indicators
Romanowska et al. (2013) [32] Sweden	Witnessing performance art	Experimental study	Managers and their subordinates n = 48 + 192 = 240 at baseline	Pre-test post-test inventory Pre-test post-test questionnaires	Statistical analysis	Sense of coherence Agreeableness Capacity to cope with stress Laissez-faire leadership	Improved mental resilience Enhanced pro-social behavior Reduced passive leadership Better stress management
Romanowska et al. (2014) [79] Sweden	Witnessing performance art	Experimental study	Managers and their subordinates n = 48 + 192 = 240 at baseline	Pre-test post-test questionnaires Pre-test post-test blood samples	Statistical analysis	Self-awareness Humility Capacity to cope with stress Laissez-faire leadership	Improved self-awareness Enhanced perceptual alignment Reduction in passive leadership Better stress management Positive impact on subordinates Improved leader performance
Sandberg et al. (2023) [181] Germany	Dance	Mixed-methods study Quasi-experimental sub-study	Managers n = 23/14	Pretest-posttest questionnaires Interviews	Statistical analysis Thematic analysis	Attention Presence Mutual engagement Resilience	Improved physical presence Enhanced nonverbal communication Positive aesthetic experience Increased sensitivity Successful learning transfer
Schyns et al. (2013) [35] UK	Drawing	Qualitative descriptive study	Undergraduate postgraduate and executive students n = 138 drawings created by participants	Drawings	Content analysis	Reflection on leadership Self-awareness and social awareness about implicit leadership theories	Heightened self-reflection Enhanced self-awareness
Singh & Widén (2020) [182] USA	Watching movies	Qualitative descriptive study	Library and information science students n = 101	Participant reflective papers	Content analysis	Learning about leadership concepts and theories Critical thinking skills	Changed leadership perspectives Improved critical thinking Engaged learning Recognition of essential leadership traits Practical application
Sutherland (2012) [183] Slovenia	Choral conducting	Qualitative grounded theory study	Executive MBA students n = 24	Participant reflective essays	Grounded theory Constant comparative method	Not reported	Enhanced reflexivity High aesthetic engagement Increased emotional awareness Improved self-awareness Memorable learning experiences Reconsidering future leadership practice

Table 2. *Cont.*

Author(s)	Approach	Study Design	Sample	Data Collection	Data Analysis	Aims of Intervention	Outcome
Sutherland & Jelinek (2015) [22] Slovenia	Choral conducting	Case study	Executive MBA students, early career managers *n* = 15	Observations and conversations with facilitators Participant observation Interviews with participants	Grounded theory	Not reported	Heightened awareness of relational dynamics Deeper understanding of power and responsibility Long-term impact on professional practice Emotional engagement Reflective practice Aesthetic experience Sense-making Enhanced humanistic qualities
Winther (2018) [184] Denmark	Dance	Qualitative performative study	Pre-service teachers *n* = 21	Written student experience reports Documentary film	Phenomenological thematic analysis	Somatic awareness Creativity Leadership	Increased self-confidence Increased sensitivity Improved self-contact Somatic awareness Embodied leadership
Winther & Højlund Larsen (2022) [185] Denmark	Dance	Qualitative phenomenological study	Leaders from diverse fields *n* = 9	Written participant reflections	Phenomenological analysis	Embodied leadership competence	Increased embodied leadership competence Enhanced emotional awareness Improved reflexivity Enhanced communication skills Development of relational skills Sustained growth Improved self-contact Somatic awareness
Woods et al. (2023) [45] UK	Collage-creation Gesture-response	Qualitative action research study	Educators *n* = 44	Interviews Participant written reflections Photos of collages Workshop videos Field notes	Thematic analysis	Capacity for distributed leadership Aesthetic qualities	Enhanced aesthetic awareness Improved collaborative leadership capabilities Transformative learning Increased reflexivity Self-awareness Interpersonal awareness Widening perspectives on leadership Increasing capacity for pro-active agency

2.6. Data Synthesis

The process of mixed research synthesis is inherently challenging due to the complex task of comparing and combining the diverse methodologies and topical differences inherent in qualitative and quantitative studies [131]. Qualitative metasummary represents a unique approach to integrating qualitative and quantitative research findings on a topic by extracting descriptive findings from diverse studies and aggregating them through a quantitatively oriented approach [131]. The method provides a degree of rigor that allows for the generalization of results [186].

The synthesis of outcome findings was based on their codes. Identical codes and codes with the same meaning were grouped to sub-themes, adjusted for redundancies, and referenced with the study from which they were derived [131]. Based on the similarities in content, the resulting 155 sub-themes were aggregated to 27 themes and finally organized into 11 overarching main themes [187]. To prevent bias and ensure plausibility, the author and Reviewer 3 discussed the abstraction process [188,189]. The resulting thematic framework is presented in full in Table S2. Table 3 provides an example of the hierarchy for the main theme "higher-order cognitive skills".

Table 3. Exemplary thematic hierarchy.

Main Theme	Theme	Sub-Theme
Higher-order cognitive skills (14)	Reflective thinking (5)	Increased reflective thinking (2)
		Improved reflective thinking (1)
		Reflective thinking (1)
		Enhanced reflective learning (1)
	Critical thinking skills (3)	Improved critical thinking skills (1)
		Improved critical thinking (1)
		Improved problem-solving skills (1)
	Creativity (6)	Increased creativity (3)
		Reconnection with creativity (1)
		Enhanced creativity (1)
		Utilization of creative processes (1)

Note. Numbers in brackets indicate the number of reports contributing to a theme.

To assess the relative magnitude of themes, their frequency effect sizes were calculated by taking the number of reports representing a theme and dividing it by the total number of reports in the sample (33 reports). This resulted in the percentage of articles reporting a certain outcome. Articles derived from a common parent study representing a duplication of the same theme, namely Romanowska and colleagues [32,67,79], were counted only once in the numerator and denominator [131]. The frequency effect sizes are reported in Table 4.

Table 4. Frequency effect sizes.

Main Theme Theme	No. of Studies (%)	Study (Quality Score/39)
1 Learner engagement and satisfaction		
Engagement	5 (15)	Andenoro & Ward (2008) [166] (17), Cranston & Kusanovich (2014) [168] (12), Rajendran & Andrew (2014) [51] (16), Singh & Widén (2020) [182] (13), Sutherland & Jelinek (2015) [22] (28)
Aesthetic experience	5 (15)	Harz et al. (2023) [172] (31), Parush & Koivunen (2014) [68] (17), Sandberg et al. (2023) [181] (31), Sutherland (2012) [183] (22), Sutherland & Jelinek (2015) [22] (28)
Satisfaction	5 (15)	Andenoro & Ward (2008) [166] (17), Cranston & Kusanovich (2013) [167] (12), Cranston & Kusanovich (2014) [168] (12), Harz et al. (2023) [172] (31), Hurdle & Greenhaw (2023) [173] (28)
2 Learning process		
Transformative learning	7 (21)	Firing et al. (2022) [171] (24), Hurdle & Greenhaw (2023) [173] (28), Parush & Koivunen (2014) [68] (17), Rajendran & Andrew (2014) [51] (16), Sutherland (2012) [183] (22), Winther & Højlund Larsen (2022) [185] (17), Woods et al. (2023) [45] (28)
Comprehensive learning	1 (3)	Rajendran & Andrew (2014) [51] (16)
3 Sensory and experiential awareness		
Sensitivity	7 (21)	Harz et al. (2023) [172] (31), Katz-Buonincontro (2011) [50] (10), Katz-Buonincontro & Phillips (2011) [176] (20), Katz-Buonincontro et al. (2015) [177] (11), Sandberg et al. (2023) [181] (31), Winther (2018) [184] (13), Woods et al. (2023) [45] (28)
4 Emotional development and personal growth		
Emotional awareness and transformation	10 (33)	Dennis (2014) [169] (6), Feltham (2012) [170] (10), Firing et al. (2022) [171] (24), Garavan et al. (2015) [69] (26), Hirsch et al. (2023) [57] (14), Katz-Buonincontro (2011) [50] (10), Leonard et al. (2013) [106] (22), Munro et al. (2015) [179] (18), Sutherland (2012) [183] (22), Winther & Højlund Larsen (2022) [185] (17)
Self-awareness	10 (30)	Dennis (2014) [169] (6), Hirsch et al. (2023) [57] (14), Munro et al. (2015) [179] (18), Peña & Grant (2019) [180] (20), Romanowska et al. (2014) [79] (34), Schyns et al. (2013) [35] (23), Sutherland (2012) [183] (22), Winther (2018) [184] (13), Winther & Højlund Larsen (2022) [185] (17), Woods et al. (2023) [45] (28)
Empowered self-concept	9 (27)	Dennis (2014) [169] (6), Feltham (2012) [170] (10), Kaimal et al. (2014) [174] (20), Kaimal et al. (2016) [175] (19), Parush & Koivunen (2014) [68] (17), Peña & Grant (2019) [180] (20), Romanowska et al. (2011) [67] (31), Winther (2018) [184] (13), Woods et al. (2023) [45] (28)

Table 4. *Cont.*

Main Theme **Theme**	**No. of Studies (%)**	**Study (Quality Score/39)**
5 Reflective and reflexive practices		
Reflective and reflexive practices	15 (45)	Dennis (2014) [169] (6), Feltham (2012) [170] (10), Harz et al. (2023) [172] (31), Hirsch et al. (2023) [57] (14), Kaimal et al. (2014) [174] (20), Kaimal et al. (2016) [175] (19), Katz-Buonincontro (2011) [50] (10), Katz-Buonincontro & Phillips (2011) [176] (20), Katz-Buonincontro et al. (2015) [177] (11), Kilic (2023) [40] (30), Schyns et al. (2013) [35] (23), Sutherland (2012) [183] (22), Sutherland & Jelinek (2015) [22] (28), Winther & Højlund Larsen (2022) [185] (17), Woods et al. (2023) [45] (28)
6 Higher-order cognitive skills		
Reflective thinking	4 (12)	Andenoro & Ward (2008) [166] (17), Cranston & Kusanovich (2013) [167] (12), Katz-Buonincontro (2011) [50] (10), Leonard et al. (2013) [106] (22)
Critical thinking skills	3 (9)	Andenoro & Ward (2008) [166] (17), Katz-Buonincontro & Phillips (2011) [176] (20), Singh & Widén (2020) [182] (13)
Creativity	6 (18)	Hirsch et al. (2023) [57] (14), Kaimal et al. (2014) [174] (20), Katz-Buonincontro (2011) [50] (10), Katz-Buonincontro & Phillips (2011) [176] (20), Katz-Buonincontro et al. (2015) [177] (11), Kilic (2023) [40] (30)
7 Sense-making		
Sense-making	8 (24)	Dennis (2014) [169] (6), Firing et al. (2022) [171] (24), Harz et al. (2023) [172] (31), Hirsch et al. (2023) [57] (14), Katz-Buonincontro et al. (2015) [177] (11), Peña & Grant (2019) [180] (20), Singh & Widén (2020) [182] (13), Sutherland & Jelinek (2015) [22] (28)
8 Adaptive resilience		
Negative capability	2 (6)	Firing et al. (2022) [171] (24), Hirsch et al. (2023) [57] (14)
Risk taking	5 (15)	Cranston & Kusanovich (2014) [168] (12), Katz-Buonincontro & Phillips (2011) [176] (20), Katz-Buonincontro et al. (2015) [177] (11), Leonard et al. (2013) [106] (22), Parush & Koivunen (2014) [68] (17)
Mental health	4 (13)	Feltham (2012) [170] (10), Harz et al. (2023) [172] (31), Kilic (2023) [40] (30), Romanowska et al. (2011) [67] (31), Romanowska et al. (2013) [32] (34), Romanowska et al. (2014) [79] (34)
9 Interpersonal and social competencies		
Empathy	7 (21)	Andenoro & Ward (2008) [166] (17), Cranston & Kusanovich (2013) [167] (12), Feltham (2012) [170] (10), Firing et al. (2022) [171] (24), Harz et al. (2023) [172] (31), Kaimal et al. (2016) [175] (19), Katz-Buonincontro (2011) [50] (10)
Ethical understanding	3 (9)	Cranston & Kusanovich (2013) [167] (12), Cranston & Kusanovich (2014) [168] (12), Medeiros et al. (2012) [178] (7)
Communication skills	6 (18)	Garavan et al. (2015) [69] (26), Kilic (2023) [40] (30), Medeiros et al. (2012) [178] (7), Munro et al. (2015) [179] (18), Sandberg et al. (2023) [181] (31), Winther & Højlund Larsen (2022) [185] (17)
Interpersonal skills	8 (24)	Dennis (2014) [169] (6), Feltham (2012) [170] (10), Firing et al. (2022) [171] (24), Kilic (2023) [40] (30), Romanowska et al. (2014) [79] (34), Sutherland & Jelinek (2015) [22] (28), Winther & Højlund Larsen (2022) [185] (17), Woods et al. (2023) [45] (28)
Collaboration	7 (21)	Cranston & Kusanovich (2014) [168] (12), Firing et al. (2022) [171] (24), Katz-Buonincontro (2011) [50] (10), Kilic (2023) [40] (30), Leonard et al. (2013) [106] (22), Medeiros et al. (2012) [178] (7), Woods et al. (2023) [45] (28)
10 Comprehensive leadership development		
Leadership perspective	5 (15)	Andenoro & Ward (2008) [166] (17), Kaimal et al. (2014) [174] (20), Kaimal et al. (2016) [175] (19), Singh & Widén (2020) [182] (13), Woods et al. (2023) [45] (28)
Leadership enhancement	4 (12)	Cranston & Kusanovich (2014) [168] (12), Garavan et al. (2015) [69] (26), Medeiros et al. (2012) [178] (7), Romanowska et al. (2014) [79] (34)
Embodied leadership	3 (9)	Sandberg et al. (2023) [181] (31), Winther (2018) [184] (13), Winther & Højlund Larsen (2022) [185] (17)
11 Transfer success		
Real-world application	9 (27)	Andenoro & Ward (2008) [166] (17), Cranston & Kusanovich (2013) [167] (12), Kaimal et al. (2014) [174] (20), Kaimal et al. (2016) [175] (19), Leonard et al. (2013) [106] (22), Sandberg et al. (2023) [181] (31), Singh & Widén (2020) [182] (13), Sutherland (2012) [183] (22), Sutherland & Jelinek (2015) [22] (28)
Behavioral change	2 (6)	Feltham (2012) [170] (10), Romanowska et al. (2013) [32] (34), Romanowska et al. (2014) [79] (34)

Note. No. = number.

To ascertain which studies contributed to the identified themes, the intensity effect size of each study was determined in two ways. The first was the frequency effect size A, calculated by dividing the number of themes with frequency effect sizes ≥25% contained in a study by the number of themes with frequency effect sizes ≥25% across all studies (5 themes). This value indicates the relative contribution of a study to the most significant findings across all studies. The frequency effect size B was derived by dividing the number of themes contained in a study by the total number of themes across all studies (27 themes). This value indicates how many themes are captured within the study [131,190]. The intensity effect sizes are listed in Table 5.

Table 5. Intensity effect sizes.

Reference	No. of Themes with Frequency Effect Size ≥25	Intensity Score A (Column B/Total Themes with Frequency Effect Size ≥25 (5)) (%)	Total No. of Themes	Intensity Score B (Column D/Total Themes (27)) (%)	QuADS Score/39
Andenoro & Ward (2008) [166]	1	20	7	26	17
Cranston & Kusanovich (2013) [167]	1	20	5	19	12
Cranston & Kusanovich (2014) [168]	0	0	6	22	12
Dennis (2014) [169]	4	80	6	22	6
Feltham (2012) [170]	3	60	7	26	10
Firing et al. (2022) [171]	1	20	6	26	24
Garavan et al. (2015) [69]	1	20	3	11	26
Harz et al. (2023) [172]	1	20	7	26	31
Hirsch et al. (2023) [57]	3	60	6	22	14
Hurdle & Greenhaw (2023) [173]	0	0	2	7	28
Kaimal et al. (2014) [174]	3	60	5	19	20
Kaimal et al. (2016) [175]	3	60	5	19	19
Katz-Buonincontro (2011) [50]	2	40	7	26	10
Katz-Buonincontro & Phillips (2011) [176]	1	20	5	19	20
Katz-Buonincontro et al. (2015) [177]	1	20	5	19	11
Kilic (2023) [40]	1	20	5	22	30
Leonard et al. (2013) [106]	2	40	5	19	22
Medeiros et al. (2012) [178]	0	0	4	15	7
Munro et al. (2015) [179]	2	40	3	11	18
Parush & Koivunen (2014) [68]	1	20	4	15	17
Peña & Grant (2019) [180]	2	40	3	11	20
Rajendran & Andrew (2014) [51]	0	0	3	11	16
Romanowska et al. (2011) [67]	1	20	2	7	31
Romanowska et al. (2013) [32]	0	0	2	7	34
Romanowska et al. (2014) [79]	1	20	5	19	34
Sandberg et al. (2023) [181]	1	20	5	19	31
Schyns et al. (2013) [35]	2	40	2	7	23
Singh & Widén (2020) [182]	1	20	5	19	13
Sutherland (2012) [183]	4	80	6	22	22
Sutherland & Jelinek (2015) [22]	2	40	6	22	28
Winther (2018) [184]	2	40	4	15	17
Winther & Højlund Larsen (2022) [185]	3	60	7	26	13
Woods et al. (2023) [45]	3	60	8	30	28

Note. No. = number.

3. Results

3.1. Study Characteristics

3.1.1. Research Setting and Sample Characteristics

The 33 reports and 31 studies, respectively, in the sample span from 2008 to 2023. There has been a slight increase in study intensity in recent years, with seven studies published in 2022 and 2023. The studies originate from North America (13 studies, thereof 12 from the US), Europe (17, thereof 6 from the UK), Australia (2), and South America (1).

The reports encompass a diverse array of art-based approaches to leadership development. The majority of interventions employed a combination of various art forms [40,45,57,174,176,177].

Five articles report on workshops where participants created paintings [178,180], made drawings [35,69,175], or engaged with paintings as objects for reflection [175]. Another five studies focus on applied drama [167,168,170,171,179]. One study addresses improvisational theater [50].

Three reports are based on a parent study where participants witnessed performance art [32,67,79], the only study in the sample referencing literature and poetry. Four studies examine the effects of dance and movement-based practices on leaders [169,181,184,185].

One study examines the impact of joint music-making [106], three discuss leaders' experiences with choral conducting [22,68,183], and another focuses on a listening experience and an artist talk with a musician [172]. Finally, four articles investigate the learning outcomes of watching movies [51,166,173,182].

In fewer than half of the studies (12/31), professionals in a lead role were involved. The majority of interventions were designed as single sessions, with a maximum duration of two-days. A total of six studies included participants in intermittent sessions over time spans of two to 18 months [32,67,79,166,171,176,179,185] (see Table 6). Empirical research on the use of movies as teaching material is exclusively derived from student participant groups.

Table 6. Study dynamics.

Author(s)	Intervention Frequency	Participant Type	Study Design	Sampling	Study Group Design	Data Collection Timepoint	Post-Intervention Data Collection Interval	Assessment Tool	Quality Score/39
Andenoro & Ward (2008) [166]	Multiple sessions over 15 weeks	Enrolled students	Case study	Purposive	N/A	During intervention Post-intervention	N/A End of intervention	N/A	17
Cranston & Kusanovich (2013) [167]	Single 2-day session	Not reported	Qualitative descriptive study	Not reported	N/A	Pre-intervention During intervention Post-intervention	Not reported N/A Not reported	N/A	12
Cranston & Kusanovich (2014) [168]	Single 2-day session	Workshop attendees	Qualitative descriptive study	Convenience	N/A	During intervention	N/A	N/A	12
Dennis (2014) [169]	Single 2-day sessions	Not reported	Qualitative action research study	Not reported	N/A	Not reported	Not reported	N/A	6
Feltham (2012) [170]	2 separate one-day sessions	Individuals connected with the training event	Qualitative descriptive study	Purposive	N/A	Not reported	Not reported	N/A	10
Firing et al. (2022) [171]	9-week program	Enrolled students	Case study	Purposive	N/A	During intervention (observation) Not reported (interviews)	N/A Not reported	N/A	24
Garavan et al. (2015) [69]	Single session	Leaders from a large company	Quasi-experimental study	Random	Comparative trial	Pre-test Post-test	6 months	Subjective rating scales	26
Harz et al. (2023) [172]	Single one and a half day session	Enrolled students	Qualitative descriptive study	Purposive	N/A	Post-inter-vention	End of intervention	N/A	31
Hirsch et al. (2023) [57]	Single session	Not reported	Qualitative descriptive study	Not reported	N/A	Post-inter-vention	Six-week period	N/A	14
Hurdle & Greenhaw (2023) [173]	2 sessions one week apart	Enrolled students	Case Study	Purposive	N/A	Post-intervention	One week	N/A	28

Table 6. *Cont.*

Author(s)	Intervention Frequency	Participant Type	Study Design	Sampling	Study Group Design	Data Collection Timepoint	Post-Intervention Data Collection Interval	Assessment Tool	Quality Score/39
Kaimal et al. (2014) [174]	3 separate sessions	Program participants	Case study	Purposive	N/A	Not reported	Not reported	N/A	20
Kaimal et al. (2016) [175]	2 separate sessions	Program participants	Case study	Purposive	N/A	During intervention Post-intervention	N/A Not reported	N/A	19
Katz-Buonincontro (2011) [50]	5-day program	Program participants	Case study	Purposive	N/A	During intervention	N/A	N/A	10
Katz-Buonincontro & Phillips (2011) [176]	11-week course 5-day program	Enrolled students Program participants	Comparative case study	Purposive	N/A	Not reported	N/A	N/A	20
Katz-Buonincontro et al. (2015) [177]	Not reported	Program participants	Comparative case study	Purposive	N/A	Not reported	N/A	N/A	11
Kilic (2023) [40]	Not reported	Program participants	Mixed-methods action research study Quasi-experimental sub-study	Purposive convenience	Single group design	Pre-test During intervention Post-test	Not reported	Social Skills Inventory (SSI) Affect Grid	30
Leonard et al. (2013) [106]	2-h session	Two unipro-fessional groups	Qualitative descriptive study	Purposive	N/A	Post-intervention	7 days 4 to 9 months	N/A	22
Medeiros et al. (2012) [178]	Single session	Enrolled students	Quantitative descriptive study	Purposive	N/A	Post-test	Not reported	Subjective rating scales	7
Munro et al. (2015) [179]	Intermittent sessions over 18-month period	Company members	Quantitative exploratory study	Self-selection	Single group design	Pre-test Post-test	Not reported	Bar-On Emotional Quotient Inventory (EQi) Neethling Brain Instrument® (NBI)	18
Parush & Koivunen (2014) [68]	Single sessions	Program participants Company members	Case study	Convenience	N/A	During intervention Post-intervention	N/A Not reported	N/A	17
Peña & Grant (2019) [180]	2-h session	Enrolled students	Qualitative phenomeno-logical study	Self-selection	N/A	Post-intervention	Not reported	N/A	20
Rajendran & Andrew (2014) [51]	Single session	Enrolled students	Qualitative action research study	Convenience	N/A	Post-intervention	Not reported	N/A	16
Romanowska et al. (2011) [67]	12 intermittent 3-h sessions over one year	Managers and their subordinates	Experimental study	Random	Comparative trial	Pre-test Post-test	12 months 18 months	Maslach Burnout Inventory Karolinska Sleep Questionnaire Hopkins Symptom Checklist Covert Coping Index Biometric instruments	31

Table 6. *Cont.*

Author(s)	Intervention Frequency	Participant Type	Study Design	Sampling	Study Group Design	Data Collection Timepoint	Post-Intervention Data Collection Interval	Assessment Tool	Quality Score/39
Romanowska et al. (2013) [32]	12 intermittent 3-h sessions over one year	Managers and their subordinates	Experimental study	Random	Comparative trial	Pre-test Post-test	12 months 18 months	Developmental Leadership Questionnaire (DLQ) NEO-PI-R Sense of Coherence questionnaire (SOC)	34
Romanowska et al. (2014) [79]	12 intermittent 3-h sessions over one year	Managers and their subordinates	Experimental study	Random	Comparative trial	Pre-test Post-test	12 months 18 months	Developmental Leadership Questionnaire (DLQ)	34
Sandberg et al. (2023) [181]	2-day sessions	Managers	Mixed-methods study Quasi-experimental sub-study	Self-selection	Single group design	Pre-test Post-test	Up to 2 weeks and 6 weeks (questionnaire) 13 to 17 weeks (interviews)	Subjective rating scales	31
Schyns et al. (2013) [35]	Single session	Enrolled students	Qualitative descriptive study	Convenience	N/A	During intervention	N/A	N/A	23
Singh & Widén (2020) [182]	Single session	Enrolled students	Qualitative descriptive study	Convenience	N/A	Post-intervention	Not reported	N/A	13
Sutherland (2012) [183]	1-day session	Enrolled students	Qualitative grounded theory study	Convenience	N/A	Post-intervention	Not reported	N/A	22
Sutherland & Jelinek (2015) [22]	1-day session	Enrolled students	Case study	Convenience	N/A	Post-intervention	24 h 6 to 12 months	N/A	28
Winther (2018) [184]	Not reported	Enrolled students	Qualitative performative study	Convenience	N/A	Not reported	N/A	N/A	13
Winther & Højlund Larsen (2022) [185]	3-month course	Program participants	Qualitative phenomenological study	Convenience	N/A	During intervention	N/A	N/A	17
Woods et al. (2023) [45]	2-h session	Workshop attendees	Qualitative action research study	Self-selection	N/A	During intervention Post-intervention	N/A Not reported	N/A	28
Andenoro & Ward (2008) [166]	Multiple sessions over 15 weeks	Enrolled students	Case study	Purposive	N/A	During intervention Post-intervention	N/A End of intervention	N/A	17
Cranston & Kusanovich (2013) [167]	Single 2-day session	Not reported	Qualitative descriptive study	Not reported	N/A	Pre-intervention During intervention Post-intervention	Not reported N/A Not reported	N/A	12
Cranston & Kusanovich (2014) [168]	Single 2-day session	Workshop attendees	Qualitative descriptive study	Convenience	N/A	During intervention	N/A	N/A	12
Dennis (2014) [169]	Single 2-day sessions	Not reported	Qualitative action research study	Not reported	N/A	Not reported	Not reported	N/A	6
Feltham (2012) [170]	2 separate one-day sessions	Individuals connected with the training event	Qualitative descriptive study	Purposive	N/A	Not reported	Not reported	N/A	10

Table 6. *Cont.*

Author(s)	Intervention Frequency	Participant Type	Study Design	Sampling	Study Group Design	Data Collection Timepoint	Post-Intervention Data Collection Interval	Assessment Tool	Quality Score/39
Firing et al. (2022) [171]	9-week program	Enrolled students	Case study	Purposive	N/A	During intervention (observation) Not reported (interviews)	N/A Not reported	N/A	24
Garavan et al. (2015) [69]	Single session	Leaders from a large company	Quasi-experimental study	Random	Comparative trial	Pre-test Post-test	6 months	Subjective rating scales	26
Harz et al. (2023) [172]	Single one and a half day session	Enrolled students	Qualitative descriptive study	Purposive	N/A	Post-intervention	End of intervention	N/A	31
Hirsch et al. (2023) [57]	Single session	Not reported	Qualitative descriptive study	Not reported	N/A	Post-intervention	Six-week period	N/A	14
Hurdle & Greenhaw (2023) [173]	2 sessions one week apart	Enrolled students	Case Study	Purposive	N/A	Post-intervention	One week	N/A	28
Kaimal et al. (2014) [174]	3 separate sessions	Program participants	Case study	Purposive	N/A	Not reported	Not reported	N/A	20
Kaimal et al. (2016) [175]	2 separate sessions	Program participants	Case study	Purposive	N/A	During intervention Post-intervention	N/A Not reported	N/A	19
Katz-Buonincontro (2011) [50]	5-day program	Program participants	Case study	Purposive	N/A	During intervention	N/A	N/A	10
Katz-Buonincontro & Phillips (2011) [176]	11-week course 5-day program	Enrolled students Program participants	Comparative case study	Purposive	N/A	Not reported	N/A	N/A	20
Katz-Buonincontro et al. (2015) [177]	Not reported	Program participants	Comparative case study	Purposive	N/A	Not reported	N/A	N/A	11
Kilic (2023) [40]	Not reported	Program participants	Mixed-methods action research study Quasi-experimental sub-study	Purposive convenience	Single group design	Pre-test During intervention Post-test	Not reported	Social Skills Inventory (SSI) Affect Grid	30
Leonard et al. (2013) [106]	2 h session	Two uni-professional groups	Qualitative descriptive study	Purposive	N/A	Post-intervention	7 days 4 to 9 months	N/A	22
Medeiros et al. (2012) [178]	Single session	Enrolled students	Quantitative descriptive study	Purposive	N/A	Post-test	Not reported	Subjective rating scales	7
Munro et al. (2015) [179]	Intermittent sessions over 18-month period	Company members	Quantitative exploratory study	Self-selection	Single group design	Pre-test Post-test	Not reported	Bar-On Emotional Quotient Inventory (EQi) Neethling Brain Instrument® (NBI)	18
Parush & Koivunen (2014) [68]	Single sessions	Program participants Company members	Case study	Convenience	N/A	During intervention Post-intervention	N/A Not reported	N/A	17
Peña & Grant (2019) [180]	2 h session	Enrolled students	Qualitative phenomeno-logical study	Self-selection	N/A	Post-intervention	Not reported	N/A	20

Table 6. *Cont.*

Author(s)	Intervention Frequency	Participant Type	Study Design	Sampling	Study Group Design	Data Collection Timepoint	Post-Intervention Data Collection Interval	Assessment Tool	Quality Score/39
Rajendran & Andrew (2014) [51]	Single session	Enrolled students	Qualitative action research study	Convenience	N/A	Post-intervention	Not reported	N/A	16
Romanowska et al. (2011) [67]	12 intermittent 3 h sessions over one year	Managers and their subordinates	Experimental study	Random	Comparative trial	Pre-test Post-test	12 months 18 months	Maslach Burnout Inventory Karolinska Sleep Questionnaire Hopkins Symptom Checklist Covert Coping Index Biometric instruments	31
Romanowska et al. (2013) [32]	12 intermittent 3 h sessions over one year	Managers and their subordinates	Experimental study	Random	Comparative trial	Pre-test Post-test	12 months 18 months	Developmental Leadership Questionnaire (DLQ) NEO-PI-R Sense of Coherence questionnaire (SOC)	34
Romanowska et al. (2014) [79]	12 intermittent 3 h sessions over one year	Managers and their subordinates	Experimental study	Random	Comparative trial	Pre-test Post-test	12 months 18 months	Developmental Leadership Questionnaire (DLQ)	34
Sandberg et al. (2023) [181]	2-day sessions	Managers	Mixed-methods study Quasi-experimental sub-study	Self-selection	Single group design	Pre-test Post-test	Up to 2 weeks and 6 weeks (questionnaire) 13 to 17 weeks (interviews)	Subjective rating scales	31
Schyns et al. (2013) [35]	Single session	Enrolled students	Qualitative descriptive study	Convenience	N/A	During intervention	N/A	N/A	23
Singh & Widén (2020) [182]	Single session	Enrolled students	Qualitative descriptive study	Convenience	N/A	Post-intervention	Not reported	N/A	13
Sutherland (2012) [183]	1-day session	Enrolled students	Qualitative grounded theory study	Convenience	N/A	Post-intervention	Not reported	N/A	22
Sutherland & Jelinek (2015) [22]	1-day session	Enrolled students	Case study	Convenience	N/A	Post-intervention	24 h 6 to 12 months	N/A	28
Winther (2018) [184]	Not reported	Enrolled students	Qualitative performative study	Convenience	N/A	Not reported	N/A	N/A	13
Winther & Højlund Larsen (2022) [185]	3-month course	Program participants	Qualitative phenomenological study	Convenience	N/A	During intervention	N/A	N/A	17
Woods et al. (2023) [45]	2 h session	Workshop attendees	Qualitative action research study	Self-selection	N/A	During intervention Post-intervention	N/A Not reported	N/A	28

Note. N/A = not applicable.

3.1.2. Study Design and Quality

Empirical research on art-based leadership development is predominantly qualitative (see Table 6). The 25 qualitative studies examined cover various approaches, including, among others, ten case studies, two phenomenological studies [180,185], and one performative study [184]. The review encompasses four quantitative studies: one experimental study that generated three reports [32,67,79], one quasi-experimental study [69], and two quantitative descriptive studies [178,179]. Furthermore, two mixed-methods studies with quasi-experimental sub-studies [40,181] are included in the sample.

The typical methodology employed by researchers is to integrate their inquiries into existing training programs and to rely on convenience sampling (10 studies) or purposive sampling (12 studies). It is a relatively uncommon practice among researchers to source participants independently (e.g., [40,67,181]). Two quantitative studies employed random sampling and a comparative group [32,67,69,79], while the others followed a single group design. The reported sample sizes for qualitative studies ranged from 5 to 140, while those for quantitative (sub-)studies ranged from 15 to 240.

With the exception of Romanowska and colleagues [32,67,79], which included biometric measures, all studies were based on self-reported and/or observational data. The experimental study conducted by Romanowska and colleagues [32,67,79] is the only one that considered both the leader and follower perspective.

The majority of researchers collected qualitative data during the sessions (nine studies) or after the intervention (nine studies). With the exception of one study [178], quantitative and mixed-method studies presented baseline and post-test data. The sample includes six longitudinal studies, three of which are qualitative [22,57,106] and three of which are quantitative (sub-) studies [32,67,69,79,181] with a follow-up period of between six weeks and 18 months post-intervention.

The quality assessment of the included studies is presented in Table 1. The QuADS quality scores exhibited considerable variability, ranging from 6 to 34 of a possible 39 points, with a mean and median score of 20 across all studies (see Table 7). Qualitative studies range from 6 [169] to 31 [172] with a mean of 18. Quantitative studies achieve higher values. Their quality ranges from 7 [178] to 34 [32,79] with a mean of 25 (29 without the outlier). Mixed-method studies score 30 [40] and 31 [181].

Table 7. QuADS mean scores.

Item	Mean Score/3
1 Theoretical or conceptual underpinning to the research	1.8
2 Statement of research aim/s	2.0
3 Clear description of research setting and target population	2.5
4 The study design is appropriate to address the stated research aim/s	2.2
5 Appropriate sampling to address the research aim/s	0.8
6 Rationale for choice of data collection tool/s	1.1
7 The format and content of data collection tool is appropriate to address the stated research aim/s	2.2
8 Description of data collection procedure	1.6
9 Recruitment data provided	1.3
10 Justification for analytic method selected	1.0
11 The method of analysis was appropriate to answer the research aim/s	2.2
12 Evidence that the research stakeholders have been considered in research design or conduct	0.2
13 Strengths and limitations critically discussed	1.0
Total score	20/39

The studies examined exhibited appropriate study designs, data collection methods, and data analysis techniques, regardless of the research approach. Lower quality assessment is generally related to the aforementioned suboptimal sampling and a lack of reporting around recruitment data and the data collection procedure, as well as the rationale for data collection and data analysis. Three research projects considered stakeholders in the design or conduct of the study.

In general, empirical research on art-based leadership development is well-founded in theory or viable concepts. A number of studies make reference to philosophy or learning theory, citing concepts such as aesthetic experience [191] and embodiment [192], experiential learning [72], and transformational learning [193]. Seven studies out of 31 align their research questions with leadership concepts, including leadership theories and concepts in general [182], laissez faire leadership [32,79], distributed leadership [45,106], artful leadership [181], and embodied leadership [184,185].

3.2. Outcomes

3.2.1. General Findings

The findings presented in the reports were grouped into 11 main themes and 27 related themes (see Table 4). The main themes identified are reflective and reflexive practices, higher-order cognitive skills, and sense-making (see Section 3.2.2); emotional development and personal growth, sensory and experiential awareness (see Section 3.2.3); interpersonal and social competencies (see Section 3.2.4); adaptive resilience, and comprehensive leadership development (see Section 3.2.5); learner engagement and satisfaction, learning process, and transfer success (see Section 3.2.6).

As demonstrated by the effect sizes presented in Table 5, qualitative studies contribute more significantly to impactful findings and offer broader thematic coverage than quantitative studies. Although they are of higher quality (see Tables 1 and 5), quantitative studies tend to have lower intensity effect sizes in both instances: contributing to the most impactful findings (intensity effect size A) and in terms of overall thematic contribution (intensity effect size B). While lower-quality studies may contribute to some high-impact findings, studies with higher methodological rigor generally dominate in both impact and thematic breadth. A considerable proportion of frequent findings are supported by a combination of high- and low-quality studies.

With the exception of four reports, the analysis of findings suggests that the art-based sessions were a complete success. Woods and colleagues [45] observe that the impact of the art-based approach on participants varied. For some, the art-based approach had no discernible effect [182]. Studies employing statistical analysis and appropriate reporting indicate that, contrary to the intended outcome, the sessions did not result in a notable change in openness to experience [69], in the way leaders interacted with others, nor in resilience [181].

3.2.2. Cognitive and Reflective Skills

The most frequently cited effect of arts-based methods in leadership development is an increase in reflective and reflexive practices. In fact, almost every second study (15/31) reports an enhanced capacity for reflection and reflexivity among participants. While reflection involves processes of introspection and self-examination, reflexivity encompasses an awareness of the broader relational contexts that influence oneself and an appreciation for the social realities of others [194]. The art-based approach facilitated participants' capacity for critical reflection on their actions and decisions. Participants developed enhanced reflexive capabilities, enabling them to engage in a more rigorous evaluation of their leadership practices.

A total of ten studies have documented an increase in higher-order cognitive skills, including reflective thinking, critical thinking skills, and creativity. Eight studies have referred to various aspects of sense-making, including a deeper understanding, a change of perspective, and holistic identity development. The interventions enabled participants to analyze and evaluate specific experiences and information and to make sense of complex and ambiguous situations, thus contributing to effective problem-solving and decision-making [195].

3.2.3. Experiential and Emotional Development

Twenty studies were allocated to the main theme of "emotional development and personal growth". Art-based methods have been found to have an impact on self-awareness, emotional awareness, and emotional transformation, which points to an increase in emotional intelligence [196]. As a consequence of the interventions, participants demonstrated enhanced capacity to regulate their emotional responses and an augmented ability to express emotions. Many gained a sense of personal agency, feeling more confident in their abilities to influence and drive change.

Seven studies reported that participants exhibited heightened awareness and sensitivity in terms of aesthetic, somatic, or visual perceptiveness. This heightened sensitivity and perceptiveness to sensory stimuli, coupled with an openness to new experiences, constitutes sensory and experiential awareness [197].

3.2.4. Interpersonal and Social Competencies

Another significant main theme is "interpersonal and social competencies", with 19 studies in total. Interpersonal skills and communication skills are conceptualized as interpersonal competencies that enable individuals to interact with others one-on-one or in small groups. Social competencies, including empathy, social sensitivity, and prosocial skills, refer to a broader set of skills and abilities that are needed to navigate within a larger social context [198]. The empirical findings indicate that methods based on performance arts, in particular, foster interpersonal skills and increase proficiency in both verbal and nonverbal communication. Participants expressed appreciation for the collaborative learning environments that some interventions created. They observed enhanced collaborative efforts and team cohesion. Several studies demonstrate that participants developed a greater ability to empathize with others.

3.2.5. Adaptive and Resilient Leadership

Individual adaptive resilience highlights the capacity to adapt to changing circumstances while maintaining a sense of agency and control [199,200]. A limited number of studies have examined this aspect of leader development. Five studies have reported that art-based practices have encouraged participants to take more risks in their leadership practices. Two studies have supported the idea that this approach helps leaders develop negative capability, which is the ability to embrace uncertainty, doubt, and ambiguity without the need for clear answers or logical resolution [201]. Four studies have demonstrated a positive impact of arts-based methods on mental health, including improved stress management and well-being.

The implementation of art-based methods has been found to have a notable impact on the mindset of participants, resulting in a broader and more nuanced perspective on leadership, enhanced leader identity, and improved performance. Additionally, there was a significant improvement in embodied leadership. These findings are derived from a total of 12 distinct studies.

3.2.6. Learning Experience and Transfer

The art-based methods were notably distinct from approaches to leadership development that learners had previously encountered [166,167]. While some participants found the different nature of the assignments enjoyable [175], others were significantly challenged by them, perceiving them as an "emotional bomb-shell" [171] (p. 336). For many, the art-based approaches engendered a "feeling of being far outside one's comfort zone" [171] (p. 337) (see also [45,68,183–185]). The findings indicate that there is a disorienting dilemma present in the learning process [180,181].

The art-based interventions yielded high levels of learner engagement and satisfaction, with positive feedback on the aesthetic experience. Learners found the art-based sessions more engaging than traditional lecture-based courses. Eleven studies demonstrate the effectiveness of art-based interventions in engaging learners and enhancing satisfaction.

In seven studies, the learning process is described as transformative or comprehensive, indicating that there have been sustainable shifts in self-perception, understanding of leadership roles, and professional practice that are based on memorable experiences.

Leaders perceived the art-based sessions as distant from their everyday professional lives [68], which presented a challenge for some in transferring insights to their individual leadership practices [22]. However, one-third of the reports indicate that learners successfully transferred their insights and acquired skills to their professional contexts. Three studies demonstrate sustainable transfer success in follow-up assessments conducted four to 18 months post-intervention [22,32,67,79,181]. One longitudinal study provides substantial evidence that art-based leadership development leads to behavioral change [32,79].

4. Discussion

4.1. Effectiveness of Art-Based Leadership Development

The objective of this systematic literature review and metasummary was to identify, critically evaluate, and synthesize the evidence pertaining to the effectiveness of art-based leadership development. The 31 studies reviewed encompass a diverse range of art forms, including visual arts, applied drama, dance, music, and movies. The impact of art-based leadership development can be discerned across a variety of leadership aspects, regardless of the art form. The evidence indicates a multitude of effects.

Art-based methods have been found to significantly enhance reflective and reflexive practices among participants. The ability to critically reflect on actions and decisions, and to develop deeper reflexive capabilities, is a common outcome. The impact of art-based methods on emotional development and personal growth seems profound. Participants demonstrated increased emotional intelligence, self-awareness, and the ability to regulate emotional responses. Art-based methods also fostered significant improvements in interpersonal and social competencies. Enhanced communication skills, empathy, and collaboration are frequently reported outcomes. The advancement of these abilities through artistic processes indicates a holistic transformation in the way participants think, feel, and interact with their surroundings.

Empirical research on leadership development typically ignores collective outcomes, focusing instead on effects at the individual and team levels [202]. This trend is also evident in studies on art-based leadership development. The art-based leadership development that is currently evidenced does not imply transcending leaders' development in leader–follower dynamics and organizational development. The objectives and outcomes of interventions are limited to an individual perspective, with a focus on personal development and the capacity to fulfill one's role as a leader. This approach neglects more complex development categories at the group level [23].

Although only one study explicitly categorizes this focus [171], the documented interventions almost exclusively concentrate on leader development. This is because the development of individual capabilities of leaders is central to their approach. Aside from one study [32,79], followers are not considered in study designs. Therefore, art-based leader development, as reflected in evidence, aligns with the adult development paradigm. Art-based leader development is interpreted through concepts of identity and linked to skills of self-awareness, metacognition, and self-regulation. While supporting leaders' mastery of cognitive, emotional, and interpersonal regulation, art-based methods currently embed leader development in adult development [203–205].

The studies on leader development corroborate evidence from reviews in other fields of adult development. Art-based methods have been shown to facilitate perceptual refinement [206,207] and reflective practice [208,209]. Furthermore, these methods have been shown to positively impact learners' cognitive and emotional development [209,210]. This includes enhancing empathy [211], higher-order cognitive skills [212], and sensemaking [213]. Moreover, the arts have been demonstrated to enhance group cohesion and interpersonal skills [209,214,215]. Additionally, art-based approaches have been shown to facilitate a shift in learners' attitudes and to enhance their capacity to act [210]. It is noteworthy that research on art-based (leader) development does not identify any significant outcomes that are unique to leadership alone.

4.2. Paradigmatic Insights

Qualitative research is the dominant paradigm in the field. Qualitative studies yielded more significant and nuanced findings than quantitative studies, which were more limited in scope. Qualitative studies show considerable variability in terms of methodological rigor and reporting quality. Qualitative studies of lower quality are generally less robust in their evidence. Nevertheless, a synthesis of the evidence reveals a pattern of findings that are supported by studies with predominantly good to very good methodological quality, despite some shortcomings in reporting quality. A paucity of longitudinal studies exists in the research area, and only one study is sufficiently robust to demonstrate actual behavioral change resulting from a long-term leadership program [32,79].

The preference of researchers for qualitative study designs is also evident in other areas of art-based learning [121,215]. This can be explained, among other things, by the epistemological foundations of art-based methods. Art-based leadership development falls under constructivist learning interventions. These create a learning environment where participants can have experiences without clearly defined learning objectives [216]. Learner-centeredness and the reflection on experiences play an important role in this process. From this theoretical perspective, learning success in leadership development is seen in a deeper understanding of self and environment, enhanced self-reflection, and expanded problem-solving skills [217].

Qualitative methods are particularly adept at capturing complex, subjective experiences and meanings, inherently aligning with a constructivist paradigm [218]. The constructivist view, which posits that individuals interpret experiences and construct knowledge, strongly supports the qualitative investigation of interventions rooted in the same epistemological principles.

Another reason for the paucity of quantitative studies is the distinctive nature of arts-based practices. The learner-centered approach poses a challenge to the standardization of interventions and replication [219]. Comparative studies may encounter difficulties in drawing generalizable conclusions due to variability in implementation fidelity, instructor expertise, and student engagement, which can introduce heterogeneity. Furthermore, contextual variables may interact with the intervention, making it challenging to isolate the effects of arts-based practices [220].

The dominance of qualitative research, which inherently focuses on the singularity and unique characteristics of individual cases, leads to a diverse range of outcomes in art-based leadership development. In contrast, quantitative research typically focuses on a limited number of variables to accommodate a larger number of cases [131], which is reflected in intensity effect sizes. Apart from obstacles in the learning process, qualitative studies, unlike quantitative ones, exclusively report positive effects. This phenomenon appears to be typical for qualitative research on art-based methods [121]. It thus raises the question of whether there is a reporting bias in qualitative research on art-based leadership development, which may undermine the robustness of the findings.

4.3. Implications for Leadership Development

The mindsets of effective leadership prioritize learning and promote engaging relationships [221]. This points to reflexivity [12,222] and sense-making as essential leadership competencies [223,224]. Identity, meta-cognitive processes, and emotional regulation are considered key factors in developing leadership expertise [30]. Art-based leader development demonstrably fosters reflexivity, emotional transformation, higher-order cognitive skills, and sense-making. The reported effects are considered intrapersonal developmental indicators, which are believed to positively influence leader competence and effectiveness in the long term [26].

The findings indicate that art-based practices offer a promising approach to leader development, providing a holistic and transformative learning experience. The distinctive potential of art-based leader development lies in its capacity to alter leaders' prevailing mindset. In this regard, art-based methods present distinctive opportunities for the development of critical leadership competencies that are not as readily addressed through traditional approaches, which are generally oriented towards skillsets, standardized, and performance-driven [1,221]. As a leadership development practice that incorporates critical reflection, art-based andragogy addresses many of the shortcomings identified in traditional approaches by promoting a deeper, more individualized learning process [225].

Although effective leadership necessitates crucial competencies such as direction setting and external environment navigation [26], art-based approaches have thus far scarcely addressed the strategic level of leadership skill requirements, such as decision-making and problem-solving, which are exceptionally important at the highest leadership levels [226]. There are no generalizable empirical results in this area. Art-based methods currently align more with relational and authentic leader capacities and underlying leadership theories than with strategic capabilities [205].

The existing research and practice in the field of art-based leader development both exhibit a failure to recognize that artistic practice is a creative and relational process. This process is characterized by deliberate uncertainty, which involves probing and shaping reality [227–231]. There is a paucity of research on the subject of negative capability and the capacity to think in the present moment when dealing with ambiguity and uncertainty, and developing creative solutions for complex problems, despite these being critical requirements for leaders [201,232–234]. In art-based leader development practice, sensory perceptiveness and awareness appear to play a minimal role, despite being fundamental to effective leadership [76,235,236]. It is noteworthy that art-based methods designed to enhance these competencies have been developed and empirically validated for efficacy in healthcare settings [207,237,238].

Empirical research on leadership development has demonstrated that art-based approaches may be superior to conventional programs in certain outcomes. However, other research has cast doubt on the superiority of arts-based approaches as a training resource [239]. This underscores the necessity for the development of both short-term interventions and long-term programs that are specifically designed to integrate the potential of aesthetic education and artistic processes with leadership theories and practical leadership requirements.

4.4. Limitations and Future Research Directions

This review provides a comprehensive overview of the evidence supporting the use of art-based methods in leadership development. It integrates different types of studies in terms of methodologies, recognizes the quality of the studies, and considers all types of evidence in the evidence synthesis. The assessment is limited to studies published in the English language and does not cover research beyond peer-reviewed academic journals. Despite the researchers' best efforts to reduce bias, decisions that influence the outcome of the review—such as the selection of reports, quality assessment, and the construction of the thematic hierarchy—are ultimately based on the subjective judgment of the researchers [131].

On average, the qualitative studies in the sample exhibited satisfactory methodological rigor. In the conventional evidence hierarchy, which is often depicted as a pyramid, qualitative studies are often considered to be inferior to experimental study designs for demonstrating the effectiveness of interventions [240,241]. Nevertheless, more recent approaches in educational sciences support the concept of evidence-based practice using an evidence funnel, which considers the quantity and consistency across the body of evidence, thereby providing a more holistic view [242]. From this perspective, research on art-based leadership development provides a solid foundation for assessing what works.

Those who advocate for qualitative research on art-based methods view leadership development as a matter of personal growth and development. The ideal involves personal experience and humanistic values as a prerequisite for holistic transformation [22,89]. In contrast, the empiricist perspective places a premium on leaders' behavior and performance, with an emphasis on the verifiability of development (see, for instance, [32,41]).

The central concepts of qualitative impact research, including reflective capacity, empathy, and interpersonal competencies, can be measured using validated scales and established inventories in psychology. This also applies to mindset as a psychological construct. These measurement instruments provide a foundation for future interdisciplinary research that could explore the complex, dynamic nature of leadership and the effects of art-based methods [1]. The development and psychometric testing of measurement instruments that account for the unique characteristics of art-based approaches represents a distinct research task [243].

The results of studies with follow-up assessments indicated that the impact of art-based leadership development can extend beyond the intervention period. However, there is a lack of research on the long-term effects of leadership development, both for conventional approaches [202] and art-based methods. Similarly, other application areas of art-based learning also document the absence of evidence on long-term impact [126]. Although outcomes that are considered indicators of long-term leadership development suggest that participants build and implement capacity over time [26], this has not been conclusively demonstrated. The role of time in leadership development represents a critical area for future research [202].

There is a notable divergence between the self-perception and the external perception of leaders. Leaders tend to evaluate their learning process and behavior more positively than their followers do [79]. Moreover, the methods commonly employed in art-based interventions, such as interviews, are vulnerable to the risk of social desirability bias [211]. Irrespective of the level of evidence, such discrepancies provide a compelling argument for the use of control group designs and supporting measures such as self-administered questionnaires and direct measurement [244,245]. Multi-group experimental designs allow for a comparison of the effectiveness of art-based and traditional leadership development.

In addition to the aforementioned neglected competencies, the differential impact of short-term and long-term interventions, particularly in terms of their transfer to professional practice, warrants further investigation [179]. A multitude of aspects pertaining to the design of art-based interventions in leadership development remain uncharted territory, including the influence of participant demographics (students vs. professionals) and facilitators. Moreover, the specific elements of art-based approaches that present challenges for learners remain under-researched. The reasons why interventions are not equally effective for everyone need to be explored. Furthermore, it is important to understand under what conditions the "constructive disturbance" [89] (p. 22) provokes a defensive attitude in learners that may prevent them from achieving learning goals.

In the field of conventional leadership development, there is a paucity of empirical research on the outcomes of collective initiatives [202]. In the context of an emerging intertwining of leadership development and a transformation of organizational culture, there is a necessity to expand both development initiatives and research efforts beyond individual development [38]. Although there is research indicating the positive impact of art-based interventions on organizational development and leadership, the evidence is not yet quantified [246]. This opens up a fundamental research avenue on the arts and leadership in social transformation.

5. Conclusions

This systematic review and qualitative metasummary have demonstrated the considerable impact of art-based leadership development on various dimensions of leadership capabilities. The findings indicate that art-based methods facilitate reflective and reflexive practices, higher-order cognitive skills, and emotional intelligence among participants. These methods also foster interpersonal competencies such as empathy and communication, which may contribute to a holistic transformation in leadership practice. Despite the promising results, the evidence predominantly focuses on individual development rather than collective outcomes within organizational contexts. The studies reviewed indicate a notable deficiency in robust empirical evidence, particularly concerning long-term effects.

In conclusion, art-based leadership development offers a comprehensive approach to changing leaders' mindsets, enriching traditional leadership training paradigms. However, the field requires more rigorous, quantitative, and longitudinal research to substantiate these findings and explore the broader implications for relational leadership. Ultimately, the integration of artistic methods into leadership development programs holds significant potential for fostering transformative growth and enhancing leadership efficacy in complex and dynamic environments.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/bs14080714/s1, Table S1: Search strategy; Table S2: Thematic hierarchy; Code descriptions: Outcome summary.

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Note: References marked with an asterisk (*) indicate studies included in the review.

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Article

Cultivating Leadership and Teamwork in Medical Students Through Rowing: A Phenomenological Study

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Abstract: This study was conducted to allow us to understand the subjective experiences of medical students participating in rowing exercise classes at a medical school in South Korea and to derive implications for medical education. Accordingly, we analyzed their reflective journals, focusing on leadership and teamwork development. The study involved 40 second-year premedical students, and Colaizzi's analysis was employed to understand and structure their experiences. The comprehensive analysis revealed 149 meaningful statements expressing students' thoughts and experiences regarding the rowing exercise. From these statements, 13 meanings were synthesized, resulting in nine themes and four overarching categories, which provided a multilayered understanding of students' experiences. The factors that enhanced teamwork included communication, trust, respect among team members, and a sense of responsibility. By contrast, the hindering factors were competitiveness, impatience, and avoidance of responsibility. Before the class, a mix of anticipation, excitement, and dissatisfaction regarding the rowing exercise course was observed. However, after the class, students realized that the role of the entire team, rather than individual ability, is crucial, and collaboration with peers is key—the concept of shared leadership. This study is significant in that it demonstrates rowing's potential as a team sport to serve as an effective program for fostering collaboration and leadership within the medical school curriculum.

Keywords: leadership; leadership training; rowing; teamwork; medical student; reflective journal

1. Introduction

With increasing specialization in medicine and the growing complexity of healthcare delivery systems, interest in integrating leadership and teamwork training into medical education has increased significantly [1]. Physicians must not only treat patients using their knowledge and skills but also act as leaders who communicate with and guide multidisciplinary healthcare teams, hospital departments, patients and their families, and fellow doctors. As a result, they are increasingly required to possess not only individual abilities but also competencies such as communication, teamwork, organizational skills, consideration, and service within a team context. These competencies are closely linked to leadership training [2]. Ford et al. [3] detail the intricate relationship between leadership and teamwork in the healthcare environment and emphasize that team efficiency is inextricably linked to patient safety outcomes. They also suggest that clinical training, including simulation exercises, is a representative example of team-based activities and is considered a form of leadership training in medical schools.

Some medical schools abroad have recognized the importance of leadership and have integrated leadership training into their curricula [4–6]. However, determining the specifics of the training to be implemented and how it should be carried out in medical schools still poses a challenge. This dilemma arises because the best approach to leadership education is to provide students with practical experiences rather than mere theoretical instruction. Several medical schools in South Korea also have curricula focused on developing leadership competencies, ultimately emphasizing communication and teamwork [7,8]. These leadership courses utilize various methods, including lectures, discussions, workshops, student presentations, written assignments, hospital experiences, and volunteer activities, all of which involve direct student participation. However, a review of the leadership education currently implemented in medical schools reveals that the number of programs related to sports activities is limited [9]. Research on general physical education (PE) programs at universities is also restricted to topics such as the development of a healthy self-identity [10], interpersonal relationships [11], and adjustment to university life [12].

This study provides a phenomenological exploration of the internal changes in teamwork and leadership among students at the University of Ulsan College of Medicine (UUCM) who participated in leadership training through team sports, specifically through rowing. Rowing emphasizes teamwork and requires a strong sense of commitment to the team [9]. Schools that participate in rowing competitions as intercollegiate events include Oxford and Cambridge, Harvard and Yale, and Waseda and Keio universities internationally, as well as Ulsan National Institute of Science and Technology, Korea Advanced Institute of Science and Technology, and Yonsei University in South Korea.

The educational goal of UUCM is to "cultivate future leaders who will lead the medical field". To achieve this goal, a new curriculum was developed and implemented in 2022, which includes a leadership course utilizing rowing exercises. This study aims to discover the subjective experiences of second-year pre-medical students who participated in a rowing exercise class by analyzing the reflection journals they submitted as part of a leadership program. By understanding the students' experiences in the rowing exercise class, the study seeks to derive implications for leadership education in medical schools.

2. Research Methodology

2.1. Study Participants

This study involved 40 second-year premedical students who participated in a leadership course from 23 May to 11 June 2022. After completing the rowing exercise, the students were asked to submit a reflective journal, approximately two A4 pages long, in which they freely expressed their thoughts on the rowing exercise. All 40 students submitted their reflective journals, which were subsequently analyzed.

2.2. Overview of the Rowing Exercise Course

UUCM is committed to its mission of "continuously striving for the healthy lives of humanity" and aims to cultivate medical leaders equipped with communication, ethics, and creativity skills. Since 2022, UUCM has implemented a new curriculum under the motto "Less Competitive, More Excellence" (LCME). This curriculum focuses on avoiding unnecessary and unproductive competition while fostering the essential competencies required of a good physician. An 11-week humanities and social sciences course is conducted for second-year premedical students, with the leadership course spanning two weeks. The content and schedule of the rowing exercise conducted as part of the leadership course are depicted in Figure 1.

The rowing exercise was conducted as part of the leadership course. The students were divided into Groups A and B, with 20 in each, and the exercise was conducted over one week for each group at the Misari Rowing Stadium. On the first day, the students attended a theoretical class on the importance of exercise and the history and techniques of rowing. On the second day, the students experienced a rowing machine workout at the Misari Rowing Stadium, along with warm-up exercises. The rowing machine was used indoors for aerobic and strength training to maintain the necessary sensations for rowing. On the third day, the students were divided into five teams to participate in a rowing practice session. Before boarding the boat, the students chose their roles freely (cox, seats 1, 2, 3, 4). After practicing rowing, they participated in team-based rowing races. On the final day of the course, the students submitted their reflective journals and participated in group presentations to share their thoughts and experiences.

Group A	May23 (Mon)	May 24 (Tue)	May 25 (Wed)	May 26 (Thu)	May 27 (Fri)
Group B	May 30 (Mon)	May 31 (Tue)	June 1 (Wed)	June 2 (Thu)	June 3 (Fri)
9:00	Leadership Orientation (OT) (Lecture)				Team Presentations and Discussions on Rowing Exercise
10:00	Leadership Orientation (OT) (Lecture)				
11:00	Importance of Exercise (Lecture)				
12:00	Lunch Break				
13:00		Rowing Practice (Misari Rowing Stadium)	Rowing Competition (Misari Rowing Stadium)		
14:00					
15:00					
16:00					

Figure 1. Rowing exercise schedule.

2.3. Data Analysis

This study utilized Colaizzi's phenomenological analysis procedure to understand and structure students' experiences with the rowing exercise [13]. Colaizzi's phenomenological analysis is a methodology employed by researchers to systematically analyze phenomenological data, aiming to understand the subjective experiences of research participants. The procedure involves several key steps: initially, meaningful statements related to the research phenomenon are identified and meanings are derived from these statements. Subsequently, these meanings are categorized, with the themes synthesized and integrated. Finally, the essential structure of the phenomenon is articulated as revealed through the research. In this study, Colaizzi's method guided the data analysis, encompassing the phases of familiarization, meaning extraction, meaning clustering and thematization, and structure development [14].

Familiarization: Both researchers, experienced in qualitative research and phenomenological analysis, independently read and re-read all 40 reflective journals to capture the overall sentiment and identify key themes.

Meaning Extraction: Meaningful statements relating to the rowing experience and the development of leadership and teamwork were extracted from each journal. A detailed coding scheme was developed and consistently applied by both researchers.

Meaning Clustering and Thematization: Similar statements were grouped into clusters of meanings, which were then synthesized into broader themes. Any disagreements regarding the categorization of meanings and themes were resolved through discussion and consensus.

Structure Development: The themes were systematically integrated to construct an essential structure that reflects the comprehensive phenomenological experience of the rowing exercise, focusing on attitudes prior to the course, factors enhancing teamwork, hindering factors, and reflections following the course.

2.4. Ensuring Trustworthiness

To enhance the trustworthiness of the qualitative research findings, this study utilized prolonged engagement, triangulation, audit trail, and reflexivity.

Prolonged Engagement: To gain a deeper understanding of students' experiences in the rowing-based leadership program and enhance data richness, the researchers participated in the two-week program, conducting an in-depth analysis of students' reflective journals. This immersive approach facilitated a more precise understanding of students' experiences and the transformative process they underwent.

Triangulation: To ensure trustworthiness, this study employed inter-rater reliability through triangulation. Two researchers with extensive experience in qualitative research independently analyzed the reflective journals. The researchers compared their individual analyses, identifying points of congruence and divergence. Disagreements were resolved through thorough discussion and consensus-building.

Audit Trail: To ensure transparency, a detailed research log was maintained, documenting the research questions, the literature review, phenomenological methodology, and the data analysis process (including data analysis records, coding, and interpretations). Furthermore, the coding data used in the study were made publicly available on the *FigShare* online repository to allow for scrutiny and potential use by other researchers.

Reflexivity: The researchers actively mitigated the potential influence of personal biases and values on the research findings. Regular research meetings facilitated the sharing of research processes and results, along with reciprocal feedback.

3. Results

Analysis of the experiences of medical students during rowing classes revealed 149 meaningful statements in the reflective journals. From these, 13 meanings were constructed, resulting in 9 themes and 4 categories. The categories, themes, and constructed meanings are summarized in Table 1.

Table 1. The essential structure of the experience of rowing exercise classes.

Categories	Themes	Constructed Meanings
Attitudes before the Rowing Exercise Course	Expectation and Excitement	Enjoyment and excitement Confidence in doing well
	Concerns and Complaints	Worry about being physically weak Uncertainty about the purpose of this course
Factors Enhancing Teamwork	Communication	Importance of communication among team members
	Trust and Respect	Need to synchronize and align with each other Necessity of being a good follower
	Responsibility	Everyone must do their best in their respective roles
Factors Hindering Teamwork	Competitiveness and Impatience	Desire to win
	Arrogance about Individual Ability	Prioritizing personal ability over the team's needs
	Avoidance of Responsibility	"It's OK if I just slack off" attitude
Reflections after the Rowing Exercise Course	Shared Leadership	Viewing teammates as collaborators, not competitors Joy of working together

3.1. Attitudes Before the Rowing Exercise Course

3.1.1. Expectation and Excitement

Before participating, students experienced a mix of anticipation and concern. Although rowing was an unfamiliar sport, the fact that it was not something everyone could easily do excited them. They approached the course with a lighthearted attitude, which included looking forward to enjoying an activity outside the classroom, rather than simply learning theory. In addition, the announcement of team-based competitions gave them confidence, and they were eager to win.

When we first saw rowing on the schedule, we were excited at the prospect of engaging in a fun activity with our peers. Rowing was a new sport that we had never tried before, and because it was something not typically experienced, it brought a great sense of anticipation and excitement.

We enjoyed breaking away from desk-based studying and engaging in outdoor activities because we had come to deeply appreciate the value of regular physical education classes, which were a part of our middle and high school years and which we missed after starting college. After becoming college students, we found that exercise had become an activity that required extra time and money.

3.1.2. Concerns and Complaints

Upon initial receipt of the course schedule, students questioned the inclusion of rowing exercises and, thus, highlighted the need to clarify the connection between this activity and medical education. Some students expressed dissatisfaction with having a physical exercise class in medical school, and others worried that their lack of physical strength might negatively affect their performance in the competition.

We were initially filled with fear and worry when we first heard about the rowing exercise; it seemed like a sport that was difficult to see or experience, and as newcomers, we doubted whether it was something we could actually do.

We were quite surprised when we found out that rowing was part of the class. Our peers shared various opinions, such as it was added to fill the class schedule or the professor, who enjoys sports, included it to challenge the students.

3.2. Factors Enhancing Teamwork

3.2.1. Communication

Communication and providing feedback among team members are crucial in rowing. The students believed that constant verbal communication with their teammates was essential for synchronizing their movements during the rowing exercise.

We realized the lead rower knows nothing if the rowers behind don't communicate. If we had provided feedback to our teammates during the race, we could have gone faster than we did.

Our team finished in first place. Reflecting on how this was possible, the most decisive factor was our communication and teamwork.

3.2.2. Trust and Respect

In rowing, as the rowers face the opposite direction from the way the boat is moving, team members must pay close attention to each other's movements and align themselves with their teammates.

Some team members need to take the lead, while others must demonstrate good followership to the leader. The students particularly emphasized the importance of harmony, synchronization, and the right tempo among team members.

As we realized, the most important aspect of rowing is adjusting to each other. The person sitting at the front takes on the role of the leader, guiding the entire team. This person must maintain a steady pace and movement because the other team members rely on that to follow along. It's important not to start rowing before the other members are ready or suddenly increase the pace just because you want to go faster. You must be considerate and ensure that others can keep up with you.

I believe that key elements of good followership include taking responsibility by following the leader's decisions, providing appropriate feedback when necessary, and being tolerant of the leader's mistakes while offering encouragement.

3.2.3. Responsibility

Achieving optimal speed in rowing requires each of the five team members to fulfill their specific roles diligently: the coxswain steers the boat, the fourth seat sets and maintains the rowing rhythm, the second and third seats follow the latter's pace, and the first seat, which is positioned at the back, supports the entire team by observing and maintaining the rhythm. The students believed that the best way to make the boat go faster was for each person to take responsibility for their assigned role.

I realized that rowing isn't a sport where just one strong person can make a difference; it is a sport where everyone must watch each other and adjust to stay in sync. Moreover, in team activities like this, it's easy to think, 'It won't matter if I just slack off,' but rowing doesn't allow for that kind of mindset.

3.3. Factors Hindering Teamwork

3.3.1. Competitiveness and Impatience

Unlike in practice, the students exhibited competitiveness and impatience during the race as they saw the other teams pulling ahead. Some students initially prioritized individual performance, thinking that it would be enough if they did well; however, this mindset contradicted the collaborative nature of the exercise. This personal view led to rowing without considering the pace of their teammates, ultimately causing them to fall behind the other teams.

As it was a race, it was hard not to think about the speed of the other teams or our own team's ranking. For this reason, the teammate in the fourth seat, who was responsible for regulating the overall speed of the boat, rowed too quickly out of impatience. The people behind couldn't keep up with the fast pace that didn't match the rhythm, which caused the oars to collide frequently and the team's coordination to suffer. In the end, our team finished third out of the four teams.

I struggled to keep the rhythm and tried too hard to push, but this effort backfired. As our coordination continued to fall apart and we ended up in last place, I was really disappointed with the race's outcome. Even if our ranking wasn't great, I wouldn't have been so disappointed if we had maintained our rhythm and pace throughout the race. We tried hard to do well, but the result was still disappointing.

3.3.2. Avoidance of Responsibility

The students found that avoiding or neglecting one's duties can negatively impact the entire team in rowing, where each person is assigned a specific responsibility.

There was a moment when I was rowing and got so exhausted that I stopped putting in effort. I was shocked to see how the boat almost stopped moving, and I felt bad for letting my team down, and realized I had been a burden to them.

3.4. Reflections After the Course

Shared Leadership

After completing the rowing exercise, the students reflected on leadership within the team rather than as individuals. Accordingly, they realized the concept of leadership as a collective effort, where everyone works together toward a common goal, understanding the shared vision, and supporting one another along the way.

Having teammates in front of and behind me, all working toward the same goal, was a great source of strength. It was an experience that made me realize how much the presence of my teammates could help me grow.

Through this rowing course, I realized collaboration can be more important than individual effort. I also learned how collaboration is developed and how other individuals supporting me can lead to effective teamwork.

4. Discussion

The Association of American Medical Colleges [15] emphasizes the growing importance of leadership development in medical schools, stating that "leadership development has become more crucial than ever to anticipate, navigate, and address the complex challenges faced by medical schools and teaching hospitals today". While numerous medical schools have developed and implemented leadership training programs focusing on communication and teamwork enhancement [16,17], the utilization of sports, particularly rowing, as a vehicle for leadership development represents a novel and underexplored approach in medical education.

The study analyzed the reflective journals written by pre-medical students who participated in rowing exercise classes conducted as part of a leadership course to understand their subjective experiences of the rowing classes. The analysis revealed the following results: first, before the rowing exercise course, students did not fully appreciate the value of incorporating physical activity into their medical education. Students viewed the course as a stress-free break from studying, that is, a time to relax and have fun. They felt a sense of anticipation and excitement about trying a sport they had never experienced. Meanwhile, they were also concerned about not performing well and whether the exercise might be too physically demanding. In addition, some dissatisfaction was expressed about why such a sport was included in the medical school curriculum. Medical students lead competitive lives even before entering medical school, particularly in preparation for their admission. After entering medical school, students experience significant amounts of coursework, pressure to maintain high grades, feelings of relative failure, and academic stress due to intense competition [18]. They also often suffer from issues such as sleep deprivation and chronic fatigue [19]. Previous research [20] documents that medical students' perfectionist tendencies lead them to set excessively high standards for themselves and to strive for perfection. Furthermore, they tend to be highly self-critical when they fail to meet these standards.

According to previous studies [21], sports education can contribute to students' health as well as their interpersonal relationships, personal psychosocial skills, and professionalism. Therefore, there is a need for educational programs that promote mental and physical health for medical students who are exposed to competition and experience high levels of stress. However, to date, there has been a lack of basic research in South Korea on how much physical activity education medical students are engaging in at university and what types of exercise classes are included in the official curriculum. It is necessary to provide reasons as to why educational programs focused on physical activity are needed for medical students, as well as to design effective educational plans for the implementation of these programs. Additionally, follow-up studies should be conducted on the effectiveness of educational programs utilizing sports in medical education.

Second, through their participation in the rowing program, students gained a deeper understanding of the factors that both foster and impede effective teamwork. In their reflective journals, the factors that enhanced teamwork included communication, trust and consideration, and a sense of responsibility, while the hindering factors were competitiveness and impatience, arrogance about individual ability, and avoidance of responsibility. Rowing is characterized by the fact that the boat can only move forward through cooperation and harmony; no matter how skilled someone is, they cannot move the boat on their own. The rowing course allowed even students accustomed to individualism to reflect on how working together could lead to greater efficiency and the ability to go further. Similarly, our findings align with those of Yang [9], who also investigated rowing exercises at a medical school. Students developed a sense of community as they synchronized their movements, thereby fostering a mindset of consideration and respect for one another. In addition, in team-based general PE courses at universities, students developed confidence in their ability to complete tasks with their peers, which led to improved academic performance [22].

Our findings strongly suggest that integrating team sports, such as rowing, into medical education curricula can significantly enhance students' collaborative skills and their capacity to achieve collective goals, potentially improving their performance in multidisciplinary healthcare teams. Because non-cognitive competencies such as communication, trust and respect, and responsibility are difficult to develop in a short period, there is a need for a curriculum that can systematically cultivate non-cognitive abilities that medical students should possess through various activities, including team sports.

Third, through their rowing experience, students developed a new perspective on leadership. They learned that effective leadership emphasizes collaboration and teamwork, with the leader's role being to facilitate collective effort and progress rather than to rely solely on individual skills. The leader's role is even more critical in a rowing race because multiple individuals must work together to move the boat. The situation is similar for physicians, who need to collaborate with various professionals. Wiseman et al. [2] identified critical leadership competencies essential for residency training, encompassing responsibility, teamwork, moral integrity, and empathy, which align with the skills fostered through the rowing exercise. Additionally, Stillman [23], who studied the relationship between leadership and team performance, reported that leadership is a critical element for the success of an organization and is important for medical staff collaborating with various professions, positively impacting team performance.

Leadership is often defined as the skill of exerting influence over others to motivate them toward achieving a common goal [24]. To date, most studies on leadership in medical schools have concentrated on self-leadership [25], which focuses on motivating oneself and taking responsibility through autonomy and self-control, ultimately exerting influence over one's actions and decisions. However, shared leadership emphasizes the roles of the entire team rather than a single leader. Shared leadership is one of the leadership approaches adopted by many organizations to address the complexities of modern organizations, referring to a team phenomenon where the role and influence of the leader are distributed among team members [26].

The study found that students experienced the importance of mutual influence among members for the group's goals rather than individual achievement through the rowing exercise class. In other words, students showed a shift in the concept of leadership, valuing the 'team' over 'self' through the rowing exercise. In rowing, each team member is assigned specific roles and responsibilities. Students found that while individual abilities are important for maximizing team effectiveness, trust among team members who can achieve common goals and tasks together is crucial. The rowing class provided students with an opportunity to reflect on how the team can grow and develop through mutual feedback from team members. In medical education, shared leadership has traditionally been studied in clinical settings such as emergency situations or simulation training [27]. This is because simulation training is similar to a sport in which multiple team members work together towards the common goal of patient safety. However, the results of this study indicate that leadership skills in medical students can be developed not only through simulation training limited to clinical practice but also through team sports. Medical schools need to develop and implement curricula that incorporate a variety of activities, including team sports, to provide more meaningful leadership education.

The significance of our study lies in its demonstration of the potential of rowing as a team sport to serve as an effective program for fostering teamwork and leadership within the medical school curriculum. As this study only analyzed the reflective journals of second-year premedical students from a single university who participated in the rowing exercise course, it has limitations in terms of generalizing the results. Future research should analyze students' experiences using various methods, including not only the analysis of reflective journals but also student interviews and surveys. Moreover, the experiences of students at other medical schools that have incorporated various team sports into their curricula need to be investigated, and the findings used to inform the development of medical education programs.

5. Conclusions

This study phenomenologically analyzed the subjective experiences of medical students participating in rowing to examine the effectiveness of using team sports as a leadership development program in medical education. The findings revealed that rowing had a positive impact on medical students' teamwork, communication skills, trust-building, and the development of shared leadership. Notably, the rowing process fostered an understanding of the importance of communication and cooperation, leading to improved relationships among team members. This emphasizes the significance of shared leadership, where collective efforts are valued over individual capabilities in achieving common goals.

This study suggests the potential for incorporating team sports into medical education for leadership development. Rowing can be an effective program for enhancing teamwork and shared leadership skills among medical students, indicating its potential for nurturing future leaders in the medical field.

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Data Availability Statement: The data presented in this study are openly available on FigShare at the following URL: https://figshare.com/s/190bc6edba9b4c7b59c5, accessed on 29 August 2024.

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behavioral sciences

MDPI

Review

Growing Greener: Cultivating Organisational Sustainability Through Leadership Development

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Abstract: Organisations significantly contribute to climate change, making them essential targets for climate mitigation strategies. There is an opportunity to curb organisations' environmental impact by increasing the amount of pro-environmental behaviour (PEB) among employees. Many social and psychological factors impact an employee's likelihood of performing PEBs. Among social–psychological factors influencing employee PEB, leadership is unique as it is a social–psychological factor that can control or influence other factors. Leadership makes performing PEBs at work and home different. Due to its unique position, leadership has garnered attention from practitioners and researchers for how it can affect organisational environmental sustainability. There is limited research focusing on how leadership development can promote employee PEB, thereby increasing organisational environmental sustainability. Researchers conducted a narrative review that provided an overview of how leadership uniquely affects employee PEB, bringing together findings from various fields. Through this review, the authors propose the ICERR model for leadership development, which outlines five key capability areas and three desired outcomes for leadership development related to environmental sustainability. This model consists of 14 proposals that provide a framework for future research and identify critical areas for leadership development programmes looking to impact environmental sustainability.

Keywords: leadership development; environmental sustainability leadership; pro-environmental behaviours; organisational sustainability; behaviour change

1. Introduction

As the effects of the climate crisis increasingly impact society, researchers and practitioners are looking for interventions and initiatives that can change behaviour. In the past years, there has been an increased focus on how organisations can curb their environmental impact and improve their environmental sustainability [1,2]. This review focuses on leadership as a key factor that warrants further investigation. The previous literature has acknowledged the significance of leadership in influencing organisational outcomes [3]. This ability to influence organisations and their employees has spurred attention from researchers encouraging exploration into environmental leadership [4]. As people across disciplines and sectors work towards generating solutions to the climate crisis—leadership remains an area for growth and opportunity for interventions.

If organisations intend to implement environmental strategic initiatives successfully, they need individual employees' active support and participation [5–8]. Promising findings support the notion that leaders can promote employee environmental behaviour [6,7,9], thereby creating more environmentally sustainable organisations. For the change within organisations to be successful, leadership must be developed throughout the organisation [10]. In recent years, researchers have strayed from highly individual-centric models of leadership [10,11] to an approach that supports the notion that positive qualities and skills are not innate to specific individuals but rather that development can be utilised to create better leaders who can motivate their employees. This perspective highlights a potential route to organisational environmental sustainability: leveraging leadership development to create leaders best suited to motivate employees to adopt environmental practices and engage in pro-environmental behaviours (PEBs).

Due to the multilevel nature of the climate crisis, there is a need for multi-dimensional solutions, with varied perspectives. Therefore, this review was not restricted to one subject area—it pulls knowledge from fields such as psychology, environmental science, economics, and management to create the proposed model. With a multi-disciplined approach, there is expected to be varied perspectives, focal points, theoretical approaches, methods, and assumptions [12]. These multitudes of perspectives and approaches help our conclusions be more adaptive to various settings. By creating a framework encompassing differing ontological and epistemological approaches, we attempt to mirror "real" organisational environments, which consist of many contexts and restraints and are not limited by academic disciplinary bounds.

1.1. Organisations and Environmental Sustainability

Right now, there is a climate crisis, and it poses a real threat to every aspect of society and the planet. This crisis can be addressed, and the effects of climate change reversed, if there is swift action at all levels of society [13]. Organisations have been called out as an area where change would make a meaningful difference. The United Nations explicitly notes that the private sector must change if the world hopes to achieve the UN's Sustainable Development Goal to "…protect the planet from degradation…" [14]. The Intergovernmental Panel on Climate Change also called out the private sector, arguing that organisations must reduce their environmental impact now to keep warming under 2 °C [13]. There are current constraints on the private sector with competing demands for growth and profit as well as sustainability, so there is a non-trivial challenge in driving sustainable change within those constraints.

Challenges and barriers to environmental sustainability change may impede the integration of environmental sustainability into leadership development and the broader organisation. Some challenges leaders and organisations may face include the financial pressure to maximise profit in most capitalist contexts [15]. Alternatively, organisations may have the desire to invest resources into environmental sustainability. Yet, they may not be currently capable of it—this is particularly relevant for nonprofits and charity organisations that may have restricted budgets tied to government funding, grants, or philanthropy. Outside of financial pressures, there may be other resistance to environmental sustainability from individuals. For example, individual employees may not feel that environmental sustainability is relevant to the sector or important to their own work, or environmental sustainability may conflict with their current ways of working. For a more complete analysis of the barriers to employee PEB, please see a 2018 Metanalysis [16]. Social–psychological research can be particularly adept at addressing these barriers to environmental sustainability. This is because for any environmental sustainability progress to be made, some form of behaviour will have to be changed, whether it is from mass changes across individual employees or large-scale decisions from top leadership. With the framework we propose below, we take a social–psychological perspective and attempt to tackle several of the recommendations made by researchers found via the aforementioned metanalysis, including creating quality relationships, role modelling from managers, and training [16]. Challenges to environmental sustainability need to be acknowledged and explored to produce research that can adapt to challenges and practice that is effective at working within context.

Despite the challenges discussed above, the importance of changing organisational structures to become more environmentally sustainable is evident. However, the path to do so may be less clear. One identified way mentioned throughout the literature on organisational sustainability is increasing pro-environmental behaviour (PEB) among employees. Pro-environmental behaviour is any actions individuals or groups actively perform to reduce their negative impact on the built and natural world [17]. Employee PEB can vary widely, from recycling, reducing energy consumption, transportation choices, and choosing sustainable suppliers to collaborating with team members to create more sustainable internal processes. These employee PEBs can be a pathway to creating environmentally sustainable organisations.

Individual actions of employees may seem unimportant in the fight against climate change, but when behaviour change is widespread, individual behaviours cumulatively come together to create more environmentally sustainable organisations [5,16,18]. The performance of PEBs by employees can ensure the success of environmental initiatives [19] and positively impact the organisation's overall environmental sustainability [7]. Increasing employee PEB is central to mitigating an organisation's environmental impact, and leadership can influence employee PEB. Therefore, leadership development could create leaders who are better situated to increase employee PEB, subsequently increasing the overall organisational environmental sustainability.

1.2. Aims of Present Review

This narrative review aims to contribute to our understanding of leadership development's role in creating environmentally sustainable organisations. There has been increasing research on leadership and its relation to environmental sustainability in recent years. Much of the research is focused on how leadership, in conjunction with various factors, can promote (or hinder) employee PEB. Researchers have taken a variety of approaches and looked at many different factors. For example, researchers in Thailand have explored how leadership and spirituality can affect pro-environmental behaviour [20]. Other researchers have conducted studies in China that explored green dedication for explanations of the relationship between leadership and voluntary pro-environmental behaviour [21]. Another example is research conducted in Nigeria, which supports most of the literature and illustrates a significant relationship between environmentally specific transformational leadership and green employee behaviour [22]. This research also expanded upon findings by uncovering environmental concern as a significant mediator between environmentally specific transformational leadership and green employee behaviour [22]. These examples demonstrate some of the many research articles published in recent years exploring how leadership impacts employee environmental behaviour.

Despite this expanded focus on sustainability within leadership research, there is still relatively limited research on how leadership development plays a role in a leader's ability to increase employee PEB and improve organisational environmental sustainability. In this review, we address this gap in the research by gathering evidence surrounding the development of environmentally sustainable leadership. We also reviewed research on leadership's impact on environmental sustainability to see what themes frequently occur in the literature. We then highlight these themes within a proposed model to provide insights for leadership development researchers and practitioners on what key capabilities are needed to develop leaders best situated to promote PEB and create more environmentally sustainable organisations. By doing this, we aim to set a research agenda for expanding leadership development research focusing on environmental sustainability. We also encourage researchers to continue exploring how leadership can impact organisational environmental sustainability and begin expanding the research into how leadership development can better situate leaders to promote organisational sustainability.

This narrative review starts by reviewing the literature surrounding PEB in the workplace versus the household and concluding that leadership makes the difference between performing PEBs at home and in the workplace. We explain why leaders are crucial in environmental sustainability efforts and the social and psychological factors that impact leadership's effectiveness in promoting environmental sustainability efforts through employee PEB. Then, we propose a framework of key capabilities that leaders can develop to increase their ability to encourage PEBs among employees. After establishing this framework, this review will outline how these concepts can provide a springboard for future research and how practitioners can implement changes to their leadership development programmes to include the key capability areas of the framework.

Our framework establishes a starting place for our understanding of how leadership development can impact organisational sustainability. Embedded within the framework are 14 propositions—these are offered by the authors based on conclusions drawn from previous work on leadership and environmental sustainability. These propositions provide a structured path to launching research into leadership development and environmental sustainability. Future research can strengthen, change, and add to the model as we continue to understand leadership and environmental sustainability better.

2. Methods

We started the literature review through Scopus, APAPsychNet, and Google Scholar. Several rounds of searching keywords related to the topic, such as leadership development, environmental leadership, and employee pro-environmental behaviour, resulted in 776 papers being screened for relevancy based on their title and a short description. After that review, 203 article abstracts were screened for relevance. Full articles were reviewed if their abstract contained information about successful environmental sustainability leadership, leadership development principles, leadership's relationship with PEB, or leadership development in relation to behavioural change. Articles, conference papers, pre-publishes, and dissertations were included in the literature search. Articles were excluded if they were not written in English. In addition to the papers found in the initial search, many resources were found through 'snowballing', with sources found because they were either cited by documents from the initial search or cited those papers. Some papers were also reviewed based on suggestions from colleagues and peer reviewers.

When papers were read, notes were taken on the article's main points and how the work related to the development of environmentally sustainable leadership. We noted re-occurring leadership capabilities and themes mentioned in previous papers that were related to or suggested as components of leadership that impact PEB. After initial reading and review, areas of focus, which later became five leadership capabilities in the ICEER model, emerged. These then became the focus of the literature review. After conducting the primary search, which informed the initial structuring of the paper, five smaller searches were conducted within each competency area within the proposed model. Any articles deemed relevant were stored in Mendeley. The final iteration of this narrative review encompasses 86 papers and includes papers from a variety of disciplines. See Figure 1 for a breakdown of papers included by discipline. Papers were included in the final review if they were relevant to developing environmental sustainability leadership or the key competencies proposed to increase organisational environmental sustainability through leadership.

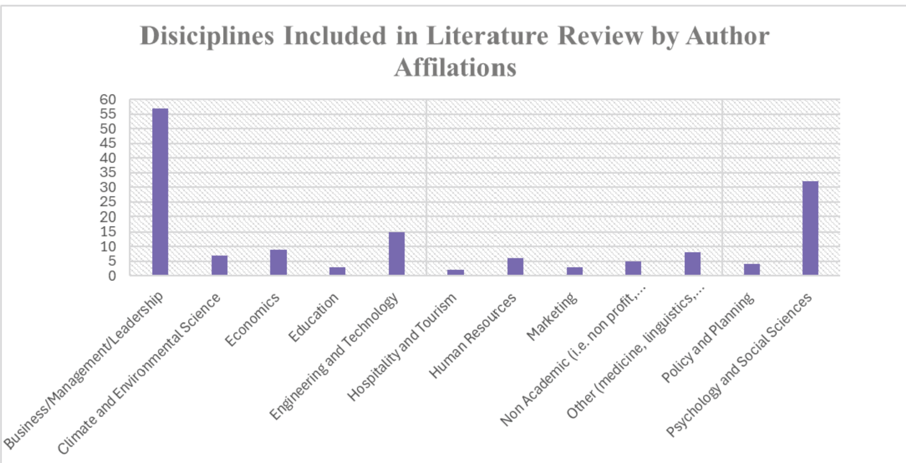

Figure 1. Disciplines included by authorship.

*If papers were authored by multiple authors representing different departments and disciplines, the papers will be included in the counts of all relevant disciplines. For a paper with three co-authors, one from the business school and two from the department of psychology, the paper would be included to add one to the total for both the department of psychology and the business school.

**For clarity, we have combined some disciplines into larger overarching groups—e.g., researchers from management departments and business schools were grouped together because of the similarities in approaches, perspectives, and methods used.

There has been an increase in research into environmental sustainability in recent years, but within the last decade, there has also been a strong increase in environmental sustainability leadership research. A total of 64 percent (56 papers) of the sources in this review were published in the last ten years. Furthermore, 32 of those papers were published since 2020, demonstrating the clear interest in these issues among researchers. See Figure 2 for a breakdown of articles included in this review by publication date.

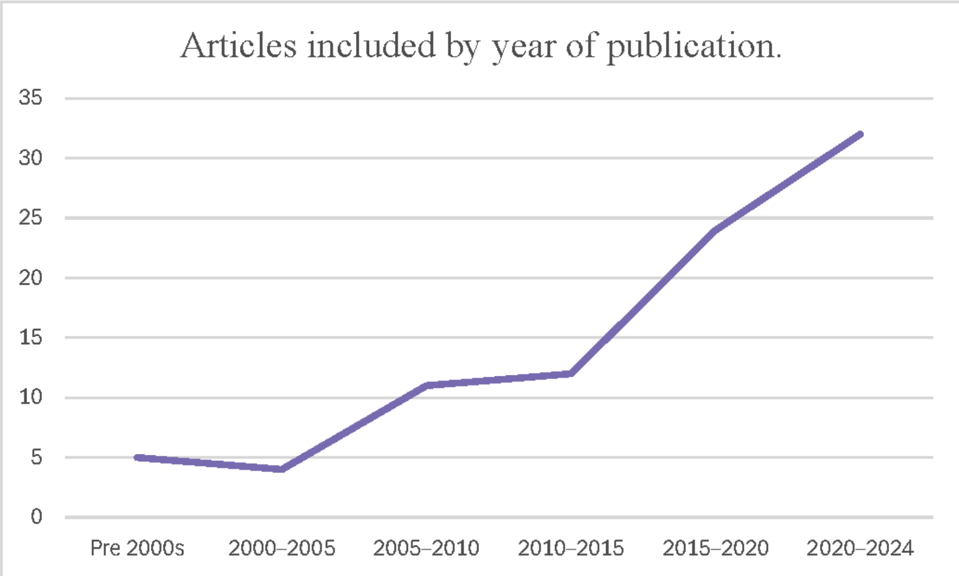

Figure 2. Articles included by year of publication.

Due to the global nature of the climate crisis, there is interest in environmentally sustainable solutions globally. Therefore, a geographically diverse range of voices must be included in discussions. To increase diversity, it is helpful for researchers to clearly state the geographic spread of where the research within the paper is being generated. By doing so, we can acknowledge our shortcomings and strive to include research from various global perspectives. See Figures 3 and 4 for a breakdown of papers contained within this review by country and continent.

Western countries like the United States still comprise a large share of the research in our review (22 papers included in the review had authors from American institutions). However, Asian countries (particularly China, which is represented in 19 papers) make up the largest share of papers by continent. Most of the sources contributing to this review are from Asia, Europe, and North America. Future work on leadership development and environmental sustainability should strive to include more African, Australian, and South American research.

Although including various geographically diverse voices is important in any research, it is particularly crucial in climate and environmental research as climate solutions must be applied or adaptable to a wide range of communities and cultures. Although we believe we were successful in integrating research from a variety of countries, more geographic diversity could strengthen the proposed model and ideas discussed here in the future.

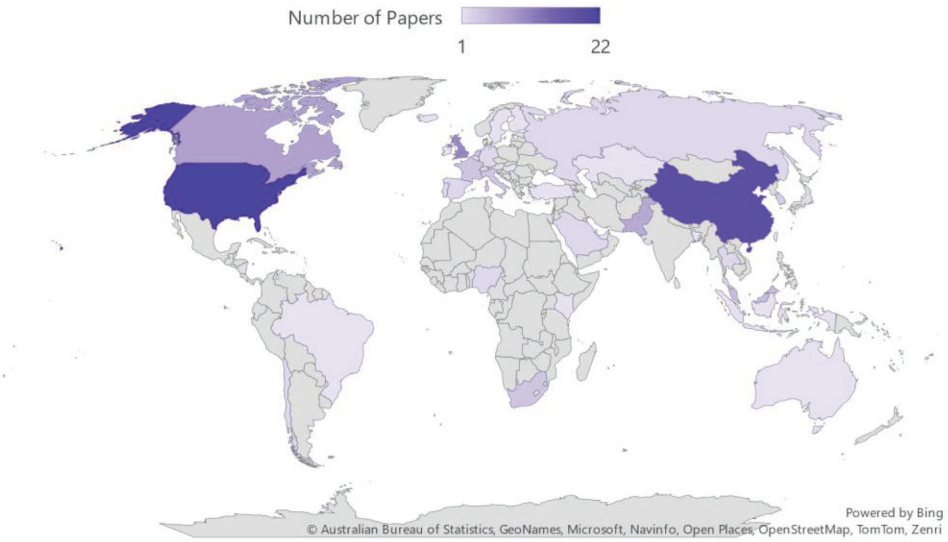

Figure 3. Authorship included in review by country.

Figure 4. Authorship included in review by continent.

3. Results

3.1. Social–Psychological Factors That Influence Employee PEB

Various factors can broadly affect whether an employee performs PEBs. These factors can be categorised into psychological or internal factors and social or external factors [23]. Internal factors explored in the literature include norms [23–25], personal environmental values [26], and perceived locus of control [27]. Examples of external factors include leadership [8], infrastructure, rules, and regulations [28]. Both psychological and social factors impact how much PEB is performed in the workplace. There are also several cases where these factors mediate and moderate each other (examples include [29–32]). One specific example includes a survey of leaders and employees at universities and hospitals in Pakistan conducted in three waves [32]. Among other findings, they found that the relationship between ethical leadership and employee green behaviour is sequentially mediated by green psychological climate and employee's harmonious environmental passion [32].

Another example comes from researchers who tried to address the mixed findings on the relationship between environmental intentions and behaviour [31]. They surveyed nurses' green behavioural intentions by asking items such as "I intend to perform pro-environmental behaviours while at work" and employee green behaviour through measures such as "Thinking about your work today, to what extent did you avoid waste?" along with questions aimed to assess ethical leadership perceived by the nurses [31]. Their data analysis revealed that the relationship between intentions and behaviour is moderated by ethical leadership [31]. This and the paper discussed above are just two examples of cases where employee PEB was explained through different moderation and mediation relationships. Various mediation and moderation effects in the existing literature reveal complexities that demand a nuanced approach to understanding employee PEB.

Much research into social–psychological factors affecting PEB has been conducted in households. Due to nuances between household and workplace settings, behavioural interventions must be tailored to the specific situation [28], and findings in household settings are not always transferable to the workplace [33]. Although, researchers can look to studies conducted in non-workplace settings to learn from findings and gain ideas for workplace-based research.

One area where household and workplace settings may differ are on the effect of values. Research findings are mixed on whether personal environmental values play a strong role in employee PEB. Some research found relationships between personal environmental values and workplace PEB through motivation [26], while other authors suggest that at work, situational factors may prevent individual employees from acting consistently in line with their personal values and norms [28].

Beyond personal values, external factors can also differ between the workplace and household settings. Many employees have limited to no control over their office infrastructure, availability of recycling bins, how the thermostat is controlled, etc. Past research has found that when there are fewer obstacles in the way of performing PEBs, individuals are more likely to perform PEBs because it becomes easier [34]. From this, it can be predicted that if there are more physical environmental obstacles in the way of PEBs, employees may be less likely to perform them even if they would perform a comparable PEB at home.

Cost is another external factor that exists in both workplace and household settings and can be explored more in research. Cost is a factor that can function differently in the household versus the workplace. In the household, finances may act as a direct external factor that could influence decision-making for individuals. In the workplace, employees, particularly those in front-line positions, may not be the ones making financial decisions. Therefore, they might not be as motivated by finances when making PEB-related decisions because the finances are not their own; instead, they are the company's assets.

Internal and external factors interact within the workplace, making it unique from other settings. As discussed above, there may be constraints at work that prevent employees from performing the same PEBs they perform at home. Factors exist within the workplace that may change the salience of personal values, such as perceived organisational support [35], obstacles within the organisational infrastructure [34], and managerial infrastructure, e.g., if the human resources department engages with Green Human Resources Management (GHRM) principals [36]. These various social and psychological factors have a role in determining how much PEB employees perform.

3.2. Why Leaders Are Uniquely Situated to Increase Employee PEB and Impact Organisational Sustainability

Leadership exists formally and informally at many levels of an organisation, from line managers to the C-suite, and it is an important differentiator between workplace and household settings. Leadership is a factor in its own right—as seen by studies investigating leadership support [23] and leadership behaviour [8]. However, leaders also can control other factors [23]. For example, they can increase the number of recycling bins in the office or send their employees for environmental sustainability training. Leaders are decision-makers. They set budgets, support employees, set organisation-wide goals, and create a strategic vision. All these functions can impact employee PEB.

Leaders can remove situational barriers which positively correlate with employee PEB [34]. Leaders can also go beyond that, as those highly skilled at inspiring and motivating their employees can demonstrate their passion and influence employees' psychological state, encouraging them to move past perceived and concrete obstacles [6]. Leaders can make an impact on employees not only by removing physical and psychological impediments to PEB but also by empowering their employees to overcome barriers that cannot be removed due to situational factors. However, organisations cannot assume that leaders will naturally be able to take on this role, as even strong leaders will not naturally be skilled at promoting change, leading transformations [37], or other skills to increase employee PEB. Therefore, leaders require development to be better suited to removing barriers and promoting PEB among employees.

3.3. Leadership Development: A Key to Unlocking Leadership's Environmental Capabilities

Past research has highlighted that supervisory support is an important factor in environmental sustainability within organisations [1,19,38]. Even when research did not establish a direct link between perceived supervisory support and PEB, they found other ways leadership could influence employees, such as through leader's behaviours [8]. Various studies have also connected different leadership styles to increased employee PEB [7,39]. The relationship between leadership and PEB is complicated and contextually dependent. Potentially, these complications are why leadership is underutilised (compared to other strategies) in its ability to affect employee PEB and organisational sustainability.

Leadership has the potential to make or break an organisation's success when it comes to environmental sustainability efforts. So, implementing interventions that leverage leadership's position to contribute to organisational sustainability should be an area of concern for researchers and practitioners. Leadership and leadership development are both fields spanning decades of research, but only in relatively recent years have researchers responded to the environmental challenges and begun to research leadership's relationship with environmental sustainability and PEB. Robertson and Barling looked at the concept of environmentally specific transformational leadership starting in 2013, finding that this style of leadership had a relationship with employee PEB through the employee's harmonious environmental passion and that the leader's behaviours had both direct and indirect relationships with employee PEB [6]. Their research lays out many additional paths to explore leadership and PEB.

In addition to the broader research into transformational environmental leadership, there have also been explorations into the effects of other leadership styles. In 2024, a paper looked at a contrasting leadership style, transactional leadership, and its relationship with employee green creative behaviour in the Chinese tourism industry [40]. Their results revealed many direct and indirect relationships, including a positive relationship between transactional leadership and green creative behaviour among employees [40] This and the example above are just two explorations of the impact of different leadership styles on PEB.

A growing body of literature on the relationship between leadership and sustainability exists. However, the research on developing leaders who can create more environmentally sustainable organisations is sparse. One paper recently tried to address this gap by exploring if environmental transformational leadership can be developed through leadership training [41]. Nduneseokwu and Harder's study showed promising results, with employee PEB ratings increasing after their leadership training intervention [41]. The intervention consisted of two stages. The first stage was modelled after the WeValue InSitu approach, which has been demonstrated to prompt transformational learning [42] and facilitate the transformation of tacit knowledge to explicit knowledge [41]. In this first stage, participants are exposed to photo elicitation and trigger statements to share their tacit knowledge. Then, they discuss their experiences and negotiate which of the aspects of their experiences are important to the group. After this pre-session, participants moved on to a training on environmental transformational leadership. This main training included a facilitated reflective exercise, education on the Full Range Leadership model (highlighting transformational leadership), practical exercises to discuss examples of different leadership styles, an environmental documentary, and a goal-based task where participants created specific goals for incorporating environmental transformational leadership into their work [41]. Nduneseokwu and Harder's 2023 work demonstrate that environmental transformational leadership can be practically developed [41]. Despite this promising finding, a better understanding of the underlying mechanisms of the training that generated these positive results is needed. A gap exists in understanding how leadership development can increase employee PEBs through leaders. One approach to this could be by identifying key capabilities needed for successful environmental sustainability leadership development and testing those capabilities theoretically and practically.

3.4. Moving Away from the Leadership Style Categorisation Approach

Previous research has been primarily tied to individual leadership styles such as transformational leadership, e.g., [43], transactional leadership e.g., [40], and ethical leadership e.g., [44]. The previous literature has even broken down these categories further to create environmental-specific leadership style categories. See concepts such as environmentally specific transformational leadership e.g., [6,39,41] and environmental servant leadership, e.g., [20,45,46]. Researchers seeking to understand mechanisms underlying leadership's relationship with employee PEB may miss the intricacies within the relationship because leadership styles can silo research. It also may make it harder for practitioners to navigate the literature to create research-backed interventions if they must sort through leadership typology jargon. Therefore, this review combines research from various leadership styles into one leadership development framework—ensuring that organisations can utilise findings across leadership styles. Although, this review includes articles grounded in specific styles, it will not endorse one as the best—this is to prevent reliance on one leadership style to 'fix' environmental sustainability problems within organisations.

Despite past research linking the influential nature of leadership behaviour to specific leadership styles, arguably, most leaders of any style can use their behaviour and influence to impact employees' attitudes and behaviours. Most leaders do not adhere strictly to one leadership style over the other. Indeed, some even argue that leaders must utilise multiple leadership styles to succeed in the modern business world [47]. Leadership development programmes should aim to take findings across the literature and build leaders that can better pivot from one skill (that may be based on one leadership style, e.g., transformational leadership) to another skill based on another leadership style, e.g., ethical leadership. Creating leaders who can utilise strengths from various styles can be accomplished by using adaptive frameworks.

3.5. Important Factors for Leadership Development: The Proposed ICEER Model

We reviewed the literature to posit a leadership development model highlighting key capabilities that need to be developed to increase a leader's ability to improve organisational sustainability through increasing employee PEBs. We propose the "ICEER" model, which provides a framework consisting of five key capability areas and three desired outcomes. The key capability areas are environmental knowledge, ethics, role modelling, individualisation of approach, and communication and influence skills. The three desired outcomes are environmentally sustainable leaders, employee PEB, and overall organisational environmental sustainability. See Figure 5 for the full ICEER Model.

Leadership development adhering to this proposed model can develop and promote these key attributes and factors to increase employee PEB and improve overall organisational sustainability. Factors within the ICEER Model are interdependent—although integrating a focus on one or two of these factors may help increase employee PEB through leadership development; approaches that incorporate the whole model and acknowledge that interconnectedness are most likely to result in the best organisational environmental sustainability.

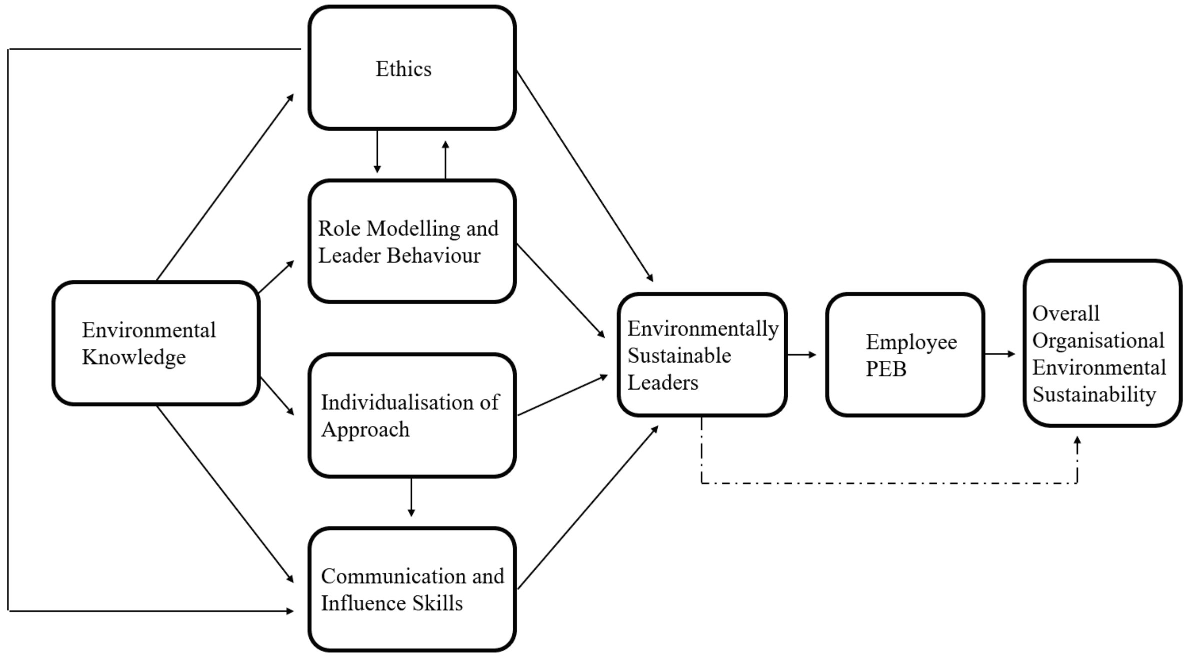

Figure 5. Proposed ICEER model for environmental sustainability leadership development.

At the end of each section, we provide propositions to outline takeaways from the ICEER model. These propositions represent the key proposed tenets of the ICEER model that form the structure of the model. Each proposition conveys a relationship that is hypothesised via the model, based on the findings of previous research. Propositions are provided to clearly distinguish the different relationships within the ICEER model to the reader and provide testable hypotheses for future research.

3.6. ICEER Model: Outcome Variables

Organisations need metrics to understand if their environmental sustainability initiatives are working. Therefore, when we created this model, we knew we needed to include measurable outcome variables. The three desired outcomes are interconnected: environmentally sustainable leaders, increased employee PEB, and increased organisational environmental sustainability. The five key capabilities within the proposed model impact environmentally sustainable leadership directly and indirectly. After leadership development focusing on these key capabilities, leaders should be better able to encourage employee PEB. As discussed earlier in this review, employee PEB is key to the success of any organisational environmental sustainability initiatives [5,16,18,19].

Employee PEB can be influenced by leadership and measured, making it a key outcome variable within the model. However, leaders are not limited to increasing overall organisational environmental sustainability through employee PEB, so the ICEER model proposes that they can also have a direct effect. Depending on their position within the organisation (e.g., c-suite vs. middle manager), leaders have more power than the average employee. This power allows them to make certain decisions and changes that could directly impact organisational environmental sustainability.

Measuring the Outcome Variables

Environmental sustainability leadership can be measured in many ways, and an organisation's choice of measuring it should be grounded in the given context. One way to measure it would be to survey employees' perceptions of how environmentally sustainable their managers are. Organisations could survey their employees by adapting the environment transformational leadership scale developed by [48], which was recently found to have high reliability (Cronbach alpha between 0.93 and 0.98, [41]). Measuring the levels of environmental sustainability leadership through the employees' views is critical because, as will be discussed below, the perceptions of leaders' impact the leaders' ability to influence employee PEB.

The second outcome variable, employee PEB, can be measured in several ways, the first being employee self-report. However, many researchers argue the risks of measuring behaviour solely through self-report scales, especially regarding validity concerns [49]. Therefore, it is best if organisations can implement physical measures of employee PEB (this can also be accomplished in tandem with self-reporting). Physical measures of employee PEB can range from power and water usage data to waste audits to the number of individual teams pivoting from more resource-intensive processes in favour of more environmentally sustainable ones. Physical measures of PEB are present in the existing literature; examples include researchers measuring energy consumption within different teams in a hospital [50] or researchers who looked at how sustainable building design can impact individuals' environmental behaviour through the observation of waste disposal practices [51]. In the practitioner context, environmental teams, HR, facilities teams, and senior management must collaborate to devise specific measures to capture the employee PEB they want to increase within their organisation.

Finally, the question of how to measure an organisation's overall environmental sustainability can be resolved by creating challenging and clear environmental sustainability goals. Goals allow organisations to benchmark their progress and have a clear path towards environmental sustainability. By publicly announcing these goals, organisations will be accountable to their employees, the public, and any relevant regulators. To measure overall organisational environmental sustainability in research contexts, researchers can look at both physical metrics (e.g., resource usage) and perceptions (of the public or of employees).

Proposition 1: environmentally sustainable leaders will be better situated to increase employee PEB;

Proposition 2: increasing employee PEB will lead to increased overall organisational environmental sustainability;

Proposition 3: environmentally sustainable leaders can directly impact overall organisational environmental sustainability through high-level decision-making processes and the creation of environmental sustainability initiatives.

3.7. Environmental Knowledge and Skills: Strengthen Capabilities Through Knowledge

Research has found positive effects from environmental or 'green' training. A study in the Italian healthcare sector explored the effects of the implementation of 'green' training programs on the PEBs among a variety of hospital staff members ranging from doctors to administrative staff. The results showed a positive relationship between 'green' training and individual employees' PEB [52]. This study also showed a promising side benefit of green training—a positive association with job satisfaction [52]. If environmental training can increase employees' PEBs, then it can help improve the number of PEBs a leader performs and most likely increase their ability to pass it along to their employees. For other examples of research that explores the effect of environmental or 'green' training on employee outcomes, see a 2022 study, which examines how training (in addition to several other GHRM factors) influences students in Northern Cyprus as prospective employees [53]. They concluded that organisations should engage in environmental education training to teach employees the importance of sustainability [53]. Another study looked at employees at 30 different universities in Kenya. Their findings suggest that training programmes centred around environmental initiatives may positively affect employee PEB [54].

By applying the findings above and other research that demonstrates the positive effects of environmental training on leadership development, the argument for incorporating environmental knowledge training is evident. Integrating environmental knowledge training into leadership development will give leaders the environmental knowledge they need to leverage the other key capabilities within the ICEER model and encourage employee PEB throughout the organisation. Leaders will also be better qualified to train their employees on environmental knowledge and pass their findings along.

Acknowledging the Limits of Education: Why Environmental Knowledge's Impact Is Moderated by Social–Psychological Factors

The ICEER model incorporates education because of the promising findings of green training discussed above. Incorporating environmental education into leadership development is important because although education alone may not have a causal relationship with behaviour, a lack of knowledge is a barrier to desired behaviours [55]. The other development areas within the ICEER model complement the knowledge gained from environmental training.

Many traditional approaches to promoting PEB centre around the knowledge deficit model, which implies that individuals will change their opinions and behaviours when provided with sufficient information about a specific topic [55,56]. PEB policies and campaigns based on the knowledge deficit model aim to inform the public of the specifics of the climate crisis and the science behind climate change. However, the knowledge deficit model is highly criticised for being too simplistic [57] and for not always accurately predicting behaviour. This gap between education and behaviour could be partially because knowledge can be misunderstood, misused, or inherently flawed because the people who generate and consume the knowledge are flawed [58]. Despite many criticisms, the knowledge deficit model remains central in many climate change efforts, which can be detrimental. The knowledge deficit model assumes that knowledge exists in a pure objective form [58], failing to acknowledge nuances and realities of socio-political–environmental challenges.

Our proposed model responds to the criticisms of the knowledge deficit model by not viewing the relationship between knowledge and behaviour as linear but instead placing the relationship between knowledge and behaviour within a social–psychological context. The social-psychological context acknowledges that relationships and their socio-psychological antecedents influence how knowledge is transferred and acted upon. Many studies show that although education is a critical prerequisite for PEB, education alone is not enough to encourage individuals to perform PEBs [59]. We follow findings that have shown how viewing environmental education with a social–psychological perspective is useful in PEB research [59]. When understanding PEB, it is essential to acknowledge environmental education's role. However, it is equally vital to understand education's limitations without further behavioural interventions or acknowledgements of the social–psychological factors that impact how knowledge is transferred and understood. This limitation is why the ICEER model proposes that although education is necessary, its effect must be moderated through social–psychological factors because it is not enough on its own.

Proposition 4: environmental knowledge is a key prerequisite for developing effective environmental sustainability leaders;

Proposition 5: ethics, role modelling, individualisation of approach, and communication and influence skills will moderate the effectiveness of integrating environmental knowledge into environmental leadership development.

3.8. Ethical Leadership: Develop Leaders Better Positioned to Promote Behaviour

Researchers define ethical leadership as "the demonstration of normatively appropriate conduct through personal actions, interpersonal relationships, and the promotion of such conduct through two-way communication, reinforcement, and decision-making" [60] (p. 120). Research has demonstrated that developing ethical leadership is important because it can have a positive impact on desired organisational outcomes [61]. Previous qualitative research interviewed ethics officers and executive leaders, finding that ethical leaders were thought to be honest, trustworthy, and people-oriented [62]. The perception of leaders matters because their behaviours impact employee PEB [8], and the perception affects how they can or cannot influence their employees.

Leadership training must convey the importance of ethics and give leaders an understanding of the ethical dilemmas they may face in the workplace. By incorporating ethics into leadership development, organisations can increase employees' perspectives of the trustworthiness of their leaders. Past research has found a positive relationship between ethical leadership and trust [60,62–64]. Ethics complements many aspects of the ICEER model, but the importance of ethics is particularly highlighted in role modelling and communication and influence skills. The qualitative study mentioned above found that ethical leaders were perceived as role models [62]. This finding indicates that developing ethical leaders could help prime leaders to be viewed as role models. With additional training focused on environmental role modelling and the impact of their own behaviours, leaders can increase their employee's PEB through their own actions.

Ethics has been linked to both pro-social behaviour [60] and pro-environmental behaviours (see [31] for an example in the healthcare context and [44] for an example from the banking sector). Past articles point back to social learning theory [60,65] and social exchange theory [66] to explain why ethical leaders impact their followers' behaviour. Brown et al. base their 2005 conceptualisation of ethical leadership on social learning theory, arguing that a component of ethical leadership is creating and modelling a fair system of positive and negative outcomes for normatively appropriate and inappropriate behaviour [60]. Ethical leadership can trigger social learning processes that could increase desired behaviours [60]. In the case of PEB, this research suggests that ethical leaders will be better positioned to act as role models, which, as it will be discussed, is important in promoting employee PEB.

In addition to perspectives on social learning processes and how they relate to ethical leadership, social exchange theory can also explain why ethical leadership can be leveraged to increase PEBs across organisations. Social exchange theory theorises that relationships operate according to norms of reciprocity [66,67]. From a social exchange theory perspective, when an employee feels that they have been appropriately treated by their leader or their organisation, then they will reciprocate [66]. By applying the social exchange theory perspective to the context of PEB, it can be predicted that ethical leaders can increase employee PEB by establishing positive relationships with their employees, making it more likely for the employee to reciprocate positively through performing duties beyond their job—which could include PEBs.

The definition of ethics used above highlights the importance of norms within our conceptualisation of ethics [60]. This definition allows for an interpretation of what is and is not normative conduct within a given context. Within organisations, several levels of norms could impact the view of ethical leaders, e.g., cultural and national norms, organisational level norms, or team/department level norms. Therefore, what is perceived as ethical leadership may largely depend on the follower's perspectives on normative conduct [60]. Therefore, leadership development should aim to make leaders aware of ethical norms and the perspectives of their employees. Overall, the demonstrated connection between ethical leadership and pro-social behaviour and, more specifically, PEB points to the importance of integrating ethics into leadership development frameworks looking to increase PEBs.

Proposition 6: developing ethical leadership will create leaders better able to promote PEB;

Proposition 7: by developing ethical leadership, development programs will make leaders more effective at role modelling PEB;

Proposition 8: by developing ethical leadership, development programs will position leaders better to communicate the environmental sustainability goals of an organisation and influence employees to contribute to those goals.

3.9. Leadership Behaviour: Developing Role Models for Environmental Sustainability

Leaders are a part of the landscape of an organisational environment. Field theory asserts that employees' reactions within the environment (which in this case would be their decision to perform or not to perform PEBs) are determined by the proximity and salience of the different parts of the workplace landscape [19,68]. From individual employees' perspectives, their direct managers may be some of the most salient and proximal individuals within their work life [19]; therefore, it can be predicted leadership behaviour holds a special role in influencing their behaviour. This extra attention on leaders allows them to act as role models and influence their employees' behaviour by leading by example. Leadership development programmes must prepare environmental leaders to leverage their behaviour and become environmental role models who act as stewards for environmental sustainability initiatives across the organisation.

There is evidence in the literature that the PEBs that leaders do (or do not) perform impact on how much PEB their employees perform [9]. Leadership behaviour can act as a bridge between employees and the organisation—impacting the rates of employee PEB [69]. A group of researchers surveyed employees at four different housing associations in the Netherlands and found significant correlations between behaviours leader's behaviour, employees' intention to act, and PEB [8]. Their findings supported suggestions from Paillé and Boiral's 2013 article that used the social exchange theory to explain organisational citizenship behaviours for the environment's (OCB-E) determinants at work [70]. In that paper, they suggest strategies to increase PEB, which could include showcasing the commitment of managers to environmental sustainability [70]. Recent studies have also supported the positive relationship between leadership behaviour and employee PEB. One example is a cross-sectional survey conducted in 2019 to determine relationships between social–psychological factors and employee PEB among hotel workers in South Africa [71]. Additionally, other researchers argued for the importance of role modelling within their definition of environmentally specific transformational leadership—highlighting that leaders exert idealised influence by acting as environmental role models [7].

As mentioned in the section covering the impact of ethics in promoting PEB, a relationship exists between how ethical a leader is perceived and how effective of a role model they are. This is a two-way relationship where (1) to motivate employees through role modelling, the leader must be perceived as ethical and credible, and (2) to be perceived as ethical, employees must see their leaders engaged in normatively appropriate conduct [60]. This demonstrates the interconnectedness between key capabilities within the ICEER framework, particularly when it comes to the effectiveness of leadership behaviour as a motivator for PEB. Research shows the importance of role modelling and leadership behaviour in encouraging PEB, so development must not only prepare leaders to be role models but also develop leaders in areas such as ethical leadership as that will determine the effectiveness of their role modelling.

Proposition 9: leadership behaviour and role modelling impact employee PEB. Leadership development that makes leaders aware of their position as role models and teaches them how to leverage that will create leaders better situated to increase employee PEB;

Proposition 10: how leaders behave will affect how ethically they are perceived. This will impact their ability to influence environmental behaviour among employees.

3.10. Individualisation of Approach: Develop Leaders Who Can Leverage Diverse Perspectives

The challenges posed by the climate crisis are too multifaced and complicated for any one person to tackle alone [72]—which is why the ICEER model focuses on developing leaders best situated to influence all their employees to take action, perform PEBs, and contribute to increasing the overall organisational environmental sustainability. Employees come into the workplace with their own attitudes, skill sets, identities, environmental awareness, morals, and beliefs. These are just some of the psychological factors that affect an employee's level of PEB. As stated above, there has been much research into the different factors that influence employee PEB, see [8,23,26,28,73]. Leaders need to understand their employees' differences and tailor their approach to each employee accordingly. Effective sustainability leaders need to excel at developing relationships with various diverse stakeholders [74]. Employees are key stakeholders in environmental sustainability efforts; therefore, to be effective, leaders need to be able to personalise their approach to each employee to develop strong relationships with the diverse workforce of many organisations. Building individualised relationships with employees will better position leaders to effect environmentally sustainable change through employees.

Taking an individualised approach allows for leaders to leverage individual unique talents. By providing individualised consideration to each employee, leaders can support the individual needs that exist within their team and coach their employees to foster green creativity [2]. There are many different types of PEB, and not every employee will perform every type. Employees' impressions of PEB may also be limited—leaders may need to show employees all the different types of PEB that are beneficial to environmental sustainability and help connect them to PEBs they will be interested in. Knowing what PEBs are most relevant to individuals will help encourage them. For example, an employee who is very task-oriented and does not see how recycling or conserving energy is relevant to their job might be more engaged with green innovation processes, which requires employees to develop environmentally sustainable products and processes [75,76] as that can more concretely be tied back to their job performance.

Individualisation of approach interacts with another key capability of the proposed ICEER model—communication and influence. The following section will discuss how leaders must develop communication and influence skills to be effective catalysts for employee PEB, but their communication and influence cannot be unilaterally applied. They will need to tailor their approach to their different employees. In this, leadership development needs to prepare leaders to be multi-faceted, identifying their employee's personal and professional priorities to understand best why they would or would not be motivated to perform PEB and then base their motivation communication strategy and style on that information. This is one of the areas within the ICEER model that points to a gap in the existing research. More research needs to be conducted to understand in what cases the personalisation of communication will best improve employee PEB outcomes.

Regardless of what PEBs they are trying to promote, it is crucial that leaders can pull from multiple leadership styles and skills to individualise their approach to encourage employee PEB. Failed attempts to promote corporate sustainability could also have negative consequences, as managers and employees tire from constant unsuccessful changes and become cynical [77]. Individualising the approach in the early stages of environmental initiatives can help prevent cynicism by incorporating employee feedback into decision-making processes and considering the different individual experiences within the organisation.

Proposition 11: if leaders can individualise their approach while encouraging employee PEB, they will be more effective environmental sustainability leaders;

Proposition 12: when leaders communicate sustainability goals, they must tailor their communication styles to the different departments and employees they work with to achieve the best results.

3.11. Communication and Influence Skills: Developing Advocates for Organisational Sustainability

Once leaders have the environmental knowledge and an understanding of their goals as an environmental leader, they need to communicate these goals to their employees and influence their employees to engage with them. Both communication and influence are important: employees need to know what the environmental initiatives are to take part, and since environmental sustainability efforts usually require employees to perform duties outside of their job description [5,52], they need to be influenced to perform these PEBs. Professional communication skills are critical to social, political, and economic functions [78], but they are also multi-faceted. Researchers' implications frequently call for practitioners to increase open communication across the organisation to achieve desired performance and environmental outcomes [79]. Leadership development programmes should strive to enhance various dimensions of communication skills so leaders can better communicate environmental sustainability challenges and solutions.

Communication skills comprise multiple small social skills that impact how effective messaging and ideas can be. A study examining the role of communication among project managers in sustainable construction project management divided communication skills into 19 different subsets, including listening, motivation, conflict management, writing, and explaining [80]. The framework established in this paper is one example of how communication skills consist of multitudes and how certain forms of communication will be more or less relevant depending on the setting. For example, in construction management, the author noted that reading and writing skills were less valuable than speaking and listening skills [80]. Leadership development needs to train leaders to be good communicators and develop leaders who know the most effective communication forms in each situation and feel comfortable changing their communication style accordingly.

Once leaders can accurately and effectively communicate environmental goals to their employees, they must still influence them to perform PEBs. Influence has been identified as centrally important to leaders' success in the modern-day [10]. For some employees, being provided information through written or verbal communication about new environmental sustainability initiatives and goals will be enough. This is informational influence, defined as "the influence to accept information obtained from another as evidence about reality" [81] (p.629). Informational influence is most effective when it comes from a trusted source [81]—which again shows the interconnectedness between the key development areas with the ICEER model. Developing ethical leaders will lead to more trust in leaders [63,64]. Increased trust in leaders will make it easier for them to use their environmental knowledge training to exert informational influence on their employees.

Beyond informational influence, we can look to psychology research to see the other types of influence that can play a role in a leader's ability to increase employee PEB. For example, we can look at the Tripartite Integration Model of Social Influence (TIMSI), which was developed to understand and promote PEB [59]. It is important to note that this model was developed in household settings. However, future testing can validate claims of the TIMSI in the workplace. The TIMSI was developed in social psychology and is primarily focused on social influences through efficacy, identity, and values [59]. The TIMSI is just one example of how identity can influence individuals' actions.

Within organisational settings, leaders should also note the potential role organisational identity can play in influencing employee PEB. Organisational identity can play an important role in workplace behaviours—particularly those outside of an employee's role [82]. Therefore, it can be reasoned that if an organisation sets environmental sustainability goals, leaders could leverage organisational identity to increase employee PEB. Leadership development needs to equip leaders to understand what identities are most salient among employees and how those identities could be connected to environmental sustainability efforts.

There are also several cases where normative social influence affects PEB. Normative social influence was defined by Deutsch and Gerald as "an influence to conform with the positive expectations of another" [81] (p. 629). We return to household settings for one example of how effective normative social influence is. Researchers conducted a series of studies among California residents; the first study assessed people's beliefs about their motivations to conserve energy, and the second study assessed what forms of messaging had the greatest effect on the actual consumption of energy (determined via metered readings). They found that the social norm message encouraged more energy conservation than any other message—despite the perception of social norms' effectiveness being relatively low [83]. Their findings represent normative social influence as a potentially underutilised motivator of PEB. Future research should aim to replicate these findings in workplace samples. Subsequently, leadership development programmes can educate leaders on utilising normative social influence within their communications to increase their employees' PEBs.

The combination of communication and influence skills is important for any leader looking to influence their employee's PEB. Communication skills can enable leaders to convey the goals of environmental sustainability initiatives. Influence skills can allow leaders to increase PEB participation rates among their employees. The ICEER model has called both capabilities out as areas that need more research—there is evidence in the household settings that should be tested in workplaces to determine their effectiveness. By developing these two capabilities in tandem, leadership development can ensure the development of leaders who can promote PEB to all their employees. This will ensure that priorities and changes due to environmental sustainability become salient across all organisational levels.

Proposition 13: increased communication skills will allow leaders to convey organisational environmental sustainability goals clearly;

Proposition 14: employee PEB will increase if leaders can influence employees to adopt sustainable efforts.

4. Discussion

This review aims to encourage the expansion of research into the relationship between organisational environmental sustainability and leadership development. It first highlighted why leadership is a worthwhile factor for further investigation, evidencing this with the rise of publications exploring leadership and sustainability in recent years. It then proposes a model that provides research questions to explore and a starting point for practitioner-focused investigations into leadership development interventions to increase organisational environmental sustainability. Past research has focused on leaders' impact on environmental sustainability. We posit that we need to understand not only whether leaders impact environmental sustainability but also how leaders can impact organisational environmental sustainability.

The connection between leadership development and organisational environmental sustainability needs to be investigated more. However, one essential component seems clear: effective leadership development and commitment to organisational environmental sustainability require a shift in perspective. Organisations' efforts for environmental sustainability rely on (at least in part) an organisation's ability to look to the future and take a long-term perspective to solve problems [15,84]. Like investments in environmental sustainability, it may also take time to reap the benefits of leadership development programmes [85]. Leaders will not become change agents for environmental sustainability overnight, and many other social–psychological factors will impact leadership saliency in environmental problem-solving contexts. It is important that practitioners can make long-term cases to decision-makers and set expectations for how long environmental sustainability and leadership development strategies will take to produce tangible benefits. Developing a strong case from the evidence within the scientific literature will be particularly essential for organisations within the Western context that tend to maximise short-term profits over long-term outcomes [15].

Organisations can ensure lasting and impactful change and better understand leadership's role in organisational environmental sustainability by focusing on how they develop leaders and successfully integrating environmental sustainability into development strategies. Both leadership development and environmental sustainability need a long-term focus [15,84,85]. This similarity presents an opportunity to better understand the costs and benefits of long-term approaches to organisational planning and management. It also presents why research needs to expand our understanding of the relationship between leadership development and environmental sustainability.

The exploration of leadership development and environmental sustainability can yield findings that connect both topics to other areas of investigation within pro-environmental behaviour research and behaviour change as a wider field. In this paper, we chose to shift from an approach siloed in one leadership style to research focused on leadership capabilities. By doing this, we will become more flexible and adaptive. Since leadership development exists within the many contexts within an organisation, a more flexible approach can aim to tackle multiple interventions and strategies within the investigation of leadership development and organisational environmental sustainability.

With this review, we also aim to shift the approach to environmentally sustainable organisations away from strategies that focus purely on external motivation incentives. These external motivation-based interventions can change behaviour in the short term, but there is mixed evidence on the role of financial incentives over time [86]. Due to these mixed results, there is a need for a model that moves away from reliance on financial incentives, highlights the advantages of social–psychological approaches, and is grounded in peer-reviewed research. The ICEER model proposed here puts social–psychological capabilities at the centre of organisational environmental behaviour change efforts. It posits leadership as a unique factor within organisations that can bolster environmental sustainability by developing social and psychological capabilities. By taking a social–psychological approach to environmental sustainability leadership development, our model proposes both a top-down strategy (through the leader's policy choices) and a bottom-up strategy (through the leader's ability to encourage employee PEB). This two-pronged approach encourages environmental behaviour change to be impactful, widespread, and sustainable over time. Given the immense challenges posed by climate change and ecological degradation, we need more approaches that will take these holistic approaches to behaviour change.

4.1. Theoretical Contributions

This narrative review makes several contributions to the literature. First, it pulls from past research to establish a case for why leadership is an important factor to consider when examining the antecedents of PEB in the workplace. It also makes a case for why researchers and practitioners looking to develop environmentally sustainable leaders should not restrict themselves to one specific leadership style but instead embrace multi-dimensional approaches at the intersection of multiple leadership styles. Finally, the most important theoretical contribution it makes is through the proposal of the ICEER model. The ICEER model provides a framework for exploring how leadership development programmes can impact environmental sustainability. It does this by establishing key capabilities that should be explored more within leadership development and psychology research. This framework creates several avenues for future research, as described below, and provides a foundation for research into how leadership development can impact organisational environmental sustainability.

4.2. Practical Implications

This review's central practical contribution is the ICEER model, which is proposed as a structure practitioners can implement when designing leadership development programmes. The model identifies key capability areas that practitioners can include within their leadership development strategies. Some of the identified capabilities may already be embedded into leadership development programmes, and by highlighting them in the ICEER model, this paper can inform practitioners to place increasing emphasis on those parts of their training. Additionally, by providing takeaways in the form of 14 propositions, this paper has provided an outline for the importance of the various factors within the model that can be presented to a wide range of audiences, allowing environmental and behavioural change practitioners to share the model with people holding varying experiences and knowledge. This review also provides three desired outcome variables, all of which can be measurable and fit various organisational contexts. Measurable outcomes are important within organisational contexts to secure funding for environmental initiatives and obtain support from executive decision-making teams. The combination of key capabilities for leadership development and desired outcome variables makes the ICEER model relevant to both researchers and practitioners.

4.3. Limitations and Future Directions

First, this was a narrative review and, therefore, did not encompass all the existing literature; instead, it opted for a more focused approach. This choice was also motivated by the fact that the development of environmental sustainability leadership is still a relatively new topic; therefore, it needed the flexibility to pull research and draw conclusions from a wide variety of papers that do not fit into one set of narrow criteria. As the body of research continues to grow, a more expansive or systematic review approach will be more appropriate. Despite our best efforts to include all relevant papers, the interdisciplinary nature of PEB research means that research is spread widely throughout topics and disciplines, and this review may have omitted some unintentionally. Future research aimed at testing the ICEER model can expand the theoretical grounds of the model as the relationships are explicitly explored in more depth.

We also do come back to a common critique of the existing literature: the prevalence of self-report scales and reliance on correlational research. Arguments utilising the theory of planned behaviour can be made to establish why behavioural intentions and self-report scales have a place in behavioural research. Additionally, there are benefits to self-report scales (such as their low cost), but the evidence base for this model will be strengthened with a mixture of methods. Additionally, correlational studies utilising self-report measures may be good for establishing probable frameworks and illustrating potential effects. Despite this, we must acknowledge that some of the research this model is built on is correlational and does not necessarily mean these are casual relationships, representing one limitation within the current literature that is then reflected in the model. This proposed model still provides a good framework reflective of concepts in the existing literature that can first be verified and modified through empirical testing; then, the model should be tested with behavioural measures for employee PEB, and finally, to increase the ecological validity, the model should be tested experimentally and in practical conditions to determine its effectiveness in leadership development strategies.

Despite the limitations, the development and proposal of the ICEER model provide several pathways for future research. First, the model should be tested through correlation studies and structural equation modelling to confirm the relationships proposed within the model and illustrate the mediation and moderation effects. Once the relationships in the model have been tested, they should be verified in lab settings. Then, studies should be transferred to test the model on working samples across various organisation types and sectors. Importantly, researchers should then transition to testing the model practically by designing leadership development interventions based on the model and testing them in organisational settings. Leadership development takes time [10]; therefore, longitudinal research approaches should be considered after verifying the model via short-term testing.

Finally, although the model proposes that it will be most effective when used holistically, the individual proposals set forth via the model can be utilised within existing research designs and tested within existing leadership development frameworks. Exploration into individual relationships will strengthen our understanding of how these capabilities interact and how the propositions from the ICEER Model can be applied to varying contexts.

5. Conclusions

There is a clear interest among researchers and practitioners across disciplines in how organisations can improve their environmental sustainability. One key factor in organisational environmental sustainability is employee PEB. Many factors that influence employee

PEB have been identified in the literature, and this review joins the growing number of papers that look at leadership as a central factor in increasing employee PEB. Despite the increasing interest in how leadership can play a role in environmental sustainability, relatively little research still explores how leadership that increases environmental sustainability can be developed. This is an area of research that needs to be expanded and explored. To address this gap, our narrative review draws findings from past research to propose the ICEER model for environmentally sustainable leadership and organisational environmental sustainability.

We recommend that researchers take flexible approaches to investigating leadership development and environmental sustainability that incorporate interdisciplinary practices and knowledge. We also encourage the proliferation of more research focused on developing leaders best suited to influence PEB in communities, organisations, and other settings. With that in mind, the ICEER model strays away from the leadership category and instead focuses on capabilities that leaders of any style or approach can develop. The proposed model consists of 14 propositions highlighting relationships between key capabilities that can be integrated into leadership development to drive three desired outcomes. The ICEER model generates research questions that should be explored and provides a starting structure for practitioners to incorporate environmental sustainability into leadership development. By utilising this proposed model, our goal is so that future researchers and practitioners can work to understand better how leadership development can affect organisational environmental sustainability.

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behavioral sciences

Article

Leveraging Leadership Development to Pre-Empt Leader Derailments

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Abstract: This article examines the role of leadership development interventions in pre-empting leader derailments. The research literature suggests that derailments are not only commonplace but associated with a range of significant costs, from financial, to mental health, to morale, to employee turnover, to missed opportunities. Given these costly consequences, this article seeks to answer the question: "Can leadership development—especially at early managerial-career stages and during transitions—play a significant role in mitigating leader derailments?" Research suggests that the majority of leadership failures occur—or are more visible—at senior organizational levels. This begs the question of whether development interventions earlier in a leader's career might have pre-empted their later failure. What if the field of leadership development were to adopt a 'preventative medicine' model in which pre-empting derailments was the focus rather than 'fixing' leaders as they are derailing? Moreover, there appears to be an overreliance on coaching as the intervention of choice. What if the field were to leverage a broader range of development interventions beyond coaching to ensure a greater probability of minimizing derailments? Five interventions will be discussed which have the potential to pre-empt leadership failures, when deployed in unison.

Keywords: leader derailments; leadership failures; leadership development; leadership disorders

1. Introduction

In 2024 alone, an estimated USD 81 billion was spent across a spectrum of leadership development interventions, from assessments to coaching to training. Most of these initiatives had a singular goal—instilling the core competencies or 'right stuff' associated with effective leadership. In contrast, it is rare to find leadership development initiatives focused on mitigating the 'wrong stuff'—the factors that contribute to leadership failures. This bias towards the constructive or 'light side' dimensions of leadership has been reinforced by the popularity of positive organizational scholarship [1,2], inventories such as the Clifton Strengths, and the majority of leadership 360-feedback surveys, as well as developmental feedback emphasizing an individual's strengths [3]. As a result, the field has paid limited attention to harmful competencies or 'leader derailers' [4,5]. As Pfeffer (2015) notes, there are few incentives to do otherwise [6]. The industry of leadership development has a 'product' to sell—a 'feel-good prescription' that promises higher performance and employee morale. The process of addressing leadership failures—a more complex and potentially intractable problem—is less amenable to productization and popular appeal.

The leadership development field appears to operate under the mistaken assumption that instilling constructive competences will somehow mitigate derailing behaviors. As Hogan, Hogan and Kaiser (2010) note, leader incompetence has been conceptualized as not possessing the characteristics of effective leadership or the 'right stuff' [7]. In reality, dysfunctional leader behavior is not the face of a coin, the other side of which is functional behavior. Leader failure is the product of undesirable characteristics or the 'wrong stuff'—a different set of behaviors. Addressing these—often interpersonal—deficits requires interventions that are distinct from those associated with developing constructive leadership skills or the 'right stuff'. While empirical research has advanced to provide reliable, evidence-based guidance for designing and delivering interventions to instill the 'right stuff' [8,9], research on interventions to mitigate leader derailments has not. This is a critical problem given the high and varied costs of derailments. In addition, there appears to be a heavy reliance on coaching as the primary intervention to 'fix' a derailing leader. This intervention can come with potential drawbacks [10]. Most significant among the drawbacks is the issue of timing. Coaching tends to be initiated after a manager has begun to visibly derail. Once identified to be derailing, the manager and their superior enter a 'set up to fail' syndrome [11]. This dynamic plays out as follows. As a manager's performance slips to being unsatisfactory, the superior increases their attention towards and supervision of the derailing individual. Rather than improving the subordinate's performance, the increased supervision has the reverse effect. Perceiving the boss's lack of confidence in them, the subordinate often withdraws from his or her work and from their superior. As a result, the relationship spirals downward, as does performance [11]. Beyond this 'set up to fail' syndrome associated with their superiors, derailing managers may have harmed their working relationships with subordinates and peers. This is highly likely given the fact that derailments are often the product of flawed interpersonal tactics which work against the building and maintaining of trusting relationships [12]. While subordinates may experience these flaws more acutely [13], the same interpersonal shortcomings can weaken peer relationships. Research shows that the latter are essential to a manager's overall performance [14]. Without positive working relationships, the derailing individual's influence and performance further wanes. Complicating matters, derailing managers are typically characterized by low levels of self-awareness and self-regulation [7]. They tend to externalize the sources for their derailment. As a result, their response to coaching can be either defensive or manipulative—'playing along' or only making superficial changes to appear compliant in addressing the concerns of their superiors [10]. For these very reasons, coaching may fall far short in mitigating a leader's derailment. 'Preventative coaching' occurring far earlier in a manager's career may offer a better return on the development investment. But for various reasons described later in this article, superiors and organizations often overlook the early warning signs of leadership derailers, or the 'wrong stuff'. As a result, they fail to take pre-emptive actions.

It is fair to ask what is the overall magnitude of the phenomenon of leaders who are perceived to be derailing? Hogan, Hogan and Kaiser (2010) cite twelve different studies, suggesting that the base rate of managerial failures ranges from 30% to 67%, with a mean of 47% and a median of 50% [7]. These estimates are reasonably consistent despite the fact that they come from distinctly different sources and samples. Examining CEO ousters alone, Stanford professor Larcker and his colleagues [15] examined nearly 1400 turnover events at Russell 3000 companies between 2017 and 2021. They found that 29% appeared to be involuntary or forced departures. For the general managerial population, Hogan, Hogan and Kaiser (2010) propose a base rate of fifty percent of managers being ineffective and possessing derailment potential [7]. Either way, the rates of leader derailments are remarkably high across hierarchical levels and sectors. Leader derailment is a not only costly but widespread phenomenon. Given the magnitude of the problem, it is surprising that the field of leadership development has devoted relatively little attention to addressing the issue.

From the perspective of leadership derailment, this article seeks to answer two questions: Why not devote a greater level of developmental resources to pre-empting the 'wrong stuff' earlier in a career? Why not move beyond an overreliance on 'last minute' coaching interventions to a 'preventative medicine' model deploying a suite of interventions? For example, to build greater self-awareness of one's potential to derail, training initiatives could expose junior managers to common leader-derailers and disorders and their consequences. Assessments could be deployed to help individuals identify their susceptibility to derailers. Onboarding programs could provide newly promoted leaders with 'real time' feedback on the impact of their behaviors at the start of a new role along with corrective coaching and feedback. Later in this article, we will propose a suite of interventions with the potential to mitigate future derailments.

For the purpose of this article, leadership derailment is defined as the process by which a leader who was previously seen as effective or identified as high-potential experiences a serious decline in efficacy and/or performance. These outcomes lead to diminished influence, career stagnation and organizational challenges such as morale or retention issues with subordinates or highly conflictual relations with peers or superiors.

2. The Many Costs of Leader Derailments

It is important to ask whether there is a pressing need for the field of leadership development to prioritize addressing leader derailments. From the standpoint of its associated costs, the answer is a resounding 'yes'. To start, leader derailment costs come in many forms—from financial costs, to missed organizational opportunities, to losses associated with employee morale and engagement. These costs in the United States alone are estimated to run in the tens of billions of dollars. The easiest ones to measure are those associated with executive and CEO-level failures. At the CEO level, failure comes with more dramatic costs (Conger and Nadler, 2004) [16]. If an executive recruiting firm is hired to find a replacement for the failed CEO, its fees can run to 25–33% of the first-year salary. In a matter of weeks, a floundering CEO can destroy a company's market valuation that has taken a decade to build. Recent research suggests that the market value wiped out by CEO and C-suite failures in the S&P 1500 is close to USD 1 trillion a year [17]. Ousted CEOs rarely leave with empty pockets. A typical severance package provides the departing CEO of a Fortune 500 company with up to three times their annual salary plus a bonus, and extras can include compensation for life insurance, a USD 500,000 to USD 1 million annual payment for life, and office assistance for several years. An extreme example would be Adam Neumann, the ousted CEO of WeWork. Neumann departed with a USD 185 million noncompete agreement, a USD 106 million settlement payment, and USD 578 million for shares sold to the investor SoftBank. The forced departures of CEOs are often followed by shareholder class-action suits brought on by the plunging stock price, which presents another hazard. In 2023, USD 7.9 billion was paid out for these investor recoveries. Last but not least, the departing CEO's organizational initiatives go into limbo during a transition crisis at the top. Important competitive advantages may be lost during this time.

While less visible, significant—though harder to quantify—costs are found below the executive levels of leadership. These are associated with losses in morale and mental and physical health experienced by the subordinates of derailed leaders [18]. Organizational climate surveys routinely show that about 75% of working adults report that their immediate supervisor is the most stressful aspect of their job [19]. As Hogan, Hogan and Kaiser (2010) point out, ineffective managers are a health hazard; they undermine the quality of life of many individuals and in turn impose medical costs on society [7]. Tepper (2000) and Skogstad, Einarsen, Torsheim, Aasland and Hetland (2007) have demonstrated how consequential these costs are empirically [20,21].

3. What We Have Learned from the Research on Leadership Derailment

What is surprising about the leader derailment research is the remarkable degree of convergence across findings. A central theme is that three interrelated factors combine to produce a leader's downfall. Derailing leaders lack sufficient levels of self-awareness and self-regulation to navigate the impacts of their personality disorders. These disorders manifest themselves in dysfunctional behaviors that undermine their relationships with superiors, peers and/or subordinates. As a result, they are unable to meet performance expectations at a certain point in their careers, and in turn, derail. A brief history of the research on leadership derailment is highlighted below.

The pioneer of research on leader derailment was Jon Bentz (1967, 1990) [22,23], who undertook a 30-year study of failed managers at Sears, Roebuck and Company. While the derailed individuals he researched were described as bright and socially skilled, they failed for a variety of reasons. These included the following factors: (1) a lack of business skills, (2) a reactive and tactical disposition, (3) an inability to deal with complexity, (4) an inability to maintain relationships with a network of contacts, (5) a failure to delegate, (6) the allowance of emotions to cloud their judgement, (7) an inability to build a team, (8) a slowness in learning, and (9) an overriding personality defect. Bentz's research would spark streams of research on leader derailment that would ultimately span four decades.

Two research 'schools' of thought on leader derailment have emerged—the first focusing on leader behaviors or behavioral derailers and the second examining the underlying interpersonal schemas and personality attributes behind these behaviors. The 'behavioral school' of derailment has a long history and is primarily associated with researchers at the Center for Creative Leadership (CCL). Building upon Bentz's work, Morgan McCall and Michael Lombardo (1983) [24] studied derailed leaders in executive positions, comparing them with groups of successful executives. Their research discovered that the successful and derailed executives shared a surprising set of common factors. Individuals in both groups (1) were identified early-on as having potential, (2) were described as bright, (3) possessed outstanding records of achievement, (4) were seen as ambitious, (5) were willing to sacrifice, and (6) possessed few observable faults. That said, ten reasons would later set apart the executives who derailed in their careers. These included (1) specific business problems; (2) personal insensitivity; (3) cold, aloof, arrogant behavior; (4) betrayal of trust; (5) overmanaging; (6) being overly ambitious; (7) failing to staff effectively; (8) an inability to think strategically; (9) an inability to adapt to a boss with a different style; and (10) being overly dependent on a mentor or advocate. In addition, McCall and Lombardo (1983) [24] noted that as job demands changed over a career, some early strengths transformed themselves into weaknesses, and certain early weaknesses—when unaddressed—carried greater consequences at more senior leadership levels.

Building upon McCall and Lombardo's work, other researchers [25–31] would examine the topic of derailment for another two decades. While their research samples employed a diverse range of populations and utilized diverse methods to examine leader derailment, several consistent and generalizable conclusions emerged. Most of the derailers identified in early research reappeared in later studies. For example, the findings from a methodologically rigorous study conducted by Rasch, Shen, Davies and Bono (2008) [32] highlight the degree of consistency across three decades of prior research. Their taxonomy of derailers included (1) persistent 'people problems'; (2) poor emotional control; (3) being over-controlling; (4) poor task performance; (5) poor planning, organization, and/or communication; (6) rumor-mongering and inappropriate use of information; (7) procrastination; (8) failure to consider human needs; and (9) failure to manage and nurture talent. The category of behavior that had the most impact on staff morale was a "failure to consider human needs." Consistent with earlier studies, they discovered that the frequency of this behavior increased with organizational status; the more senior the manager, the more pronounced and abusive the behavior. As Kaiser and Hogan (2007) [33] suggest, status in organizations allows people more discretion in their actions; with greater discretion, the derailing attributes have greater freedom to express themselves.

A 'derailment syndrome' also appears as a consistent pattern in the CCL streams of research. Weaknesses tolerated early in a career eventually become a serious matter, as an individual is promoted to more senior levels. In other words, supervisors downplay, or overlook, or fail to appreciate potential derailers in the individual's early jobs by focusing on the individual's strengths. This encourages the promoted individual to assume incorrectly that their weaknesses are not likely to become serious liabilities as the individual progresses upward in the hierarchy. Promotions and performance reviews also de-sensitize managers to the risks of overusing their strengths—another source of derailing behavior. As a result, promotions encourage overconfidence, lessen the individual's receptivity to the value of critical feedback, and reinforce a high-performer identity. Finally, those who derail often lack strong, positive relationships with colleagues. As Van Velsor and Leslie (1995) [28] observed, when relationships are strong, people will forgive mistakes. When relationships erode, tolerance disappears. Mistakes ultimately undermine support for a leader, and their influence collapses, resulting in derailment. In contrast, successful leaders understand the need to make significant shifts in their behavior as assignments and faster rates of promotion place unfamiliar and complex demands upon them. They value strong and positive working relationships and work diligently to build positive work relationships.

The second school of derailment research posits that underlying these derailing behaviors are personality disorders and unconscious drivers [13,34,35]. These disorders and drivers produce the dysfunctional styles that prevent individuals from accomplishing the leadership tasks of building teams and creating strong interpersonal relationships. One complicating factor is that these personality disorders co-exist with ambition, expertise and social skills [34]. This allows individuals to be promoted into bigger and bigger leadership assignments. In the roles ahead of them, however, these disorders become too pronounced and eventually cause the individual's failure. Because they are self-absorbed, derailing managers are unable to accept responsibility for their maladaptive behavior. As a result, they cannot adapt their behavior within sufficient time to pre-empt their derailment [7]. Hogan and Hogan (2001) [36] identified 11 personality disorders that are predictive of leadership derailments. Employing the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM—IV*), their inventory of personality disorders includes descriptive attributes, including (1) excitable, (2) skeptical, (3) cautious, (4) reserved, (5) leisurely, (6) bold, (7) mischievous, (8) colorful, (9) imaginative, (10) diligent, and (11) dutiful. Paradoxically, each disorder is actually intended to make a positive impression in the short run — which it often does [34]. Thus, it becomes difficult to initially detect their 'dark side' expression. For example, Hogan and Hogan (1997) [34] describe the positive manifestation of the boldness dimension as an expression of confidence and charisma. When over-used, however, boldness is experienced as arrogance and a sense of entitlement. With boldness as their disorder, leaders overestimate their competence while failing to learn from mistakes. Low scores on these derailer disorders can be equally problematic. For example, a low level of imaginativeness often indicates a lack of vision, and a lack of boldness can translate into indecisiveness. Low scores on disorders therefore can produce leader failures as we ll as the high scores can.

What are the implications of the findings of these schools of research for the field of leadership development? As mentioned earlier, there is a remarkable consistency in the attributes of leader derailers—across genders, hierarchical levels, sectors, and cultures. From the standpoint of training, the apparent universality of both derailer behaviors and derailer disorders means that educational initiatives are able to employ standardized content. In other words, 'derailer' frameworks (e.g., 'anti-leadership' competencies) would not need to be highly customized to an organization. Similarly, standardized assessment tools incorporating derailment behaviors/disorders could be universally employed to ensure that selection into leadership positions was more rigorous. These assessments would assist the recipients and their supervisors in identifying and addressing the presence of derailer disorders. The derailment pattern of weaknesses tolerated early in an individual's career would suggest the need for more rigorous education for supervisors in how to identify derailer behaviors and how most effectively to provide near-term corrective feedback and coaching. Similarly, junior managers require training in how to seek out and receive constructive feedback about their potential derailers. These would be baseline interventions if the field wished to move towards a more 'preventative medicine' model. That said, some would argue that more rigorous selection processes designed to weed out managers possessing leader derailers could be the most effective solution to the derailment challenge.

4. Selection: The Most Efficient Solution?

Rather than expending resources on leader development interventions, why not simply 'select out' of promotion opportunities those individuals exhibiting leader derailers? Several factors argue in favor of this option for addressing derailment. As noted earlier, the research shows that managers who exhibit derailers often have inflated self-evaluations [30,37,38].

They are described as highly narcissistic. A recent investigation of narcissism analyzing 51 studies with more than 37,000 participants across North America, New Zealand and Europe suggests narcissism is more stable than other personality constructs and declines with age only very gradually [39]. Those possessing derailers associated with narcissism are therefore likely to be resistant to critical feedback, learning and coaching. In other words, development investments may have little or no impact on them. Harnessing more rigorous approaches to selection in order to 'weed out' these individuals from leadership roles is a viable solution. If this is the case, then organizations need to devote greater attention to increasing the rigor with which they assess candidates under consideration for leadership roles. Here assessment tools such as the *Hogan Leadership Results* and the Center for Creative Leadership's *Benchmarks* may be useful assessments when supplemented with other data sources such as performance reviews [40].

Beyond assessment tools, one promising example of a multi-dimensional selection process comes from the U.S. Army [41]. In response to two surveys, the Army reinvented its selection process for first-level executive leaders—the battalion commanders. The first survey, of 22,000 soldiers, showed that twenty percent of the respondents said they were serving under a toxic leader. The second survey indicated that less than 50% of Army majors believed that the armed service promoted its best leaders. Given the surprisingly negative results, the Army decided to reinvent its selection process for one class of senior leaders. Its aim was to intentionally weed out candidates possessing toxic or derailer attributes and to select 'in' those with constructive leadership skills.

The cornerstone intervention is an intensive four-day evaluation program in which promotion candidates undergo cognitive and strategic talent assessments, psychometric tests, psychological interviews, writing-skills and argumentative-essay examinations and a physical fitness test [41]. Employing a team-based outdoor obstacle course, candidates are also evaluated on their leadership and decision-making skills. In addition, peer and subordinate evaluations are carefully reviewed for any evidence of potential derailment disorders and toxic traits. The four-day assessment ends with 30 minute interviews by an evaluation panel, the members of which make the final decision on whether a candidate should be promoted. The Army requires that only the leadership levels above battalion commanders can make a final selection decision. Given this requirement, the panel consists of three one- or two-star generals and two senior colonels who have been identified as effective battalion-level commanders. In addition, there are three non-voting members of the panel—a command sergeant major with extensive experience advising battalion commanders, a senior operational psychologist and the panel moderator. To pre-empt selection errors, each panelist receives in-depth training on the attributional errors that commonly occur during job interviews. Before they begin each daily evaluations, the panelists receive an anti-bias refresher. The panel's senior psychologists supervise junior colleagues who conduct one-on-one in-depth interviews with the candidates. These interview results are then presented in a standardized format by the senior psychologists who synthesize each candidate's overall assessments into a summary of strengths, weaknesses and disorders. They also propose follow-up questions for the panelists to raise in the final candidate interviews. This multi-data source, multi-rater approach ensures more diverse perspectives on each candidate [41]. Panelists are not allowed to evaluate candidates if they have any prior knowledge of the individual. Even the senior psychologists are kept at arm's length from each candidate. This ensures that the evaluators have no preconceived notions of the candidates they will be interviewing. While aspects of the evaluation, such as the obstacle course and physical fitness tests, might be of less relevance for non-military organizations, the variety of data collected and the methods of analysis could be a template for many organizations. The rigor of the process ensures a high probability that derailer behaviors and psychological disorders will be identified before the actual promotion decision is taken.

Are there drawbacks to this 'selection-centric' solution of weeding out individuals with leader derailers? There are several arguments against selection as a standalone intervention. For example, Hogan and Kaiser (2005) [18] attribute the majority of executive derailments *to flawed selection*. They observe that the most common selection approach is to employ interviews. Yet leader disorder attributes can actually create an initial favorable opinion—as in the example of boldness cited earlier, which creates the positive impression of confidence. As a result, interviews can be one of the weakest means used to identify those with derailment potential. For this reason, the U.S. Army has invested heavily in training its assessors in the attribution errors that occur in interviews. In addition, former subordinates' perspectives on a candidate are rarely consulted, especially in cases involving outside candidates. Assessment tools that focus on derailer behaviors and disorders are similarly rarely employed. With a sense of irony, Hogan, Hogan and Kaiser (2010) [7] observe that many executive leaders are selected and hired for the very characteristics that will eventually cause them to derail. Hogan et. al. (2010) [7] also raise the issue of whether mitigating derailment through selection is realistic, given the small pool of effective leaders in most organizations. With the percentage of ineffective managers in their potential base reaching as high as 50%, organizations have to survive and adapt with the managers they have. There are otherwise too few viable candidates for promotion. Leader development may be the only viable long-term solution for ensuring a large-enough pool of leadership talent.

5. Pre-Empting Leadership Derailment Through Leadership Development: Where to Focus?

A core challenge described in the research literature on derailment is that leaders tend to derail at more senior levels of their organizations. For this reason, the response is often to deploy executive coaches to 'turn around' the failing leader. Yet we have no empirical evidence confirming the efficacy of 'last ditch' coaching attempts to salvage the career of a derailing leader. Such efforts may bear little fruit in terms of turning around the actual behavior of the leader. Why not focus greater attention on interventions at junior levels of organizations to inoculate against derailer behaviors and disorders before they become serious liabilities? What follows are a set of recommendations for developmental interventions used to not only build awareness of the derailers and disorders but to mitigate their expressions. Five interventions will be described which ideally would be employed as a comprehensive suite of initiatives. These are grounded in insights from the research literature on leadership development. For example, the literature suggests that certain methods are more effective in helping managers to develop both the intrapersonal and interpersonal skills needed to overcome derailment [9,10,42]. Knowing derailer behavior is a necessary first step, and hence the first intervention to be proposed. Among the foundational requirements are comprehensive and competent assessments supported by effective coaching and training (the second, third and fourth interventions proposed below). When successful, these interventions provide a realistic portrait for the individual of their potential derailers and the conditions that promote them. Examining the individual's implicit theories of social interaction with their coach reveals the shortcomings of these theories within the current context. In turn, individuals will learn how their self-defeating schemas, once adaptive in earlier contexts, are now no longer viable and have become self-destructive [7]. This process, however, requires a specialized type of coaching, and for this reason we propose a fourth intervention of training for coaches. Since transitions are a common contributor to derailment, our fifth and final intervention is proposed. While not as pre-emptive as the first four, it nonetheless may provide managers with an 'early warning' of an impending derailment.

5.1. Publicizing and Socializing Frameworks of Leader Derailers

Competency models have long been used as an essential component in leadership development—especially for training programs. They are a vehicle used to publicize and socialize those behaviors considered the essential leadership behaviors within an organization. They also commonly become a foundational element in designing training content. Why not publicize the non-desired or 'wrong stuff' leadership behaviors using 'anti-competency' formats? Why not design training content around these derailer 'anti-competencies' while highlighting the shorter- and longer-term negative outcomes? Given the remarkable consistency in derailers described by research across varied contexts, organizations could compile 'leader derailer' frameworks. Sampling three to five years' worth of known leader derailments, an organization could select the more representative derailers. These would in turn be widely publicized through training and by incorporating them into performance reviews.

The author is aware of only one organization encountered in his career that has formulated and deployed such a leader derailer framework (spelling out the behaviors that have led to derailment across all of its managerial ranks). This organization's 'anti-leadership competency' framework was incorporated into leadership training programs in the form of cautionary case-studies of actual—though disguised—leaders who had derailed. Supervisory training was offered—along with assessment tools—in how to identify and coach individuals with derailers. Anecdotal evidence solicited from the organization's CEO, CHRO and other executives suggest that leader derailment did indeed decline. They attributed the decline to a heightened sensitivity to derailer attributes which led to earlier identification and remediation through coaching and training.

5.2. Incorporating Derailers into 360-Feedback Leadership Surveys

One common theme in the derailment literature is a lack of self-awareness [7]. Managers who are prone to derailment view themselves more positively than others do and often externalize their personal problems. Examining multi-rater assessments, Eichinger and Lombardo (2003) [30] found that managers whose self-ratings were noticeably higher than those provided by their colleagues were more likely to fail. To complicate matters, those who will derail—like their successful counterparts—are ambitious, technically skilled, and possess strong track records. As a result, it can be difficult to discern the derailing manager from the successful one based on performance outcomes. For these reasons, the majority of performance reviews by superiors may not provide sufficient and compelling feedback on potential derailer behaviors [7].

With their tendency to focus only on 'bright side' characteristics of [43], current 360-degree feedback tools fall short in helping to identify an individual's derailers. As Lombardo, Ruderman and McCauley (1988) [27] have shown, leadership failure is more often an outcome of having the 'wrong stuff' rather than lacking the 'right stuff'. Moreover, the research shows that overused strengths can similarly be associated with [44]. Yet as Hogan, Hogan and Kaiser (2010) [7] point out, high ratings on the typical 360-feedback tool are generally seen as positive indicators of leadership. A high rating on a strength could be mis-interpreted as a positive indicator when in reality it is an indicator of over-use and suggests derailment potential.

To address these shortcomings with 360-degree leadership feedback tools, one solution would be to incorporate derailer attributes [7,45]. With overused strengths, feedback tools could be designed to bring attention to the links between the overuse of strengths and performance problems. The author is aware of one 360-feedback tool in which respondents—in a qualitative comments section—are able to share their observations of how a manager's excessive use of a strength is creating performance liabilities. Another option is to pair 360 assessments with psychometric tests designed for workplaces such as the *Hogan Development Survey* [35] and the *Questionnaire of Personality Styles* [46], which focus primarily on derailers.

Surprisingly, there has been little research on, or experimentation with, 360-degree assessments that incorporate leader disorders/derailers [47]. The limited evidence suggests the following. When the self-ratings and other ratings are in agreement, with high ratings as to the presence of derailer behaviors, the individual's leadership effectiveness is indeed perceived to be low. When the individual being assessed underrates their derailment factors in comparison to their raters' perceptions, the individual tends to have low leadership effectiveness ratings. As might be expected, low ratings of the presence of derailers by both the manager and their raters are correlated with higher levels of leadership effectiveness. The research by Tang, Dai and DeMeuse (2013) [47] suggests that 360 surveys incorporating derailer behaviors could indeed be a helpful and potentially pre-emptive source of feedback. One constraint, however, may be the visibility of derailment factors at lower levels. For example, Tang, Dai and DeMeuse (2013) [47] did find that higher-level managers were rated higher on derailment factors than were lower-level managers.

In conclusion, feedback is an essential intervention used to address derailment potential. It appears to be underleveraged—in assessments and in performance and developmental reviews—in building greater self-awareness and promoting behavioral change. The research suggests that this tool can often lead to positive change, especially under certain conditions. As summarized by Hogan, Hogan and Kaiser (2010) [7], these conditions ideally include situations (1) when feedback is intended for development versus administrative reviews, (2) in which coaches are available to help managers review and set improvement goals, (3) in which managers share their development goals with colleagues and engage them in action planning, and (4) the feedback is for the lowest-rated managers.

5.3. Targeted Training on Leader Derailment

It is rare to hear of leadership training programs with a focus on derailment. This is likely one outcome of the positivist bent of the leadership development field. It may also be a recognition that resolving derailers in a training program is an unrealistic expectation. After all, many of the derailer behaviors have their roots in personality disorders. Training programs would be hard-pressed to adequately tackle the emotional and motivational causes underlying many derailers.

The present author is not so pessimistic about the potential of training, especially with more junior audiences and with the frame of building awareness. He is familiar with one such program for high-potential leadership talent. The program's training content explored the ways in which managers in the organization commonly derailed in their careers. Educational content covered relevant lessons from the research on leader derailment while case studies explored the overuse of strengths, derailer disorders, and the cycle of derailment. Each participant received feedback on their own potential to derail from the *Hogan Leadership Forecast* assessment. In addition, participants had three coaching sessions to devise action plans to address their potential derailers and/or leadership skill gaps as well as develop constructive leadership skills. To build the case for the program, the organization's CEO opened by sharing his decision to terminate the firm's chief engineer (whose leadership role oversaw several thousand engineers) due to his derailer behaviors. The CEO described reviewing twenty-four years of the chief engineer's performance evaluations to make his termination decision. The behaviors that led to this executive's derailment were found in every single performance review since the start of his career. Behaviorally, he was distant, exhibited poor emotional control and failed to nurture and mentor talent. The story's parallel to the research literature was striking—individuals promoted with their weaknesses until these weaknesses become too pronounced and could no longer be tolerated. This powerful story left an indelible mark on the program participants.

There may indeed be a place for training and its capacity to build a persuasive case to address one's derailers early in a career. At a minimum, training can be employed to (1) build awareness of common derailers and how leader derailments typically unfold, (2) help participants identify and begin to address their own potential derailers, (3) teach individuals how to proactively solicit constructive feedback and act on it, (4) socialize expectations that derailer behavior will not be tolerated by the organization, and (5) simultaneously develop constructive leadership skills. As Day (2024) [9] has noted, one challenge facing training approaches is their short-term effects. If individuals do not practice consistently what is learned in the training experience, then 'decay' becomes the more likely outcome. For reason, follow up coaching by supervisors or professional coaches is essential requirement.

5.4. Developing Coaching Skills Specifically for Addressing Derailers

As noted earlier, coaching is often seen as the 'fix-all' for derailing leaders. Indeed, coaching is more effective than training because it can be customized to the individual and occurs over extended time periods. That said, the professional attributes required in these coaching engagements are complex. Paradoxically, many programs that teach coaching skills do not necessarily focus on addressing derailing leaders in their curricula. Since these coaching engagements must address underlying personality disorders, they necessitate training in psychotherapeutic techniques. As Sargent (2011) [48] notes, the requisite coaching attributes include: (1) discerning the client's degree of readiness for change; (2) possessing a portfolio of experiential and behavioral strategies and interventions; (3) understanding the client's emotional state and when it is appropriate to apply each strategy and intervention; (4) staging experiential interventions to raise awareness, build resilience and stimulate the desire to experiment and change; and (5) introducing behavior-based interventions to encourage clients to take practical steps facilitating change. Given this list, it is not surprising that, just two decades ago, the coaches employed for derailing executives were primarily psychologists and psychiatrists. The number of coaches who are highly skilled across this suite of attributes is likely to be small in number. As Kirschner and Zamora (2022) [49] suggest, it is highly recommended that coaches who undertake these assignments themselves seek regular supervision from peer coaches to navigate their own psychodynamics (transference/countertransference) relative to their clients and to bolster their senses of self-efficacy and resilience in the face of defensive client behavior. Kets de Vries (2006) [36] explains the psychoanalytic skills required to coach those most prone to leader dysfunction and derailment.

Hogan, Hogan and Kaiser (2010) [7] highlight what these coaches—beyond Sargent's list of required skills—must accomplish with derailing leaders as their clients. First, they must assist each client in surfacing the individual's implicit theories of social interaction and assumptions about motivation. In the process, they have to build an awareness of the individual's faulty assumptions, self-defeating schemas and emotional triggers/hot buttons and how these currently manifest themselves in highly dysfunctional ways. The coach must show how these self-defeating schemas are no longer adaptive—even though they may have been successful in earlier contexts. They then reprogram the client's faulty schemas by supplanting the counterproductive behavior with new constructive leader behaviors that are reinforced through recognition and positive performance outcomes. Eventually the new behaviors become self-sustaining. As one might imagine, this is a time-consuming process often characterized by as many setbacks as times of forward progress. Behavior change in a derailing leader is further complicated since many are unwilling to take responsibility for their failings and are resistant to coaching and feedback. We can conclude that many coaches are not well prepared to successfully coach derailing leaders. Therefore, careful selection of coaches is a necessity. The skills required also suggest that most supervisors of derailing individuals will not possess the requisite coaching skills themselves.

It has been suggested that peer coaching could play a role in building accountability and support for behavioral change with derailing leaders. It is certainly a more cost-effective solution than utilizing professional coaches. But this option is not likely to be a viable for several reasons. Peers often have to maintain a façade of likeability to ensure positive working relationships. They may lack the confidence required to constructively confront a colleague who is derailing—fearing resentment or resistance if the derailing peer feels judged or threatened by them. Moreover, peers are likely to lack the sophisticated coaching skillsets needed to successfully support the complicated behavior-change process.

5.5. Formalize Onboarding Interventions for Job Transitions

One consistent trigger for derailments is the transition into a new role or to work under a new supervisor [50]. This is particularly true with transitions to senior leadership roles [51]. With these promotions come far greater visibility, more scrutiny, organizational politics which are more complex, and often-ambiguous performance expectations [52,53]. For example, newly promoted executives must address three dilemmas [54]. First, in a relatively short period of time, they need to gain mastery over a complex and demanding role. The learning demands are dramatically elevated and may be the most pronounced ones in a manager's career. Second, expectations are high that the incoming executive already has the capability to lead in the new role. In other words, they require little or no 'honeymoon'. As a result, developmental feedback and support are rare for those in the upper echelons of organizations. These two challenges lead to the third dilemma. The probability of a new executive's derailment is high. Complex new role demands combined with a lack of developmental support can produce a 'perfect storm'—the failure of the new leader.

Despite these demands, organizations rarely prepare or effectively 'onboard' leaders into senior roles. As noted in the research, weaknesses that mattered less in junior roles or strengths that were highly valued in a prior role now have the potential to become derailers. Yet if organizations are to mitigate derailments at their most senior levels, they must make serious investments in onboarding programs—utilizing a full range of interventions from assessments, to coaching, to feedback, to training. One in-depth longitudinal case study [54] provides baseline insights into the program-design features that make for a successful onboarding experience. The first is to recognize that onboarding occurs over a time frame from twelve to eighteen months on the job—not simply the first 90 days. Onboarding process therefore must be supported by *multiple interventions* instead of a single 'welcome on board' event at the moment of entry. To ensure continuous feedback, developmental interventions need to be spaced at *intervals* over the executive's first year to 18 months rather than within the first few months in the job. The fullest possible spectrum of stakeholders should be involved in the selection, entry and onboarding. All too often, the new executive's supervisor is the only individual engaged in the onboarding process. Utilizing coaches and feedback tools, stakeholders need to provide ongoing, candid feedback to the new leader. Coaches, for example, may be able to solicit richer, more accurate feedback from the leader's stakeholders when it is provided without attribution to specific individuals. In any case, the new executive needs to be aware of expressions of derailer behaviors as well as behaviors that are highly effective. Finally, onboarding interventions are completely dependent upon the quality of the *interaction* between the executive and their stakeholders. A bureaucratic process will not succeed. The approach must focus on the quality of candid *dialogue* rather than documentation and formal processes. The new executive leader must receive 'in time' critical, candid and valid feedback so that they can constructively respond and maintain or regain their credibility. Only with rigorous designs can onboarding programs play an essential role in pre-empting some of the most visible and costly leader derailments.

6. Conclusions

The research on leadership derailment has a long and rich history. Given the variety of studies, there is a remarkable level of convergence in terms of our insights into the behaviors and underlying personality disorders that ultimately produce leadership failures. Yet this body of knowledge seems to remain in a parallel universe relative to the field of leadership development. Given the remarkable costs associated with derailments, we need to integrate and translate this knowledge into rigorous inventions that have the potential to mitigate derailments. The assumption that instilling constructive leadership competencies is sufficient to address derailment is misplaced. The 'wrong stuff' attributes are indeed distinct from the 'right stuff' ones—as evidenced by decades of leadership development initiatives and expenditures in the billions of dollars that have yet to resolve the widespread problem of leadership derailments. We need a new paradigm within leadership development—one that emphasizes the need to (1) directly address derailers, doing so (2) with a richer set of interventions and (3) at earlier stages of a manager's career, and (4) to encourage scholars and practitioners in the leadership development field to invest in greater research. The long-standing reliance on 'last minute' coaching as the solution is costly in so many ways. This article and its recommendations serve as a call to action.

In terms of the limitations of the conclusions in this article, it is important to recognize that this is a conceptual paper. It needs to be backed up by research examining the efficacy of the five interventions which are proposed. For example, we know little about the coaching skills required to assist managers who are derailing. The work by Kets de Vries (2006) [35] offers insights into the clinical psychotherapeutic requirements that are likely to be foundational. We do not know whether it is feasible to discern derailers early in a manager's career. The assumption that early career exposure to the personality attributes and behaviors associated with derailment is sufficient to pre-empt leader derailments itself needs to be rigorously tested. Research investigations focusing on the following topics would advance our understanding of the topics in this article: (1) the utility of training and assessments as tools used to build awareness and ultimately pre-empt leader failures, (2) the coaching skills required to address derailing leaders and whether these are distinct from what is currently taught, (3) the development interventions for leaders transitioning into new roles which can be used to identify and address the impacts of their derailing behaviors, and (4) the effectiveness of training supervisors in the capacity to detect derailing personality attributes and to provide effective feedback. It is clear that there are significant opportunities for future research that could have a profound impact on pre-empting leadership derailments.

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behavioral sciences

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Review

The Impact of Motherhood on Women's Career Progression: A Scoping Review of Evidence-Based Interventions

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Abstract: (1) Background: Despite the progress made by women in the workplace, mothers still face systemic barriers that prevent them from advancing professionally. This "motherhood penalty" involves a variety of discriminatory practices and experiences that mothers can face at work, including being held to stricter standards regarding salary and recruitment. Despite ongoing research on the association between motherhood and career outcomes, few studies specifically explore how motherhood impacts career advancement and, consequently, access to leadership. This scoping review seeks to gain an understanding of how motherhood impacts women's career progression, and how interventions can address the underrepresentation of mothers in leadership. (2) Methods: Following the PRISMA-ScR framework, we analyzed 52 articles from 2010 to 2022, drawn from 10 databases. (3) Results: The results showed both negative and positive impacts of motherhood on career progression, affecting mothers' attitudes, feelings, and behaviors and yielding changes in interpersonal relationships and work conditions. Intersectionality is highlighted, urging a nuanced examination of challenges faced by mothers from a diversity of backgrounds. Recommendations for interventions include individual and institutional efforts, comprising societal support structures, organizational policy changes, and cultural shifts. (4) Conclusions: This scoping review offers an updated perspective on a classic challenge, providing practical insights for a more inclusive and structural understanding of the career trajectories of working mothers.

Keywords: motherhood; interventions; review; career; progression; leadership

1. Introduction

In the workplace, mothers face a motherhood penalty, where they are perceived as being unfit for leadership roles, are evaluated as less competent and less committed to their careers, receive lower salaries, and are denied advancement opportunities [1–3]. The experience of motherhood often comes with a lower sense of control and belonging, followed by elevated productivity demands [4]. As a consequence, mothers tend to occupy fewer leadership positions than men (including fathers) and childfree women.

This penalty is, at least in part, due to gendered norms and cultures inherent in career development policy and practice, which still focuses on men's experiences, values male attributes, and reinforces traditional notions of leadership [4]. Yet, to date, there has not been, to our knowledge, a systematic examination of how motherhood impacts career progression and access to leadership. Additionally, just describing the problem is not enough, as we also need to visualize which and how interventions can offer support to mothers through multidimensional sources. This should include not only their behavior as employees, but also how organizational culture and government policies, for instance, can boost mothers' career progression and hopefully pave their way towards leadership positions.

In the current research, we aim to fill this gap by conducting a scoping review of the literature to understand (1) how motherhood impacts women's career progression and (2) how interventions can address the underrepresentation of mothers in leadership roles. In doing so, this review will offer valuable insight into how to reimagine leadership with motherhood in mind.

2. Barriers to Leadership for Mothers

Although notions of "mothering" are widely acclaimed and valued throughout society, difficulties in finding balance between career and motherhood remain, resulting in career breaks and reduced work hours [4,5]. Cross-country research demonstrates that there is a decline in mothers' participation in the workforce after childbirth. On average, 24% of women exit the labor market in their first year of motherhood. Five years later, the percentage drops to 17% and after a decade, still 15% are absent [6]. Considering the rather unquestioned expectation for continued work throughout the years to favor career progression, not surprisingly, mothers remain markedly underrepresented in leadership positions.

Research has offered several explanations for why this might be. The first is stereotypes about gender and leadership [7]. Leadership remains largely associated with stereotypically masculine attributes such as competitiveness, aggression, and selfishness [8], contributing to a scenario where women are viewed as less equipped to assume leadership roles [9]. This phenomenon, known as 'role incongruity' [10], highlights the expected inconsistencies between the traditional female gender role and the leadership role. The equation of leadership with masculinity means that women and gender-diverse people who do not conform to these stereotypic expectations are at a disadvantage when applying for leadership roles, as they are less likely to be seen as typical 'leaders'. This is especially true for mothers, as the qualities expected of a mother, such as warmth and affection, are directly at odds with the stereotypical qualities expected of a leader [10,11].

The demands of motherhood may also affect the ability of mothers to perform in leadership roles. The motherhood penalty comes with an assumption that mothers are less committed or competent, which implies promotion delays, limited career options, or the need to make potentially career-harming decisions to meet children's needs [12]. With the current economic model of work, the rooted idea of the 'ideal employee' implies a person without domestic and family responsibilities who can devote long hours to uninterrupted work [13,14]. This assumption often presumes that another person, usually a woman, is at home taking care of household chores and caring responsibilities, whereas men are expected to perform the majority of financial and provider responsibilities within their households [15,16]. Gender roles within heterosexual relationships reinforce this model, such that mothers often end up working a taxing 'double shift' to manage the demands of both home and career, which may even lead to lower productivity and poor mental health [17,18].

Women with children are, therefore, caught between a rock and a hard place where to be a good mother, they must prioritize their families over their careers, but to be a good leader, they must prioritize their careers over their families. Unable to accommodate such contradictory expectations, mothers commonly deviate from the traditional career path, taking career breaks, reducing working hours, or even leaving the workforce indefinitely, all of which negatively affects their chances of career advancement. This may cause mothers to forgo leadership opportunities or even cut back at work in an effort to be a 'good' mother. When they decide to return to the paid workforce, mothers are less likely to be interviewed, hired, or promoted, and they receive lower salaries [18]. The incompatibility between career and family life can lead to a myriad of negative consequences for working mothers, including feelings of guilt, emotional overload, and fatigue, as the requirement to perform both roles properly is incompatible with reality [19,20].

Taken together, these situations create a maternal wall, composed of formal and informal forms of discrimination that hinder women's professional advancement after having children [21]. Understanding how motherhood influences career advancement and the path to leadership attainment is therefore crucial to creating inclusive and supportive environments for paid working mothers. Additionally, acknowledging these impacts can better inform organizations regarding how to develop interventions which recognize the multidimensional (individual, interpersonal, organizational, and societal) nature of the issue.

3. The Need for Interventions to Address the Underrepresentation of Mothers in Leadership

Interventions encompass a broad spectrum of activities, treatments, programs, or initiatives designed to tackle specific issues, achieve defined outcomes, or influence particular variables [22]. Considering the specific barriers that motherhood imposes on women's career advancement, gender- and motherhood-sensitive interventions may offer important opportunities for leveling the playing field if they aim to reduce gender inequality and transform social conditions by addressing structural issues such as biases and stereotypes [7].

Interventions aimed at transforming traditional notions of leadership are of particular importance. Therefore, rethinking leadership in the context of motherhood can be a strategic imperative for fostering environments that thrive on diverse approaches to problem-solving. These targeted efforts can help reconcile paid work and other roles assumed by women, promoting a more supportive environment for working mothers.

4. Current Study

Considering that mothers face systematic barriers to leadership positions, it is important to analyze how motherhood may influence women's professional ascension and the kinds of interventions that may help their path towards leadership. To initially map the issue, we first conducted a rapid review of the literature about motherhood and leadership, which revealed a scarcity of research about mothers in formal leadership positions and a particular lack of research that considers the role of interventions. Due to this paucity, the search strategies were expanded to encompass a broader scope through the use of the term "career progression" instead of "leadership". A new rapid search was accomplished, which evidenced the feasibility of a scoping review to analyze career progression instead of leadership.

Career progression extends beyond mere leadership and encompasses a broader spectrum of career aspects, including various professional advancements that may not necessarily involve formal leadership roles. Indeed, both the prevailing definitions of career advancement and leadership often perpetuate a male-centric viewpoint, concentrating solely on high-ranking executive positions rarely held by mothers. Adopting a broader perspective allowed us to recognize and embrace the diversity inherent in professional success, considering the varied career trajectories that women, particularly mothers, may pursue.

Although the literature has advanced in terms of analyzing how motherhood may impact career progression, to our knowledge, there is no systematic literature review on this topic, or even on interventions in this context. This gap is concerning, as the design of actions and strategies to foster mothers' economic and labor participation need to be grounded on a solid foundation of evidence-based research. To achieve this, there is a need to explore and map the state of the art on the topic, which can be done through a scoping review. Additionally, a scoping review allows for identifying the current gaps in the literature, which is paramount for guiding research agendas. By mapping how the latest research has investigated the impact of motherhood and career progression, we expect to offer systematized evidence for fostering future research and interventions aimed to help mothers ascend professionally. The following research questions were investigated:

(1) How does motherhood impact women's career progression?

(2) How can interventions address the underrepresentation of mothers in leadership?

5. Method

5.1. Study Design and Report Guidelines

We conducted this scoping review based on Arksey and O'Malley's [23] five-step methodological framework: (1) identifying pertinent research questions, (2) conducting a comprehensive search for studies relevant to our research questions, (3) employing a systematic study selection process with predetermined eligibility criteria, (4) charting relevant data from included studies using Rayyan as a data extraction tool, and (5) summarizing and reporting the results. We also employed the preferred reporting items for systematic reviews and meta-analyses extension for scoping reviews [24], and four of the authors (AJ, LB, OM, UG) assessed the papers for quality according to PRISMA-ScR checklists.

5.2. Search Strategy and Databases

Our search strategy was grounded in the peer review of electronic search strategies checklist [25]. We used the following databases: Lilacs, Pepsic, Scielo, PsycInfo, EBSCO, Web of Science, Scopus, MEDLINE/Pubmed, EMBASE, and CENTRAL. We chose ten databases, in line with best practice [26], and due to their coverage of most publications on the topic. We also included three Brazilian databases (Lilacs, Pepsic, Scielo), considering the nationality of most of the authors, the fact that they are open access, and that numerous Brazilian authors publish in English in the Brazilian journals that are featured in these respective databases. We filtered peer-reviewed articles from 2010 to 2022, including publications in English. We used the search string for the title, abstract, and keywords fields.

We used the population (working mothers), concepts (motherhood, career progression), and context (workplaces, academy, and organizations) framework to define the search terms. After the refinements, we used the following string for the search: ("parental role" OR "mother" OR "mothers" OR "motherhood" OR "mom" OR "moms") AND ("career pathways" OR "career trajectory" OR "career breaks" OR "career interruptions" OR "child penalties" OR "motherhood penalty" OR "motherhood bias" OR "career success" OR "career achievement" OR "career progression" OR "career advancement" OR "professional advancement" OR "job progression" OR "job advancement" OR "work advancement" OR "work progression" OR "maternal wall").

5.3. Eligibility Criteria and Study Selection Process

Our eligibility criteria were: (a) articles published in peer-reviewed journals; (b) articles written in English; (c) full-text availability; (d) publication year between 2010 and 2022; (e) quantitative, qualitative, or mixed methods; (f) samples should include women; (g) title, objective, and/or variables should address motherhood, career advancement, and interventions. We analyzed only articles in English due to limitations of time and resources, and the choice to focus on a 10-year timeframe was made in order to provide a contemporary overview of the topic. Articles with mixed-gender samples were included as long as they had separate data on mothers.

We uploaded the articles retrieved from the databases to Rayyan [27], with duplicates excluded and the initial screening of titles and abstracts conducted by three of the authors, coded as AJ, LB, and UG. After the screening process, we fully read the remaining articles, which were independently evaluated by the same three authors. A fourth researcher helped the authors reach a consensus.

We first conceptualized our research questions and purpose based on a rapid review of the motherhood and leadership literature. The rapid review revealed that there is little research about mothers in leadership positions, so using career progression as a term proved to be more comprehensive. Afterwards, we elected a population, concepts, and context (PCC) framework to improve the research question and purpose of this study:

Population: working mothers over 18 years old;
Concept: motherhood, career progression, leadership;
Context: academia and organizations.

5.4. Data Extraction and Synthesis

Four of the authors independently conducted data extraction using a standardized data extraction sheet. The extracted information encompassed author details, publication dates, journal main nationality, first authors' nationality, aims, study type (qualitative, quantitative, or mixed methods), research design (experiment, case study, longitudinal, or cross-sectional), data collection method, participant sample, context, intervention type (if applicable), main results, conclusions, and key findings that relate to the research questions.

5.5. Study Selection Process

The search and selection of articles is detailed in Figure 1. Initially, we found 895 articles in the 10 selected databases, but after excluding duplicates, we analyzed 413 articles based on their titles, abstracts, and keywords. In the eligibility analysis, we fully read 91 articles, and the final sample consisted of 52 articles that met all the inclusion criteria. The inter-rater agreement rate was 49.5% between the three authors that worked as judges (AJ, LB, UG).

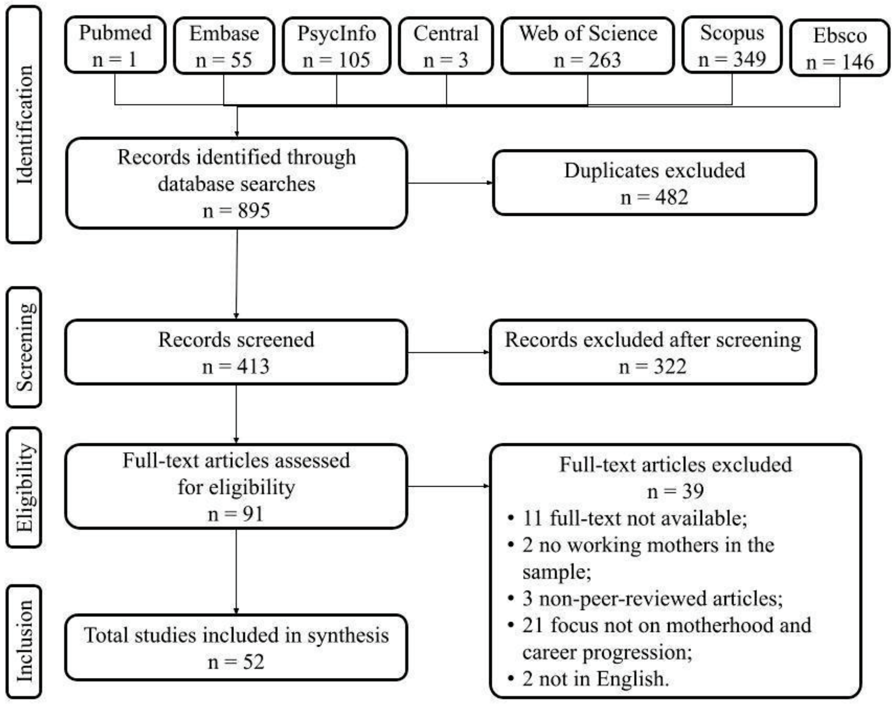

Figure 1. Stages of data collection for the literature review.

6. Results

General Characteristics

Of the 52 articles we included, 48.1% were quantitative, 34.6% were qualitative, and 17.3% used mixed methods. Most used a cross-sectional design (53.8%) and surveys as the data collection method (63.5%). The highest percentage of author nationality, regarding the university of affiliation, was the USA (28.8%), while most of the journals were based in the United Kingdom (44.2%), according to information extracted from the Scimago Journal & Country Rank. The journal with the most publications (9.6%) was Gender, Work & Organization. Regarding the year of publication, 2021 was the year with the most papers (11), followed by 2022 (7). Finally, most of the studies, 55.8%, used a female-only sample, the research was conducted in organizations (51.9%), and it generally did not distinguish between the knowledge field of the participants (61.5%; see Table 1 for details).

Table 1. Characteristics of the included studies.

Categories	n	%
Nationality of the 1st author		
USA	15	28.8%
Germany	7	13.5%
Others (e.g., Sweden, UK, Norway, Austria, Republic of Korea)	30	57.7%
Journal origin		
United Kingdom	23	44.2%
USA	15	28.8%
Others (e.g., Netherlands, Switzerland, Germany)	14	26.9%
Publishing journals		
Gender, Work & Organization	5	9.6%
Acta Sociologica	2	3.8%
Advances in Life Course Research	2	3.8%
Gender & Society	2	3.8%
Gender in Management: An international journal	2	3.8%
Labour Economics	2	3.8%
Social Sciences	2	3.8%
Research design		
Quantitative	25	48.1%
Qualitative	18	34.6%
Mixed methods	9	17.3%
Research design		
Cross-sectional	28	53.8%
Experiment	21	40.4%
Longitudinal	2	3.8%
Data collection method		
Survey	23	44.2%
Interview	33	63.5%
Sample composition		
Female	29	55.8%
Mixed gender	23	44.2%
Context		
Organization	27	51.9%
Academia	18	34.6%
Not reported	7	13.5%
Knowledge field		
No distinction	32	61.5%
STEM	4	7.7%
Medicine	3	5.8%
Others (e.g., tourism and hospitality, accounting, advertising, education)	13	25.0%

We gathered and analyzed further categories addressing the main findings of each paper to answer the two research questions. More detail on the findings for each question are available in Supplementary Tables S1 and S2.

7. Discussion

7.1. Question 1: How Does Motherhood Impact Women's Career Progression?

7.1.1. More Barriers to Leadership for Mothers

Unsurprisingly, the reviewed literature reinforced that women are still less likely to occupy a leadership position after becoming mothers and indicated multiple barriers to women's leadership and career progression more generally [28,29]. Our analysis evidenced that many of the barriers that women face with regard to their career progression are treated as internal, personal choices rather than structural problems, e.g., references [30–32].

The most frequent internalized barrier had to do with the societal expectations that mothers must put the needs of others before their own, sacrificing their own interests and career aspirations to fulfill motherly duties, e.g., references [33–35]. Mothers still face identity conflicts caused by unrealistic ideals of what is a good mother and a successful worker [36,37], in addition to the emotional challenge of being mostly responsible for what their children will become [38]. Women declined promotion offers, in part, because of the double burden caused by the accumulation of family and leadership responsibilities, e.g., references [30,32,33].

A lower sense of control over professional life was identified, followed by negative feelings like stress and guilt, lower satisfaction with their achievements, more fear of job loss, and a lower sense of entitlement to use benefits such as reduced hours or maternity leave [35,39–42]. Additionally, mothers experienced a lower sense of belonging at work, as they often had to prove themselves by putting more effort in to achieve higher positions than their childfree counterparts [30].

In contrast to the focus on internalized barriers such as self-blaming and self-management of motherhood, other studies analyzed more contextual aspects. Time availability was identified to be one of the major contextual barriers to mothers in senior positions or leadership aspirants, as caregiving responsibilities put additional constraints on their time and availability [31,35]. Compared to fathers, mothers are more limited in terms of their availability to participate in events outside of work hours or to travel for business [43]. Therefore, the evidence shows they are disregarded from positions that require extended time away from home, a common demand for many leadership roles [44,45]. As a consequence, some studies emphasized the monetary losses post-motherhood, focusing on wage penalties, incoming losses due to reduced working hours, and transitions to lower-earning occupations [31,46].

Motherhood was also associated with lower job retention due to barriers like poor access to childcare or other work–life balance challenges, e.g., references [31,32]. In some cases, mothers reported experiencing career interruptions in the form of returning later than expected to work, resorting to informal, flexible, or part-time work, postponing promotion opportunities, or even dropping out of the workforce indefinitely, e.g., references [28,33]. Other papers addressed how exclusively female parental leave policies contribute to reducing women's career opportunities, professional networks, and partnerships, e.g., references [30,36,47].

7.1.2. The Weight and Endurance of the Motherhood Penalty

The analyzed articles demonstrated the persistence of the motherhood penalty, as they documented the ways in which mothers are impacted by notions of the 'ideal worker' who is free from domestic responsibilities and able to work overtime whenever needed. Such stereotypes remain the default assumption in many workplaces and are in direct conflict with societal expectations of mothers, implying they should be the primary caregivers and homemakers within their families [11]. The consequences are that mothers experience elevated turnover rates, frequent employment transitions, low-paying positions, and a lower likelihood of being recommended for hiring in comparison to men [47–51].

The motherhood penalty also evidences how mothers are commonly devalued and subject to scrutiny and doubts over their commitment to their work. The belief that women "use" pregnancy or motherhood to avoid work still exists [38]; mothers face constant discrimination and have their personal life as a current topic of debate at workplaces, in addition to being labeled as "the pregnant one" or "the one with the baby" [52]. Women may be penalized just by achieving childbearing age, corroborating the negative impact that even the prospect of motherhood may have on their careers.

Due to the often unrealistic expectations of time availability and flexibility in leadership positions, the motherhood penalty contributes to the perception that mothers are unsuitable for leadership roles. Benard and Correll's [48] study, for instance, showed how mothers or pregnant women are rated as less competent, less committed, held to stricter standards, and penalized in salary and hiring decisions when compared to their childless counterparts. Mothers are also assigned to less interesting tasks, are not seen as suitable for management positions, and have to struggle to maintain their credibility [18,53]. Similar results were found by Thébaud and Taylor [51] and Schlehofer [52], which show how mothers are subjected to reduced competency perceptions and are viewed as less hirable.

As if it was not enough, there was also evidence of a dominance penalty for those who excel during motherhood: highly successful mothers were rated as less likable and warm, which can lead to penalization in other forms such as salary, hiring, and other organizational rewards, e.g., references [54]. Therefore, we can say that research in the last 10 years attests to how society pressures mothers to bear the brunt of responsibilities around childcare and family life, often compromising their career aspirations and progression.

7.1.3. The Motherhood Advantage?

In contrast to the penalties outlined above, some of the reviewed articles highlighted positive career outcomes linked to motherhood, as the experience of motherhood is many-sided and has the potential to promote new skills development. For instance, women reported improved work relationships, perceiving greater appreciation by their colleagues as working mothers than they did before having children [51], and more efficient time management and problem-solving techniques [55]. Other studies indicated women felt greater motivation to complete different work responsibilities after becoming mothers, such as finishing coursework, as well as an increase in cognitive knowledge, seen to be a result of coping with motherhood challenges such as taking care of children and multitasking to complete household chores [32,43,55,56].

One article in particular showed a wide range of positive impacts of motherhood for job performance and career advancement in the U.S. tourism and hospitality industry [55]. This study highlighted how working mothers may experience more courage and increased confidence to pursue positions involving management and leadership roles. Mothers were reported to have improved willpower and emotional intelligence, which included more patience, tolerance, positive emotions and attitudes, confidence, and a stronger mindset.

As for more tangible outcomes, unexpectedly, Ma [56] and Magnusson [43] showed that wages can be positively impacted by parenthood for men and women, as they found that after childbirth, average wages were higher for married/cohabiting respondents with children for fathers and mothers. Regarding career progression, Morgenroth et al. [18] found that stereotypes of mothers are seen as more similar to stereotypes of managers and ideal managers than stereotypes of women in general, evidencing a benefit for mothers in terms of stereotype content. Therefore, despite working mothers experiencing more negative than positive impacts overall, the reviewed studies demonstrate how motherhood can also bring certain benefits to career progression.

7.2. Question 2: How Can Interventions Address the Underrepresentation of Mothers in Leadership?

7.2.1. Can Individual-Focused Strategies Work as Effective Interventions?

Some of the interventions we identified in the career literature focus on individual-focused strategies; that is, women's individual efforts and agency to manage their careers. Career counseling is one example, which was suggested to help mothers in assessing career goals, developing strategies, and making informed career decisions [57]. Likewise, therapeutic support services such as individual counseling or support groups are also indicated to assist them to address internalized stigma, navigate societal expectations, and develop coping strategies to deal with the challenges of balancing motherhood and career.

Skills development was identified as another personal strategy to reduce family–work conflict and maintain professional relevance even if mothers choose to slow down their career progression temporarily. Among these, time management skills were proposed to facilitate the balance between motherhood and career demands [58]. Learning negotiation skills, in turn, was proposed to support mothers in discussing working conditions with their supervisors or human resources [59].

Seeking further education was a commonly suggested strategy for tackling career progression barriers. Education on women's rights and labor laws, for instance, were recommended to make women aware of their rights and legal protections against discrimination at work [46,60]. Financial literacy education was also proposed as something important for mothers, since budgeting, savings, and investment strategies could help them navigate career transitions, especially during economic crises [32,44].

What these strategies have in common is that they all focus on individual efforts women can pursue—which usually involve changing themselves or their behavior—to "compensate" workplaces for their motherhood. Such individual strategies may be useful to a degree, but they do not acknowledge the societal, cultural, and economic barriers women face. In their review, Ryan and Morgenroth [61] classify such interventions as those that try to provide women with the 'right' tools and skills to achieve leadership positions. However, these may end up being problematic due to a number of reasons such as the reinforcement of gender stereotypes, which indirectly blame women for inequalities and fail to address the root of gender inequalities. Women, especially mothers, should not be solely held accountable for changing a system that inherently perpetuates inequality and discrimination.

Beyond the interventions identified in the reviewed articles, recommendations from Oliveira-Silva and Barbosa-Silva [7] emphasize that interventions for gender equality should be multilevel and target systemic sexist structures, such as the gender norms and stereotypes that contribute to perpetuating women's main and naturalized role in reproduction, nurturing, and child rearing. When transposing these recommendations to motherhood and career, they would include actions at the interpersonal level, such as discussing the desired number and spacing of children with a partner, how to share and balance family priorities, and the impacts of postponing pregnancies in favor of a career—a dilemma so familiar for women but so unknown to men.

Although not clearly identified in the reviewed literature, we also highlight the importance of adopting an intersectional perspective, such that identity markers (e.g., race, ethnicity, sexual orientation, or socioeconomic status) and the specific conditions of mothers (e.g., number and age of the children, marital status, and support network availability) are considered. Therefore, we should be aware of interventions that imply we need to "fix" women [61]; instead, interventions should aim to address the broader societal structures by changing workplace and government policies, culture, and practices.

7.2.2. Interventions to Restructure How We See Motherhood and Leadership

Interventions should challenge traditional gender norms and lead to a cultural shift that redefines societal perceptions of motherhood and leadership. It is important to celebrate the diverse roles women can occupy, recognizing they can be whatever they want—including leaders. To make this possible, we need to tackle stereotypical and unreasonable views of what constitutes a "good" mother and a "successful" leader.

Valuing care work and promoting an equitable division of family duties is essential, as it contributes to contesting the notion that women should be the primary caregivers. This also implies recognizing the socioeconomic significance, effort, and skills involved in taking care of children and elderly people [62]. Although the following interventions do not exhaust the needs and barriers faced by mothers in their careers, the combined efforts of individuals, organizations, and governments are necessary to tackle some of the unequal structures that still hinder women's decisions professionally and personally.

It Takes a Village to Raise a Child

Overall, cultivating connections and counting on the support of other people is essential for creating an environment where mothers feel acknowledged and empowered while also respecting their multifaceted identities. Several articles in our sample, e.g., references [44,58], indicated the support of family and friends as a key enabler for mother's career progression.

Therefore, career arrangements that allow for the equal sharing of family responsibilities with spouses is a must, and it is important for couples to have open communication, outlining responsibilities and expectations with a clear understanding of each partner's responsibilities, as highlighted by part of the reviewed articles, e.g., references [36,37]. Additionally, we propose that having immediate family members (such as parents, siblings, or friends) close by and adding to the support network also represent meaningful boosters to women's career advancement. Such community and family support is especially critical for the career progression of single mothers.

The Importance of Women Helping Other Women

Based on the findings of Bowyer et al. [30] and Eren [36], we propose that interventions involving role models may be especially helpful, as getting to know other stories could support women in navigating the duality of work and motherhood when exploring different career paths. Networking is also important, and it can be done by actively engaging with other parents (within or outside the workplace) to build a peer support network to share experiences and career and family related advice. Within the workplace, this network may be an important source of feedback for mothers regarding their skills and contributions, since they may show a tendency toward understatement and poor self-assessment, as shown by Schueller-Weidekamm and Kautzky-Willer's results [58].

Schueller-Weidekamm and Kautzky-Willer [58] and Kristensen et al. [63] propose that organizations can also invest in mentorship programs, succession planning, or leadership programs that promote female talent and emphasize collaborative leadership styles, challenging the traditional views of what makes a good leader. For best practices, in addition to providing instrumental and psychosocial support for mothers through mentoring, workplaces can stimulate formal women's platforms and networks to foster connection and sharing experiences [44,55].

Focusing on Workplace Arrangements Makes a Difference

Regarding organizational interventions, they need to go beyond the usual "leave" policies and also provide "return" and "stay" policies; an approach that is often underestimated. In addition to extended parental leaves (which are indeed important), organizations should also provide a safe environment to which women would like to return, rather than a work structure that maintains the status quo and penalizes them for trying to balance family responsibilities and a career. One way to achieve equality for mothers is to create opportunities for them to continue working while also raising their children, enabling a real integration between work and family, which requires profound changes in workplace practices [48,64].

Therefore, organizations should focus on flexible policies and work arrangements in response to the changing family circumstances of their employees, such as adjusting working hours, offering remote work options, or avoiding planned meetings late at night. They could also enable job redesigns and temporarily restructure the roles of pregnant women or new mothers by assigning them administrative work and less travel, as suggested by Whittington [28].

Based on the common negative impacts identified in the reviewed articles, we propose that inclusive events and activities, child-friendly spaces, and breastfeeding rooms are other good initiatives to promote a more children-friendly work environment. Maternity leave is one of the main reasons for women's career breaks and may be a "burden" to mothers according to Maxwell et al. [59], while fathers often continue to work and advance professionally regardless of their family situation. Therefore, parental leave should be equally shared, allowing families enough time to bond with newborns and achieve a more equitable distribution of caregiving responsibilities. Organizations can facilitate this by encouraging and supporting men to participate equally in caring roles by reframing caregiving in ways that facilitate agentic goals and normalize men's participation in these roles [65]. Male managers and leaders who role model equal parenting may also help to achieve these aims. Organizational and governmental policy that introduces a well-paid, nontransferable "use it or lose it" policy for parental leave of fathers and secondary caregivers may also help to normalize men's equal participation in caregiving [66], as well as initiatives that address men's own gender role attitudes and biases [67].

Flexible work arrangements should also be combined with family-friendly benefits, like extended parental leave, on-site childcare facilities, and the possibility of taking days off for caregiving reasons. Considering the risk of losing a position while taking parental leave, organizational policies could regulate the hiring of substitutes to replace workers, as well as structured return programs (with phased return schedules, mentorship, training, and reintegration support) for mothers, as proposed by Bowyer et al. [30] and Halrynjo and Mangset [50].

Building a Supportive Organizational Culture for Mothers

Organizations need to build a supportive work culture that values work–life balance, diverse identities, personal well-being, and cultivates positive attitudes toward mothers and caregivers of any gender. We suggest that this could be done by inviting mothers and caregivers returning from parental leave to share their experiences, recognizing soft skills gained in parenthood and guardianship and encouraging leaders to openly express support for employees' family commitments, explicitly manifesting how these responsibilities are known and valued [59,68].

We recommend structured anti-discrimination and anti-harassment policies with anonymous reporting systems, as these are pivotal to foster transparency and accountability, building a safer work environment for women in response to the motherhood penalty identified by Härkönen et al. [60] and Benard and Correll [1]. These policies could also be followed by performance evaluations relative to opportunity, since negative views towards mothers are commonly reflected in lower salaries and reduced advancement opportunities, as shown by Bear and Glick [46] and Kristensen et al. [63]. While implicit bias training may raise awareness of gender stereotypes that affect the perception of mothers, considerate evaluation practices can help reduce inequities in salaries, performance reviews, promotions, and recognition.

We emphasize that performance evaluation practices need to be carefully planned. Ignoring caregiving status by evaluating mothers based only on their performance increases inequalities and preserves disproportional systemic challenges. Considering that mothers are often primarily responsible for domestic labor, face more career interruptions, have reduced work hours or double-shifts, and deviate from traditional career paths, performance assessments should take such factors into account and use specific metrics for mothers based on their context, responsibilities, and challenges while also recognizing the skills and experiences gained through caregiving [50].

These initiatives can be complemented by a more collaborative approach to work. Cross-training programs within teams, collective resources, and collaboration platforms could enable the sharing of experiences and foster a more proportional distribution of demands, responsibilities, and rewards, as proposed by Kibelloh and Bao [69] and Halrynjo and Mangset [50]. This could facilitate transitions and reduce the risk of job loss during parental leave, in addition to dismantling traditional hierarchies and promoting inclusivity. However, this needs to be analyzed in terms of the nature of the job, as in some cases, limited autonomy may be a barrier for mothers' career advancement, according to Hancioglu and Hartmann's [70] findings.

Academic careers are especially challenging to new mothers, given the reward system focused on productivity and publication records that place significant constraints on their career progression. We urge a re-evaluation of the criteria for recognition, tenure, and promotion, since academic mothers are commonly unable to comply with the same standards as their male counterparts given their often disproportionate caregiving and domestic responsibilities compared to their male counterparts. Therefore, institutions should promote fairness in the evaluation process and rethink the role of productivity with employees' caregiving responsibilities in mind. This can be accomplished by accommodating interrupted publication records, extending evaluation periods, or recognizing diverse forms of scholarly outputs other than publications, such as data sharing, teaching, collaborative projects, and community-based interventions [30,36].

More generally, each organization should analyze the specific conditions of its employees, since women with dependent children are not a homogeneous group (e.g., number and age of children are related to different career outcomes [33,70]). This follows Oliveira-Silva and Barbosa-Silva's [7] recommendations for tailored interventions targeting audience-specific needs and characteristics.

The Role of Childcare-Related Government Legislation

The economic costs associated with having children are one of the main difficulties faced by mothers, especially single mothers and those from disadvantaged backgrounds. Therefore, governments need to structure legislation to guarantee mothers' rights, alleviating the challenges associated with childcare. This could be done by providing affordable, reliable, and accessible childcare services, or by offering tax credits for childcare expenses.

Financial constraints not only increase the likelihood of withdrawal from the labor force but also compel mothers to take jobs of lower status and salaries, which directly hinder their career, as stated by Ma [56] and Hancioglu and Hartmann [70]. Therefore, we emphasize the need for social safety nets and government programs that offer financial support, healthcare, food security, and housing assistance for low-income families, added to reemployment programs. These are especially important during economic crises, as shown by Staniscuaski et al. [44] and Cha [71].

Legislation that guarantees rights for part-time and short-term contract workers is also important, considering that many women from lower social classes are obliged to invest in such career arrangements after motherhood [33,36]. To ensure poorer mothers are not being even more marginalized, we recommend governmental interventions to focus on providing protections against job loss, as well as fair treatment and mechanisms for transitioning contract workers to permanent roles. Another important issue that should be government-level regulated is breastfeeding, with public policies including the creation of lactation spaces [32,72]. Legislation for equal pay is also important to guarantee that mothers are being fairly compensated for their work and to avoid deepening the gender pay gap, as shown by Bear and Glick [46].

Education plays a crucial role in addressing motherhood penalties, so providing specific training programs and learning resources are important strategies to improve mothers' employability, keep them updated on industry trends, and facilitate their return after career breaks, as proposed by Ma [56] and Härkönen et al. [60]. However, we highlight that education should not target everybody—not only mothers—especially when involving awareness campaigns that challenge stigmas associated with motherhood. This could be achieved by sharing and underscoring successful stories of working mothers, bringing attention to the systemic barriers and stereotypes faced by them, or communicating the benefits associated with family-friendly policies. By educating people about the challenges and contributions of mothers, it is possible to encourage empathy and support from colleagues, employers, and society in general [48,51].

Work in academia should also be targeted by national initiatives that reshape evaluation metrics, recognize outputs such as teaching and service contributions, provide funding for hiring research assistance (which can help mothers with the academic workload), postpone deadlines, and provide flexible work arrangements to mothers, as suggested by Maxwell et al. [59] and Eren [36]. Additionally, public funding agencies need to finance and support research on gender biases or working mothers' experiences as means of obtaining evidence to inform public policies and legislations.

8. Limitations and Recommendations for Future Research

This review is limited by its exclusive analysis of English-language papers, potentially excluding valuable studies in other languages and introducing cultural bias by emphasizing perspectives from English-speaking countries and scholars. Additionally, the 10-year timeframe chosen for analysis, while intending to offer a contemporary perspective, does not allow us to examine historical shifts in workplace dynamics and societal attitudes toward motherhood. Future investigations might consider analyzing longer-term trends, exploring the influence of time, changes in media representations, and the impact of different generations on the career trajectories of mothers. This approach could provide a more nuanced understanding of the complex interplay between societal changes and the career experiences of mothers.

Despite its methodological limitations, this scoping review evidenced important gaps in the scholarship about motherhood and career progression. The lack of intersectionality must be stressed as a relevant characteristic of the reviewed literature. Some studies did not provide basic intersectional information about their participants, such as socioeconomic status, race, ethnicity, class, gender identity, sexuality, or marital status, in the main analysis. Not surprisingly, the reviewed literature presented a predominantly heteronormative perspective about motherhood by overlooking the experience of mothers with diverse sexual orientations or gender identities. Furthermore, the presence of a (typically male) partner was often presumed, leaving the experiences of single mothers under-examined. An additional gap was the lack of studies considering the broader macroeconomic context in which the participant mothers were situated. This is essential, as economic crises are directly related to job availability, salaries, and advancement opportunities, such that financial struggles can also stimulate mothers to return earlier from maternity leave and work for long hours.

Accessing sample characteristics, especially with regard to if and how those from minoritized groups are included, is crucial to design appropriate interventions and unfold theoretical implications. Considering the intersectionalities different women face around the world is mandatory, especially because career progression may change significantly depending on the mother's background.

An important aspect that future studies should consider is the representation of women among the authors of studies about motherhood. It would be insightful, for example, to investigate how many authors self-identify as women. This could shed light on how much women, more than men, are engaging with and contributing to the discussion and investigation of this topic. Understanding the publishing experiences of researchers who study topics related to motherhood and gender inequality could provide insights into the biases and obstacles that exist within academic publishing systems. Additionally, it could prompt further examination of the barriers and challenges that women face in academic publishing, especially in fields where the motherhood penalty is particularly pronounced.

Therefore, future research on motherhood and career should be more intersectional and inclusive, with a greater emphasis on contextual and structural inequalities when addressing interventions for career progression. Diverse family configurations (e.g., lesbian and gay couples, single mothers, non-monogamous families) and multiple cultural and social factors must be considered as often as possible, as the sexual division of labor can vary depending on cultural values and how mothers are socially perceived.

9. Conclusions

This scoping review provided a deeper understanding of how the literature has investigated the impact of motherhood on women's career progression. Most of the identified impacts were negative and corroborated the motherhood penalty, with concrete barriers to career advancement and leadership. On the other hand, we also identified positive aspects of the relationship between motherhood and career outcomes, usually related to mothers developing more interpersonal, time management, and problem-solving skills.

Despite our attempt to analyze the literature regarding career progression instead of leadership, we were still confronted with an androcentric view. Even the career progress notion was shown to be highly influenced by a typical masculine model of work. In addition to perpetuating a narrow view of what it means to achieve career progression, this fosters gender stereotypes and limits the understanding of diverse career trajectories, especially those pursued by women, working mothers, and other minorities.

Considering how attitudes, feelings, and behaviors resulting from motherhood are mainly caused by situations which women have little control over and those that result from the interaction between work responsibilities and childcare availability, the role of interventions is essential. However, they must focus not only on micro-level actions but also cover the multifaceted dimensions that affect motherhood and care work in workplaces and societies. Therefore, this scoping review provided an updated perspective on a stubborn issue, offering practical insights to encompass its complexities and contribute to a more inclusive and structural understanding of the career trajectories of working mothers.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/bs14040275/s1. Additional data and files were uploaded as "Supplementary Files" during the manuscript submission process: Table S1. Impact of motherhood on career progression; Table S2. Career interventions for mothers' career progress. References [73–84] are cited in the supplementary materials.

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behavioral sciences

Protocol

Developing Leadership: The Integrative Approach of Pro●Leader Intervention Program

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Abstract: The impact of leaders on organizational success has been widely documented, and consequently, the leadership training industry has expanded over the past decades. However, this investment has not consistently translated into better leaders. Leadership intervention programs have received notable criticism, including (a) lacking individualization ('one size fits all' approach), (b) an emphasis on pre-defined skills, and (c) insufficient consideration of context, disregarding other members' and organizations' characteristics. This paper introduces and discusses Pro●Leader, an intervention program based on the Leadership Efficacy Model (LEM), which aims to promote leadership through a comprehensive approach to training. In essence, LEM proposes that leadership efficacy increases if leaders are congruent in how they intend to exert leadership (conceptual cycle of leadership) and how they indeed implement the leadership (practical cycle of leadership), considering also the leadership behaviors they display when exerting influence (leadership styles), as well as their own, team members', and contextual characteristics (antecedent factors). The Pro●Leader intervention program is structured according to the LEM and trains participants across these three components: leadership cycles, styles, and antecedent factors.

Keywords: leadership training; Leadership Efficacy Model; leadership styles; leadership plan; leadership cycles

1. Introduction

The role of leaders in organizational success is widely recognized. Leadership is a process of influencing others towards common goals, promoting organizational productivity and profit and, consequently, competitive advantages (Hogan & Kaiser, 2005; Kaiser et al., 2008; Voon et al., 2010; Yahaya & Ebrahim, 2016). By the end of the 2000s, in the United States alone, leadership training was a $14 billion industry (O'Leonard & Loew, 2012) and in 2018, Kellerman (2018) argued for an estimation of around $50 billion being spent on leadership training. However, the investment in leadership training and development has not consistently produced better leaders (Kaiser & Curphy, 2013). A report released by McKinsey & Company showed that two-thirds of the 500 senior executives interviewed considered leadership development as the most urgent concern of human capital (Gurdjian et al., 2014). If companies are investing so heavily in leadership development, why does it remain such a pressing issue? Does this suggest that leadership development programs are failing to enhance leadership efficacy?

Do Organizations Need Leadership Development Programs?

Previous research has shown that leadership interventions are effective in a wide range of outcomes, such as promotions and assuming leadership roles, increasing leadership knowledge and technical performance, and reducing organizational absenteeism (Dannels et al., 2008; Day et al., 2010; Geerts et al., 2019; Straus et al., 2013; ten Have et al., 2013). A few meta-analyses of such research summarize the results. For example, Cummings et al. (2021) conducted a meta-analysis examining 93 studies with nurses (44 correlational studies and the remaining intervention studies) and concluded that participating in leadership interventions had a positive effect on the development of relational leadership styles. Moreover, the authors highlighted five categories of factors contributing to nursing leadership across studies: experience and education (e.g., professional development opportunities and performance feedback), leaders' traits and personal characteristics (e.g., age, emotional intelligence, adjustment), relationship with work, role in the organizational setting (lower seniority), and organizational context. When examining only the studies where an intervention occurred ($n = 49$), in 82% of them, self-reported leadership increased post-intervention, and in 20% of them, it was reported that there was an increase in observed leadership practices. However, it is important to note that few experimental intervention studies (i.e., those including a control group) were included in this meta-analysis.

Avolio et. al. (2009) took a step further and conducted two meta-analytic reviews on leadership interventions and their impact. The study included different theoretical frameworks for leadership development (e.g., trait theories, transformational leadership), different interventions (training, assignment, scenario, or others), methodologies (experimental and quasi-experimental, lab and field studies), and organizations (public and private). The overall results support the idea that leadership interventions are effective and contribute to positive outcomes. However, the studies included in this review were notably heterogeneous, as the authors noted, and therefore, their effects need to be carefully considered. More specifically, two major concerns were highlighted.

First, authors compared effect sizes produced by studies that tested leadership interventions vs. other experimental methodologies (e.g., using scenarios or vignettes). While effects were generally similar, they were slightly weaker for leadership interventions compared to other experimental studies (Avolio et al., 2009). One possible explanation proposed by the authors is that other laboratory studies did not occur in the real organizational setting, and, therefore, other factors impacting leadership effectiveness were controlled for, which may have increased effect sizes. The results may also have depended on the outcome measure chosen to evaluate its efficacy, as developmental changes may be more difficult to impact (Avolio et al., 2009).

A second important moderating effect refers to the theory behind the different studies included. More specifically, Avolio et al. (2009) compared three groups of leadership theories: "traditional theories" (e.g., Trait and Contingency Theories), which dominated leadership research until the late 1970s; "newer theories" (e.g., charismatic, inspirational, transformational, and visionary leadership theories); and "Pygmalion based leadership" (e.g., self-fulfilling prophecy effects). These were compared across different types of outcomes: affective (e.g., satisfaction/enjoyment), cognitive (e.g., level of idea generation or confidence), and behavioral (e.g., performance measures of behaviors). The Pygmalion-based studies showed an overall larger effect than the other two theory-based studies, and studies that designed interventions based on "newer" theories showed larger effects on affective and cognitive outcomes when compared to "traditional" theories, and the opposite pattern was found for behavioral measures.

So, if research appears to show that leadership interventions enhance positive results, and organizations continue to invest in leadership training, why is there still a concern about the state of leadership development today? Avolio et al. (2009) meta-analysis included 200 studies over a century of research, but this is not a representative sample of the research conducted on leadership (Avolio et al., 2009; Kaiser & Curphy, 2013), suggesting that an important proportion of studies, which may have yielded no effects or negative effects of leadership development, were not considered because they were not published (cf. Siegel et al., 2022 for a review on publication bias in organizational psychology). Moreover, of the studies considered in the meta-analysis, around two-thirds showed a positive outcome. However, these were largely affective and cognitive outcomes, with relatively few focusing on behavior or actual performance results (Kaiser & Curphy, 2013). The remaining one-third of the interventions reported no positive outcomes. Given that published studies are often more rigorously designed than the remaining interventions, the actual failure rate may be higher than 1:3 (Kaiser & Curphy, 2013).

Some criticism has been made of leadership intervention programs, which may help explain the failure rate and, consequently, the leadership efficacy. The first concerns the lack of rigorous impact evaluation. Leadership interventions offered in the industry are rarely evaluated, or, when evaluated, they often rely only on participants' feedback (Alimo-Metcalfe & Lawlor, 2001; Gurdjian et al., 2014; Kaiser & Curphy, 2013; Kellerman, 2012). The questions raised regarding leadership interventions' effectiveness have increased pressure for impact demonstration so a return on investment can be established (Geerts et al., 2019). More research on the impact of leadership interventions on behavioral change is needed, as well as an assessment of its long-term effects. Second, most well-known leadership interventions are pre-defined and skill-focused (Lega et al., 2017), and it is very difficult, due to the complexity of leadership processes, to argue that "one size fits all" interventions would be adequate to promote behavioral change in different organizational settings. Tailoring interventions to meet individuals' needs increases the likelihood of achieving better results (Melton & Brooks, 2022; Richter et al., 2015). Moreover, it is key to identify one's deep thoughts, feelings, beliefs, and assumptions about behavior to change it (Gurdjian et al., 2014), which will be difficult to achieve without an individualized plan of intervention. A third, and arguably the most significant, criticism is that many interventions fail to adequately consider contextual factors. This 'one size fits all' idea is not only related to the content of interventions themselves, but also to the assumption that by developing a certain set of skills, leaders will be more effective, without considering the organizational setting, its culture, values, ethical climate, working conditions, or strategy (Bricon-Souf & Newman, 2007; Cummings et al., 2021; Gurdjian et al., 2014; Lord et al., 2013). Overlooking contextual factors also excludes the involvement of followers in leadership activities, neglecting teams' needs and characteristics (Kaiser & Curphy, 2013). When leadership development is disconnected from the real-world context, it becomes harder for participants to apply new knowledge and skills in their real work environment. This detachment from the real work setting is also an important criticism of a significant amount of leadership programs, which operate as a "closed system" and disregard how feedback loops within an organization can help leaders better manage the consequences of their actions (cf. Day & Dannhäuser, 2024 for a review).

In sum, while leadership interventions can produce positive outcomes, their design and implementation generally fail to individualize leaders' needs and the context where leadership occurs, namely followers' and organization characteristics, which may be the main factors contributing to leadership development interventions not reaching their full potential. In other words, leadership programs need to be tailored and theoretically and evidence-based, adapted to the specific needs of their participants and organizations where leadership occurs (Day et al., 2014; Galuska, 2014). Thus, this paper presents the Pro●Leader intervention program, which is an intervention based on the Leadership Efficacy Model

(LEM) that aims to promote leadership efficacy, considering not only leaders' skills but their relationship with followers' and organizations' specific needs, focusing not only on the leader but considering also their surroundings, therefore taking a more comprehensive approach. The designation "Pro●Leader" tries to capture the idea of "Professional Leaders", providing training to augment the leadership expertise of participants.

2. The Leadership Efficacy Model: A Framework for Leadership Development

To fully understand the Leadership Efficacy Model (Gomes, 2014, 2020), it is first important to clarify the concept of leadership itself. A general consensual definition of leadership refers to a process through which leaders influence others with the aim of guiding or facilitating relationships within groups and organizations (Yukl, 2013). What this definition does not encompass is the consequences of leadership. Thus, Gomes (2023, 2024) argued that it is important to consider the outcomes in the definition itself and, therefore, leadership development should focus on enhancing the benefits for those involved in the process (both leaders and followers). Therefore, the author suggested a definition of leadership that refers to it as a process of influence exerted on others that is sustained on common and positive ideals that lead all involved to a better situation than the one that preceded the leader's influence. This is intrinsically linked to the concept of leadership efficacy, which has been broadly defined as the impact and consequences of leadership, i.e., the outcomes of the leadership process that can be measured at the individual, group, or organizational level (Kaiser et al., 2008; cf. Hannah et al., 2008 for a review). Following this definition, leadership cannot be separated from its impacts. The "status" of leadership, in fact, requires the simultaneous consideration of three factors: (a) the most known dimension of the influence exerted by the leader onto others (individuals or members of groups/teams, organizations, communities, or even societies), (b) the need to formulate common and positive ideals for all those involved in the leadership phenomenon, and (c) the need to achieve a better scenario than the one predating the leader's influence.

The Leadership Efficacy Model (LEM; Gomes, 2014, 2020) integrates different approaches to leadership (trait, behavioral, and contingency leadership theories) in a comprehensive framework that establishes and combines distinct factors that influence leadership efficacy. In a nutshell, this theoretical approach is based on the assumption that leadership efficacy increases if leaders are congruent in how they intend to exert leadership (conceptual cycle of leadership) and how they actually implement the leadership (practical cycle of leadership), considering also the behaviors displayed by leaders when exerting influence (leadership styles), as well as their own, team members', and contextual characteristics (antecedent factors). Specifically, this framework proposes that three different sets of factors influence leadership efficacy: (1) leadership cycles, (2) leadership styles, and (3) antecedent factors of leadership (cf. Figure 1).

The leadership cycles component refers to the congruency between leaders' ideas and actions. More specifically, it is proposed that a leadership cycle is composed of (a) leadership philosophy, i.e., leaders' concept of how leadership should be (one's values, assumptions, and beliefs about leadership); (b) leadership practice, i.e., the actions that reflect leadership philosophy (how leadership should be implemented); and (c) leadership criteria, i.e., indicators used to evaluate the implementation of philosophy and practice of leadership. This leadership cycle occurs at two different levels: a conceptual level (i.e., how the leader thinks their leadership should be in terms of philosophy, practice, and criteria) and a practical cycle (i.e., how the leaders implement the conceptual cycle in a certain real scenario) (Gomes, 2020). According to the model, the greater the degree to which leaders' philosophies and ideas (conceptual cycle) are in line with how they actually implement their leadership (practical cycle), the better their leadership efficacy (Gomes, 2020, 2023). Thus, leaders should be aware of the need to establish a congruence between the conceptual and practical cycles, defining their most important ideas, behaviors, and evaluation indicators.

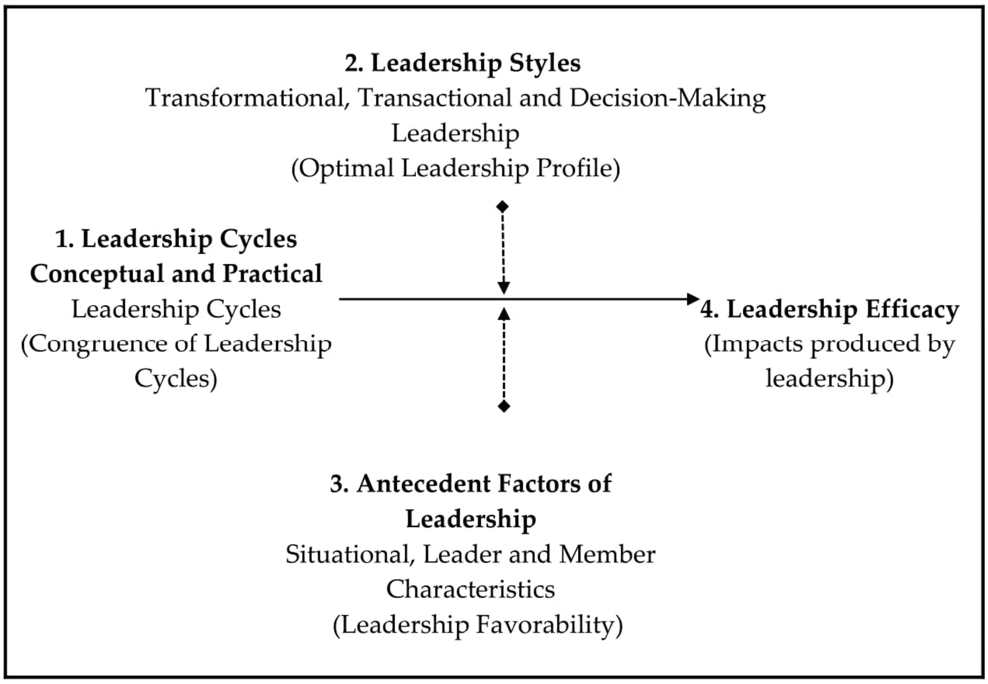

Figure 1. Leadership efficacy model (retrieved from Gomes, 2020).

The second factor refers to the specific behaviors that leaders adopt when exerting their leadership. Based on previous literature that has tested psychological measures of leadership behaviors (Gomes et al., 2021; Gomes & Resende, 2014), the LEM highlights three different styles of leadership (transformational leadership, transactional leadership, and decision-making leadership) and nine leadership behaviors divided into transformational leadership (vision, inspiration, instruction, individualization, and support), transactional leadership (positive and negative feedback), and decision-making leadership (active management and passive management). Transformational leadership relates to the leaders' ability to promote change in their followers' attitudes, beliefs, and values towards the goals of the group/organization, so that leaders' vision becomes internalized (cf. Bass, 1985; Bass & Avolio, 1994). In order to do so, leaders display a positive and enthusiastic vision, inspire followers to make continuous efforts to achieve success, provide instructions to help them develop skills, and attend to the individual needs of each follower by supporting their interests and wellbeing (Gomes, 2020). Transformational leadership has been widely researched (Bass, 1990; Burns, 1978; Judge & Piccolo, 2004; Young et al., 2021), representing a major topic of analysis when it comes to studying the effects produced by leadership (Ng, 2017; Stock et al., 2023). The popularity of this form of leadership remains intact even though new forms of leadership have been developed. However, these new proposals, such as moral and ethical leadership, authentic leadership, and servant leadership, appear to overlap significantly with transformational leadership (Banks et al., 2018; Hoch et al., 2018; Mayer et al., 2012). On the other hand, the transactional style of leadership is based on exchange systems, in a "negotiation" between what leaders want and what team members provide (cf. Avolio & Bass, 2004). More specifically, when using this approach, leaders tend to respond to their followers' actions and performance, managing them using positive and negative feedback (Gomes, 2020) to establish and promote the desired behaviors. The third and final style is related to how leaders make decisions or, more specifically, how they manage their power (Northouse, 2021). Decision-making leadership behaviors differentiate between active and passive management, referring, respectively, to whether leaders tend to share or not share leadership power and whether they involve followers in decision-making related to the teams' functioning (Gomes & Resende, 2014).

The novelty behind leadership styles in the Leadership Efficacy Model is the argument that leadership styles should be combined to build an optimal profile of leadership (Gomes, 2020). Specifically, an optimal profile of leadership is achieved when leaders use transformational behaviors (i.e., vision, inspiration, instruction, individualization, and support), positive feedback from transactional leadership, and active management from decision-making leadership (decentralizing decision-making), while reducing the occurrence of negative feedback from transactional leadership and passive management from decision-making leadership. The main assumption is that the positive combination of these behaviors (optimal profile) will augment leadership efficacy by maximizing leadership cycles.

Finally, the third and final dimension of LEM refers to the antecedent factors of leadership. This dimension comprises a set of factors that can impact leadership efficacy, namely leaders' characteristics, followers' characteristics, and situational characteristics (cf. Gomes, 2020). Broadly, these three dimensions include personal and mental characteristics of both leaders and members (e.g., age, gender, personality, coping strategies, competence levels, etc.), as well as the characteristics of the context where leadership occurs (e.g., type of organization, working conditions, responsibilities given to the leader, etc.) (cf. Fiedler, 1993; Gomes, 2020). The overall idea is that leadership does not occur in a vacuum but is instead a dynamic process that needs to adapt and be adapted by the circumstances, thereby improving situational favorability. In other words, the better the match between leaders' and followers' characteristics, the higher their competencies to perform, and the better the conditions provided by the context, the higher the leadership efficacy.

In conclusion, the Leadership Efficacy Model provides a theoretical framework for leadership development by considering holistically the process of leadership, emphasizing that in order to increase the efficacy of leadership, a multitude of factors need to be considered: the leadership cycles (by achieving a congruence between conceptual and practical cycles), the leadership behaviors (by assuming the optimal profile of leadership), and the antecedent factors of leadership (by considering the characteristics of the leaders, the followers, and the context). Accordingly, the Pro●Leader intervention program is a proposal of leadership development based on the Leadership Efficacy Model.

3. Leadership Development: Pro●Leader Intervention Program

The Pro●Leader intervention program is organized according to the LEM proposal, training participants in the three components of the model: leadership cycles, leadership styles, and antecedent factors of leadership.

The program is based on five core ideas that characterize the way intervention is delivered to participants. First, the intervention program is aligned with the notion of life skills training, including, sequentially, activities that are part of the four stages of life skills acquisition (cf. Gomes & Resende, 2020): (a) motivation: activities that aim to guarantee that participants mobilize attention and personal interest for the development of leadership skills; (b) learning: activities that aim to enhance participants' understanding of how leadership works and how it can be used properly; (c) automatization: activities that aim to provide participants the opportunity to use the life skill in a real-setting situation; and (d) transference: activities that allow participants to understand how to use the life skills in different situations, preferably from distinct life contexts. In practical terms, the program intends to stimulate the interest and knowledge of participants regarding leadership and to develop their leadership skills by providing structured opportunities that facilitate the automatization and generalization of leadership skills to participants' contexts.

Second, the program is theoretically grounded by bringing together aspects related to the philosophy, practice, and criteria of leaders (e.g., Gould et al., 2017; Lyle & Cushion, 2016), the behaviors of leaders (e.g., Antonakis, 2012; Sosik & Jung, 2018), and the characteristics of leaders, team members, and context where leadership occurs (e.g., Northouse, 2021). These distinct factors allow participants to understand the key points related to the efficacy of leadership, namely the cognitions, beliefs, and principles of leaders (leadership cycles); the actions of leadership (leadership behaviors); and the contingencies of the exercise of leadership (antecedent factors of leadership related to the characteristics of leaders, team members, and context where leadership occurs). Of course, many other factors are involved in the leadership activity, but this set of factors included in the LEM is involved in the impact produced by leadership.

Third, the program should be delivered to small groups (maximum of 15 participants) by two practitioners with professional certification in psychology. This participant/practitioner ratio aims to maximize the likelihood that all participants will have the opportunity to acquire leadership skills in an individualized manner and receive detailed feedback. This is evident, as all participants develop, discuss, and implement a leadership plan during the training, receiving feedback from both practitioners and peers. Additionally, this practitioner-to-participant ratio enhances the potential for participants to progress through the four stages of life skills, as previously described.

Fourth, the program includes participants from different professional contexts, thus reinforcing that the leadership training is applicable to all participants (due to the general theoretical background of the LEM). It also achieves specificity as participants acquire leadership skills relevant to their life contexts. There are no prerequisites to enter the program, so participants may have varying levels of experience in leadership roles, or they may simply be interested in improving their leadership knowledge and skills. The primary goal of the program is to empower participants with the knowledge and skills needed to enhance their leadership capabilities.

Fifth, the program includes opportunities for data collection to evaluate its efficacy. Specifically, data will be collected before the program begins (Phase 1), immediately after it ends (Phase 2), and three to four months after the last session (Phase 3). The third data collection phase allows participants sufficient time to apply their leadership plans developed during the Pro●Leader intervention program to their specific life contexts.

In sum, several factors contribute to leadership efficacy. It is evident that including all of these factors in a single intervention program is challenging, if not impossible. However, the Pro●Leader intervention program incorporates key factors that enhance leadership efficacy and, by extension, participants' ability to lead.

The Pro●Leader intervention program is organized into seven parts (cf. Table 1): (1) pre-intervention evaluation; (2) leadership behaviors (corresponding to the leadership styles of the LEM): participants are trained in different leadership behaviors; (3) leadership plan (corresponding to the leadership cycles of the LEM): participants are asked to define their own leadership philosophy, practice, and criteria (leadership cycles) and formulate an individual leadership plan; (4) leadership plan adjustment (corresponding to the antecedent factors of leadership of the LEM): participants reflect on how their own characteristics, their team members' characteristics, and their organizational context can influence their leadership and are encouraged to adjust their leadership plan accordingly; (5) training of the leadership plan: participants assume their own leadership plans by using a roleplay methodology to recreate, as much as possible, their scenario of leadership;

(6) post-intervention evaluation; and (7) follow-up intervention evaluation. In the following sections, we describe each part of the Pro●Leader intervention program in more detail.

Table 1. Pro●Leader Intervention Program: Organization and Areas of Training.

Leadership Efficacy Model	Pro●Leader Program
	Part 1. Pre-intervention evaluation **Goal:** Determining the leadership ability of participants before intervention **Duration:** 15 min (before starting session 1)
Program presentation **Leadership styles** ● Transformational leadership ● Transactional leadership ● Decision-making leadership	**Presentation** ○ Presenting the program's goals and main activities ○ Forming the teams of participants **Part 2. Leadership behaviors** **Goal:** Learning and demonstrating positive leadership behaviors (e.g., transformational, transactional, and decision-making) **Duration:** 6 sessions; 3 h per session (18 h)
Leadership cycles ● Leadership philosophy ● Leadership practice ● Leadership criteria	**Part 3. Leadership plan** **Goals:** ● Defining the leadership plan, according to the philosophy, practice, and criteria of participants ● Selecting the leadership behaviors for the leadership plan (e.g., transformational, transactional, and decision-making) **Duration:** 6 sessions; 3 h per session (18 h)
Antecedent factors of leadership ● Leader characteristics ● Team members characteristics ● Situational characteristics	**Part 4. Leadership plan adjustment** **Goal:** Adjusting the leadership plan to the characteristics of the participants, followers, and situation **Duration:** 1 session; 1 h per session (3 h)
	Part 5. Training of the leadership plan **Goal:** Assuming the leadership approach in simulated situations **Duration:** 2 sessions; 3 h per session (6 h)
	Part 6. Post-intervention evaluation **Goal:** Determining the leadership ability of participants after the intervention **Duration:** 15 min (after last session)
	Part 7. Follow-up intervention evaluation **Goal:** Determining the leadership ability of participants after the intervention **Duration:** 15 min (3 to 4 months after last session)
Total	● Sessions: 15 ● Duration: 45 h

3.1. Intervention Evaluation (Parts 1, 5, and 6)

Testing the efficacy of the intervention is crucial to facilitate progress in leadership knowledge and guide future adjustments to the training program. The Pro●Leader intervention program includes evaluations conducted before and after the intervention (cf. Table 1: Parts 1, 6, and 7). The measures used to evaluate efficacy should be selected according to the interests of each professional or researcher; however, in general, it is important to include two types of measures.

The first relates to leadership and is specifically designed to evaluate the leadership cycles, the leadership styles, and the antecedent factors of leadership (cf. Gomes et al., 2022). For example, for the LEM, there are available measures of the leadership cycles (e.g., Leadership Cycles Questionnaire; Gomes et al., 2022), leadership styles (e.g., Multidimensional Scale of Leadership; Gomes et al., 2021), and antecedent factors of leadership (e.g., Leadership Antecedent Factors Questionnaire; Gomes et al., 2022). The data collected from these instruments can be shared with participants to increase their understanding of their leadership skills and support their leadership plan developed throughout the program, namely when they think about their leadership styles and behaviors (Part 3.3.), their leadership cycles (Part 3.4.), and factors that influence the exercise of leadership (Part 3.5.).

The second type of measure relates to the impacts produced by the participants' leadership. In this last case, it is important to evaluate the implicit impacts produced by leadership (psychological, relational, and social impacts of leadership) but also the explicit impacts produced by leadership (behavioral impacts of leadership in terms of actions/achievements assumed by team members) (Gomes, 2024). It is also recommended that measures be collected from the perspective of participants and from the individuals who interact with them (e.g., followers, collaborators, team members, etc.), which helps reduce the common method bias (Podsakoff et al., 2012). Nonetheless, it is evident that self-evaluation from participants is easier to collect before and after the Pro●Leader intervention program than external evaluation.

3.2. Program Presentation (Part 2)

The program is presented in the first session (included in Part 1 of the program; Table 1) by informing participants about the goals, structure of training, and evaluation system. Participants are divided into three groups, and they must choose a name and motto for their group (to reinforce team identity and facilitate various training activities) (cf. Hoult et al., 2024; Slater et al., 2019).

3.3. Leadership Styles and Behaviors (Part 2)

Part 2 of the program is dedicated to educating and training participants in using eight leadership behaviors (cf. Table 1). Starting the program with a focus on leadership styles and behaviors is essential because participants need to master the eight behaviors when they are asked to later formulate the leadership plan. Thus, participants are first introduced to transformational, transactional, and decision-making leadership, along with the respective behaviors of each style (see Figure 2). Then, the concept of an optimal leadership profile is explored. This includes five transformational leadership behaviors (i.e., vision, inspiration, instruction, individualization, and support), positive feedback from transactional leadership behaviors, and active management from decision-making leadership. It is important to clarify that passive management is not trained in the Pro●Leader intervention program and that negative feedback is trained only under highly controlled conditions. Participants are informed that negative feedback should be used only when followers display unacceptable behaviors that violate previously agreed-upon standards. It is also explained that these behaviors will be important to help participants to set their leadership plan, meaning they will use the leadership behaviors to build their leadership cycles (what is their leadership philosophy, practice, and criteria?) and to adjust the cycles to the antecedent factors of leadership. In this way, participants will be aware that later in the program they will select the most useful behaviors to set their leadership plan. Finally, in an open group discussion with all participants, they discuss how to use leadership behaviors in ways that enhance leadership efficacy. At the end of this discussion, practitioners present potential strategies that can maximize the use of each leadership behavior (Figure 3).

Transformational leadership style Influence produced by the leader in followers' attitudes, beliefs, and values until a level that they commit and sacrifice to the established positive vision, achieving outstanding results above those expected under normal circumstances.
1. Vision: leader tendency to present an enthusiastic and optimistic vision of their followers' future.
2. Inspiration: leader positive expectations and behaviors directed towards promoting the success and continuous efforts of followers.
3. Instruction: leader actions focused on teaching positively technical skills to the followers.
4. Individualization: leader tendency to consider the personal needs and expectations of followers.
5. Support: leader personal concern regarding their followers' well-being and interest in building positive relationships based on mutual confidence.
Transactional leadership style Influence produced by the leader is based on an exchange relation between the leader that sets the tasks and goals to achieve, and the followers that agree to accept the leaders' authority and do the tasks in exchange of some material or psychological compensation.
6. Positive feedback: leader reinforcement and recognition of good performance and effort of followers.
7. Negative feedback: punishment behaviors applied by the leader with the intention to manage followers' inadequate behaviors and performance.
Decision-making leadership style Influence produced by the leader is based on how power and authority are managed, reflected by how important decisions are assumed. The power and authority of the leader can be assumed in a more or less active way (decision-making centralized on the leader or decentralized decision-making involving the followers) or in a passive way (avoiding or delaying responsibility for decision-making when it is necessary to solve important problems).
8. Active management: leader behaviors of power management, by assuming the decisions in a more decentralized (involving the followers) or in a more centralized process (assuming the decisions alone).
9. Passive management: leader avoidance or delay in taking responsibility for decision-making when this is necessary to solve important problems. Note: due negative effects of this behavior in leadership efficacy, it is not included in the Pro●Leader Program.

Figure 2. Pro●Leader intervention program: leadership styles and leadership behaviors.

Transformational leadership style

1. How to promote vision behavior?

- Positive: vision should propose an interesting and challenging mission for everyone involved in the situation (and not just for the leader or for the organization).
- Specific: vision should provide a clear and concrete mission; it does not need to be highly complex or elaborate.
- Personal vocation: vision should advocate a mission that the leader desires, defends, and considers beneficial for the team.
- Ethical: vision should be based in an acceptable mission for the team and for the context in which occurs.

2. How to promote inspirational behavior?

- Personal example: inspiration should be based on the leader personal example of what needs to be done, being important to assume optimism and desire for success in what needs to be done.

3. How to promote the instruction behavior?

- Positive sequence: instruction should (a) reinforce the efforts made by team members, (b) positively correct errors, and (c) encourage team members' confidence in their ability to improve.

4. How to promote individualization behavior?

- Personalized work: individualization should consider the desires, needs, and expectations of team members, making the necessary adaptations in the mission to be achieved.

5. How to promote support behavior?

- Personal interaction: support should be based on an "open door" policy allowing team members to discuss aspects not specifically related to work as well as organizing informal activities that strengthen trust among everyone.

Transactional leadership style

6. How to promote the positive feedback behavior

- Measurability/Adequacy: positive feedback should be objectively directed at the actions to increase in team members (measurability) and should be according with the desires, expectations, and needs of team members (adequacy).

7. How to use negative feedback behavior, if necessary?

- Measurability/Adequacy: negative feedback should be used as a last option when the behavior of team members deliberately and objectively deviates from what was established by the leader and team members (measurability), and should be related to the desires, expectations, and needs of team members (adequacy).

Decision-making leadership style

8. How to promote active management behavior?

- Negotiation/Persuasion: active management should be negotiated with team members when they have high technical and psychological maturity or persuaded with team members when they have low technical and psychological maturity.

9. How to avoid passive management behavior?

- Disengagement: passive management should not be used when it is expected that leaders assume actions on important and urgent matters affecting the team.

Figure 3. Pro●Leader intervention program: promoting leadership behaviors.

After exploring leadership styles and behaviors, participants are asked to reflect on a case study of leadership behaviors in a specific human context. The case study presents six different situations that can hypothetically occur within a work environment. Groups must discuss and select the leadership behaviors most suitable for each situation.

Afterward, all groups share and justify their choice with practitioners. Figure 4 illustrates situations for this task, based on work organization. Versions of this case study are also available for sports organizations, educational organizations, health organizations, and security forces organizations. During training, each group selects the version that is most closely related to their professional experience.

Role to assume: Teresa, head of production at a textile company

Task: Choose the leadership behavior(s) for each case, without repeating any of them, and excluding the passive management behavior.

Situation A

Teresa is going to meet with Pedro, one of her production lines manager. The last order had customer complaints due to defects in several products. Teresa found out that the problem occurred in one of teams managed by Pedro. In a first telephone contact, Pedro said that the error was made by two inexperienced employees of his team, but that the main fault was with the quality control section that let the products go to the customer without excluding the ones with defects.

Situation B

The manager of the line production team stated that manufacturing defects in the previous weeks were due to poor quality of materials and are therefore unwilling to change their work procedures to solve this problem. However, the quality control laboratory found small differences in the materials' quality that do not justify the manufacturing defects. After knowing that the line manager maintained their position, Teresa decided to have a meeting with them, raising the possibility of ending the production bonus system if they maintain their position of not revising their work procedures.

Situation C

Teresa is preparing a meeting with the line production manager to prepare next year's work. The previous year did not goas expected, as the line production manager reported problems related to lack of motivation resulting from excessive hours of work and low salaries. Furthermore, next year the company must comply with a quality policy in all production sectors. Teresa has autonomy to make decisions, having the Board's agreement to change whatever is necessary.

Situation D

A new machinery will be introduced in one of the production lines, which will hopefully result in increased productivity. The new machinery involves redesigning the entire production section. However, the employees are worried about how the machines will work, as there are workers that have never operated such systems before. They are also worried that the machines will eventually lead to layoffs. Thus, they asked for a meeting with Teresa.

Situation E

Teresa was required to increase productivity by 25% over the next 2 months. She has become apprehensive, as she knows that this will result in frustration and discomfort among the team due to the increase of working hours and the possibility of extra shifts on the weekend.

Situation F

Teresa panicked when she realized that there had been a mix-up of materials on the production lines and that several products were being manufactured with the wrong references. She immediately requested production to stop. Fortunately, on one of the production lines, the manager Marta had realized the error and was using the correct material. If she could warn the others, that would have been the best thing to do, Teresa thought.

Figure 4. Pro●Leader intervention program: training of leadership behaviors.

The final activity of this part of the program is training. Participants must assume the selected behavior for each situation and contribute to the whole group by using the role-play methodology. The activity follows: (1) three distinct roles are assigned for the three groups (one group of participants assume the leadership behaviors; another group assumes the role of follower of the participant that has adopted the leadership behaviors, i.e., assumes the role of the persons described in the leadership situations; and the third group assumes the role of observer by registering examples of leadership behaviors typified by the participants with the role of leaders); (2) groups have five minutes to prepare for the role-play; (3) role-play begins and practitioners monitor the quality of the interactions and act as a time-keeper (10 min per interaction); and (4) the practitioners ask participants for their opinions about the role-play by canvassing the opinions of leaders, followers, and observers (10 min of reflection).

In sum, after ending this part of the program, participants are trained to identify and adopt leadership behaviors (involved in the Optimal Profile of Leadership) that are more likely to result in a positive outcome. These behaviors will also be later adopted to build the leadership plan for each participant, meaning they will be asked to select the most appropriate behaviors (all or just some of them) to sustain their leadership in a specific situation.

3.4. Leadership Plan (Part 3)

Part 3 of the program is dedicated to educating and training participants in formulating leadership cycles. This part begins by explaining the conceptual and practical cycles of leadership as well as the components of the cycles (leadership philosophy, leadership practice, and leadership criteria). Then, participants are asked to formulate their own conceptual cycle of leadership by fulfilling the leadership plan (Figure 5). Participants must describe their leadership philosophy, leadership practice, and leadership criteria, and they must select what specific leadership behaviors are needed to formulate and implement leadership philosophy, leadership practice, and leadership criteria (see Sections 1–3, and 5 of Figure 5). The practitioners observe and give feedback to the participants regarding their plans (which is one of the reasons why there need to be at least two practitioners in the intervention program). The formulation of the conceptual cycle is very challenging to participants because it implies reflecting on their own values, beliefs, principles, and goals as individuals and (potential) leaders, bringing into play aspects related to self-identity, spirituality, and self-concept, among other important psychological constructs (Allen & Fry, 2023; Shamir et al., 2018). This complexity is managed in the program by giving participants the opportunity to first understand what leadership cycles are, and then they are asked to formulate their own leadership cycle as part of the leadership plan, obtaining feedback from practitioners. Later in the program, participants will have the opportunity to practice the leadership plan (which includes the conceptual cycle of leadership), and, once again, they will have more feedback from the practitioners and from other participants (see Section 3.6).

Leadership Plan

Section 1: Leadership philosophy

- Values, beliefs, assumptions, attitudes, principles, and priorities assumed by the leader, which influence both practice and criteria/indicators of leadership.

Questions

- o What is your leadership philosophy? What are your most important ideas? What are your goals?
- o Are your ideas and goals important to your team?

Describe below the leadership plan.

Section 2: Leadership practice

- Specific behaviors assumed by the leader to fulfil the coaching philosophy.

Questions

- o What is your leadership approach?
- o Are your actions important to your team?

Describe below the leadership plan.

Section 3: Leadership criteria

- Personal and professional indicators that help the leader to monitor whether the tenets of philosophy and practice of leadership are fulfilled.

Questions

- o What is your leadership criteria/indicators?
- o Are your criteria important to your team?

Describe below the leadership plan.

Section 4: Challenges of leadership

- Characteristics and expectations of team members, leaders, and organizations that can influence the leadership.

Questions

- o Is your leadership plan according to your values, expectations, and responsibilities as a leader?
- o Is your leadership plan according to the values and expectations of your team members?
- o Is your leadership plan according to the values and expectations of your organization?

Describe below the leadership plan.

Section 5: Leadership styles and behaviors

- Select the behaviors necessary to implement the plan.

Leadership behaviors

- ✓ Could vision be important to increase team members' collective purpose toward leadership?
- ✓ Could inspiration be important to increase team members' will of giving it their all?
- ✓ Could instruction be important to increase team members' will of improving?
- ✓ Could individualization be important to increase team members' sense of personal value?
- ✓ Could support be important to increase team members' personal trust in the leader?
- ✓ Could positive feedback be important to recognize (reward) team members' correct actions, stimulating their will to extend maximum efforts?
- ✓ Could negative feedback be important to control any undesirable actions of team members, stimulating their will to change incorrect ideas and actions?
- ✓ Could active management be important to increase team members' involvement regarding what needs to be done?

Transformational				
Vision	Inspiration	Instruction	Individualization	Support
?	?	?	?	?
Transactional		**Decision making**		
Positive feedback	Negative feedback	Active management (decentralized)	Active management (decentralized)	Passive management
?	?	?	?	?

Figure 5. Pro●Leader intervention program: formulating the leadership plan.

3.5. Leadership Plan Adjustment (Part 4)

Part 4 of the program is dedicated to educating and training participants about how antecedent factors of leadership (i.e., leaders' characteristics, followers' characteristics, and situational characteristics) can influence the efficacy of leadership (cf. Table 1). Participants are first introduced to the concepts of technical favorability (e.g., the value given by leaders to the mission and tasks to be accomplished and the maturity of team members to accept the mission and execute the tasks), psychological favorability (e.g., the interest and value given by leaders to personal and human aspects of followers and the maturity of followers to accept responsibility inherent to their roles and tasks), and situational favorability (e.g., material, human, and environmental conditions that leaders have to execute their activity) (Fiedler, 1993; Hersey & Blanchard, 1996; Likert, 1967). Then, participants are asked to analyze the need to adjust their leadership plan according to these antecedent factors (see Section 4 of Figure 5). In fact, antecedent factors of leadership can increase the favorability of leadership (i.e., the characteristics of the leader, followers, and situation operate as facilitators to the leader's activity) or can decrease the favorability of leadership (i.e., the characteristics of the leader, followers, and situation operate as debilitating of the leader's activity). This implies that participants in the Pro•Leader intervention program analyze how these factors can influence their leadership and then decide if some adjustments should be made in their leadership plan. After deciding if the leadership plan should be adjusted according to the antecedent factors of leadership, participants select the most useful leadership behaviors to increase the favorability of leadership. In this way, the optimal profile of leadership comes again into discussion because participants decide which leadership behaviors are more adjusted to their specific condition. This process strengthens the link between the three major factors of the LEM framework—leadership cycles, leadership styles, and the antecedent factors of leadership—making the program highly tailored to each participant.

3.6. Training of the Leadership Plan (Part 5)

Part 5 of the program is dedicated to training the leadership plan by providing a simulated situation to use the practical cycle of leadership by the participants (cf. Table 1). The leadership plan consists of the three elements of the LEM proposal (leadership cycles, leadership styles, and antecedent factors of leadership) being fulfilled by each participant (Figure 5). Specifically, participants choose a certain scenario in their lives where they can exert influence toward others, and then they must elaborate on how to positively influence others, taking into consideration the topics of the Pro•Leader intervention program.

The training of the leadership plan follows the role-play methodology and adheres to the same phases described in the training of leadership styles and behaviors. The only difference is that participants are not training leadership behaviors (as in Part 2), but they are training their own leadership plans. Specifically, it is constituted by the same three roles for the role-play: participants with the role of assuming their own leadership plan, participants with the role of follower of the participant that assumes the leadership plan, and participants with the role of observing the role-play to provide feedback about the way participants assumed their leadership plan. It is important to reinforce that participants may have distinct leadership plans because their context of activity may vary among them. This implies that before starting the role-play, each participant with the role of leader must first give a description of the context, the followers, and the main purpose of the leadership plan, but the rest of the leadership plan cannot be revealed to ensure the subsequent discussions with the followers are realistic and as close as possible to what might happen when participants apply the plan in the future. This procedure is also important for participants in the follower role, as it helps them understand the specific challenges faced by the colleague in the leadership role. This, in turn, helps them interact in a way that reflects what might realistically occur when the leader applies the plan in the near future.

The training provides the opportunity for participants to assume their leadership plans directed for one specific area of their lives (stage of automatization) but also provides the opportunity to discuss with other participants the potential implications of the plan for distinct areas of living (stage of transference). Typically, the formulation and training of the leadership plan represents a valuable task for participants because they can have the opportunity to reflect on how the LEM factors (leadership cycles, leadership styles, and antecedent factors of leadership) can be applied to their own specific situation (i.e., motivation and learning stages). Then, the training of the leadership plan allows participants to assume leadership skills in role-play scenarios while being provided feedback from other participants and practitioners (automatization stage). The exchange of experiences and training of distinct leadership plans between all participants helps each one to comprehend multiple scenarios where leadership can be used, allowing also the possibility of final adjustments to the plans according to the sharing of living experiences between all participants involved in the intervention program (i.e., transference stage).

3.7. Other Aspects

Although not critical to the implementation of the program, brief written tests are also used to analyze the acquired knowledge of participants about each part of the program (leadership cycles, leadership styles, and antecedent factors of leadership); more case analyses for a better understanding of the three components of the LEM proposal are also used, and an evaluation system is also included that provides quantitative feedback to participants. In this last case, a Likert scale of four points is used (1 = It can be improved; 2 = Good; 3 = Very good; 4 = Excellent).

4. Testing the Pro●Leader Intervention

This manuscript describes the Pro●Leader intervention program in detail, which is based on previous literature and, therefore, also provides evidence-based guidelines for developing effective leaders. However, this intervention program still needs to be tested in order to establish its impact on improving leadership skills. Thus, it is important to collect data to verify if the LEM represents a useful approach to explain leadership efficacy and if the three factors included in the model (leadership cycles, leadership styles, and antecedent factors of leadership) represent useful dimensions to stimulate leadership. While there is some encouraging data about the LEM (e.g., Gomes et al., 2022), there are currently no indications related to the efficacy of the intervention. This is quite critical to demonstrate if the intervention is effective and scientifically valid. Figure 6 summarizes the aspects to consider when testing the Pro●Leader intervention program.

The program can represent a useful tool for both professionals interested in stimulating the leadership ability of their clients and for individuals that are (or can be) in a position of leadership. In fact, by mastering the way leadership cycles should be set, how to positively use the leadership behaviors, and how to control the antecedent factors of leadership, participants can have a better perspective of how to modulate the three factors involved in the leadership activity.

Participants
The program is designed for both young adults and adults that are interested in achieving leadership positions or are already occupying leadership positions. Moreover, each group of participants can include people with different occupational/professional activities, without restrictions at this level. In fact, having a heterogenous group of participants (e.g., background, occupation, age) in the program can help participants to understand the multiple applications of leadership. This is particularly helpful in the program stage where participants are creating and training their leadership plans (Parts 3 and 5 of the program, respectively), thus facilitating the transference of leadership skills (see Section 3 of this paper).
Measures
Different measures can be used to assess the effectiveness of the intervention program, especially when considering the efficacy of leadership measures. However, it is suggested to include at least measures that evaluate the main topics of LEM: leadership cycles, styles, and antecedent factors. Below are some examples (see also Section 3.1 of this paper): *Leadership cycles:* The Leadership Cycles Questionnaire (Gomes et al., 2022) allows researchers to evaluate leadership philosophy, practice, and criteria at both the theoretical (conceptual cycle) and practical levels, as well as measure the congruence between both cycles. *Leadership styles:* The Multidimensional Scale of Leadership (Gomes et al., 2021) assesses a series of leadership behaviors categorized in terms of transformational, transactional, and decision-making styles of leadership. *Antecedent factors:* The Leadership Antecedent Factors Questionnaire (Gomes et al., 2022) includes a protocol assessing how leaders', members', and contextual characteristics affect leadership. Regarding the outcome measures, when possible, two different types of measures should be collected: one related to the implicit impacts (e.g., psychological, relational, and social impacts) and the other referring to explicit impacts of leadership, such as KPIs or other objective measures related to both relationship with the leader and impacts at the organizational level.
Procedure and Study Design
The Pro●Leader intervention program should follow the workplan proposed in this manuscript. Specifically, it is important to provide a full 45 h of training (see Table 1), preferably on a weekly basis, three-hour sessions per week. There are no restrictions regarding providing the training on a face-to-face basis or via *e*-learning by using any electronic platform. Apart from the intervention group, a second group, like the one that receives the intervention, should be recruited as a control group. If possible, a randomized controlled trial (RCT) methodology should be implemented to better establish causality (cf. O'Shea et al., 2016 for a checklist). Thus, participants should be randomly assigned to either the intervention or the control group. In cases where it is not possible to randomly assign participants to the groups, a quasi-experimental design (QED) can be used; this can happen when researchers have some previous criteria to assign participants to the intervention groups (e.g., when providing training services to a certain organization or when providing training for the general community where people voluntarily offer to have leadership training, among other reasons); nevertheless, criteria to balance both groups in terms of background and demographic characteristics are quite vital to augment the reliability of data.
Data collection
Prior to the Pro●Leader intervention program, participants of both control and intervention groups should complete a questionnaire with all instruments defined in the section "Measures" (and when objective measures from the organization are possible, they should also be collected at this time point) (T1 of data collection). In the case of the intervention group, data can alternatively be completed at the beginning of Session 1. A new data collection should be completed at the end of the program for both groups (the last session can be an acceptable choice for the intervention group) (T2 of data collection). T3 of data collection refers to the follow-up data collection to assess the lasting effects of the outcomes; thus, 3 to 4 months after the last session, participants of both groups should complete again the same protocol (see Table 1). When possible, team members/followers/co-workers of the participants can also complete the different measures so more information about the impact of the development of leadership skills can be collected.
Data analysis
This stage implicates defining data treatment techniques to assess the effectiveness of the Pro●Leader intervention program. Data can be treated in different ways according to the specific goals of each study and according to the volume of gathered data. Also important, data can also be used to test the theoretical principles of the LEM, providing indication about the impacts produced by the cycles of leadership, styles of leadership, and antecedent factors of leadership in the leadership efficacy (see Gomes, 2014, 2020).

Figure 6. Testing the efficacy of the Pro●Leader intervention program (Gomes, 2014, 2020; Gomes et al., 2021, 2022; O'Shea et al., 2016).

5. Conclusions

The Pro●Leader intervention program is a leadership training program based on the Leadership Efficacy Model that takes a comprehensive approach to leadership, aiming to respond to some of the recurrent criticism of leadership development programs. Specifically, its innovation relies on the fact that the whole program is centered on the formulation of a leadership plan, which is individualized for each participant, considering their own needs (contradicting the "one size fits all" approach). The formulation of an individual leadership plan implies that participants consider deeply their beliefs, feelings, and assumptions about leadership behaviors when formulating their leadership cycles, which increases the likelihood of change. Moreover, in this process, participants learn different behaviors that can be used to enhance leadership efficacy and adapt to their own circumstances and skills. A third important feature of this intervention program is that it challenges participants to deeply consider the environment in which they expect to exert leadership, namely the characteristics of their followers and organizations, to maximize their efficacy as leaders. Finally, because the program is designed to include the four levels of life skill acquisition (motivation, learning, automatization, and transference), and it does not focus on specific leadership skills but on the process of thinking and developing leadership itself, we believe participants will be more equipped to transfer the knowledge to different contexts, adapting to new situations and organizations (by adapting their individual plans). Of course, as with other programs, the Pro●Leader intervention program assumes a choice about the number of factors that explain the leadership efficacy (leadership cycles, leadership styles, and antecedent factors of leadership), meaning that participants are trained to learn and assume the leadership skills based upon these factors, which does not mean that other factors can adaptively influence leadership. Also of importance, this paper proposes a step-by-step intervention that can help to develop the leadership skills of an interested audience whilst recognizing it is now necessary to collect data to test the effectiveness of the Pro●Leader program.

In a nutshell, the Pro●Leader intervention program aims to respond to the challenge of enhancing leadership with a conceptual and empirical background by implementing three important factors involved in leadership development and efficacy (leadership cycles, leadership styles, and antecedent factors of leadership).

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Article

It Is Leadership, but (Maybe) Not as You Know It: Advocating for a Diversity Paradigm in Sports Leadership and Beyond

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Abstract: The need to 'rethink leadership' is on the radar of many, from global finance and auditing organisations (e.g., Deloitte) and global sports organisations (e.g., the International Olympic Committee) to national and local sports organisations concerned about the decreasing numbers of participants or the lack of women coaches. Yet, is the dominant Western leadership orthodoxy fit for purpose in the 21st century? The purpose of this article is two-fold. First, to advocate for ways of 'rethinking leadership' that challenge the current dominant ethnocentric, gender-biased, leader-centric orthodoxy. Second, to introduce an expanded global and diverse leadership paradigm that is underpinned by clearly delineated dimensions of diversity and cultural competence, which recognises the importance of the organisational and cultural contexts. The literature discussed in this article draws from leadership studies generally and sports leadership and sports coaching more specifically. Key to this article is the discussion of the implications of adopting a diverse leadership paradigm for policy, practice, development, and research of leadership. This advocacy article does not end with a definitive conclusion but rather with an invitation to participate in a journey to realise the potential of diverse leadership.

Keywords: cultural competence; diversity; sports coaching; social identity; organisational behaviour

1. Introduction

The need to 'rethink leadership' is on the radar of many, from global finance and auditing organisations (e.g., Deloitte) and global sports organisations (e.g., the International Olympic Committee) to national and local sports organisations concerned about the decreasing numbers of participants or the lack of women coaches. The authors of the 2019 Deloitte's Global Human Capital Trends Report—*Leading the social enterprise: Reinvent with a human focus* [1]—drew on the findings of nearly 10,000 global survey respondents to make a bold 'call to action'. Namely, it is not the time to tinker at the edges of your organisation; it is time to reinvent it. Interestingly, 80% of the survey respondents held the view that leadership was an important or very important issue, and '80% of respondents said that "21st-century leaders" face unique and new requirements' (p. 6). The authors of the report went on to state that the process of reinvention requires organisations to move 'beyond mission statements' and instead '*learn to lead* the social enterprise—and reinvent themselves around a human focus' (p. 2). Moreover, the authors contend that the reinvention process should assist organisations to develop skills and measure 'leadership in ways that help leaders effectively navigate greater ambiguity, take charge of rapid change, and engage with external and internal stakeholders' (p. 37). Despite making this 'call to action' (p. 80), they acknowledge that reinventing organisations is not easy because 'while organizations **expect** new leadership capabilities, they are still largely promoting traditional models and mindsets' [1] (p. 37, **emphasis in the original**).

A year prior to the publication of the Deloitte Report [1], Chin and colleagues [2] made similar observations. They note that much of the dominant leadership practices, as discussed in the English literature at least, tend to reflect 'an Anglo-Western-male capitalistic perspective' (p. 323). This led them to contend that if leadership practices are to be relevant and beneficial for our increasingly diverse communities, then orthodox views of leadership need to be challenged. One possible way to challenge 'idealised' Western leader-centric models and potentially operationalise Deloitte's 'call to action' [1] is seen in the earlier work of Chin and Trimble [3], where they specifically focus on diversity and leadership. They suggest, amongst other things, there is value in the following:

- Providing conceptual clarity as to what constitutes 'diversity' (i.e., inclusion, cultural competence, equity) and 'cultural competence' (i.e., climate, core/curriculum, composition) within organisational behaviour;
- Situating discussion of diverse leaders and diverse members within organisational and cultural contexts, allowing for a multilevel analysis of leadership, which incorporates leaders, members, units, groups, organisations, and systems;
- Utilising an alternative sociocultural paradigm of leadership that encompasses social identity, decolonial, and critical leadership approaches.

This article builds on our previous work [4–7] by being more explicit about diversity, cultural competence, and the centrality of the organisation in diverse leadership. We openly acknowledge leadership is, amongst other things, a 'complex, social, cultural, relational, situated, and pedagogical practice' [6] (p. 127), but we also accept that it is not possible to ignore the behaviours of individuals. As such, we contend there is value in being explicitly aware of your behaviour or the behaviours of others because this knowledge can then be a precursor for asking questions about 'where, how and why leadership work is organised and accomplished' [8] (p. 196).

It is the above work and associated theories and research that we draw on to contribute to this Special Issue, *Rethinking Leadership Development*. To begin the 'rethinking' process, there may be some value in reflecting on the title of the Special Issue. Does its title conjure up images of a bold 'call to action' [1] or more of a tweak of the status quo? Spiller and colleagues [9] have been bold when discussing leadership and supporting practitioners on their '*developmental leadership journey*' (p. 3, *emphasis added*). The analogy of being on a journey suggests an ongoing process rather than a definitive outcome, and, for some, at least, a journey conjures up feelings of excitement and exploration. Viewing leadership as an ongoing process may be advantageous in the modern world because leadership in contemporary times often

> "requires stepping into the unknown, developing sharper powers of observation, being more comfortable with uncertainty, and finding new and better ways to tackle situations, relying not only on rational thinking but also on the much broader sets of intelligence with which each of us is endowed [9] (p. 3)."

The context of our discussion of leadership in this article is sports leadership and leadership in sports coaching (see [6]). Focusing on leadership in sports is a topical issue. For example, at the beginning of the Paris 2024 Olympic Games, the International Olympic Committee posted the following:

> "Paris 2024 is the first Olympic Games in history with full gender parity on the field of play, thanks to the distribution of an equal number of quota places to female and male athletes by the International Olympic Committee (IOC) [10]."

At first glance, these figures appear to be a win for gender equity in the context of athletes attending the Olympic Games. However, if we examine the context of this parity in terms of the gender diversity of sports leaders, which includes sports coaches who develop and support the athletes, it is not so positive. Burton and Leberman illustrated this by highlighting the number of women in leadership positions in Olympic-related sports organisations. In 2017,

> "[m]en ran 33 of the 35 international federations affiliated with the Olympics. . . Only 5.7% of International Federation presidents were women, 12.2% were vice

> presidents, 13.1% were executive committee members, and only 24.4% of the IOC members were women. More concerning, perhaps, is the fact that a number of international federations have no women on their executive committees despite having high levels of participation by women. . . At a national level, the figures are not much better. Only 9% (389/4303) of national presidents across the world were women (p. 2) [6] (p. 134)."

The figures are no better for women coaching at the Olympic Games. The average percentage of accredited female coaches participating in the Olympics over the past 14 years has hovered around the low double figures. At the Winter Olympics in Vancouver in 2010, 10% of the accredited coaches were women [11], while at the Summer Olympics in Tokyo 2020, 13% of the accredited coaches were women [12]. While those figures make for sorry reading, figures for some countries are even worse. For example, at the Summer Olympics in London 2012, only 4% of the accredited New Zealand coaches were women (compared to the international average of 11%) [12], while in Tokyo 2020, 6% of the accredited New Zealand coaches were women (compared to the international average of 13%) [13].

Women are not the only under-represented group in leadership roles in sports; non-European men are also under-represented. For example, in the elite rugby union, men who identify as Pasifika make up 38% of players who are contracted to the All Blacks or All Blacks Sevens between 2021 and 2023 [14]. Despite the large number of Pasifika men who play rugby union at the elite level, there is a paucity of Pasifika men coaching or holding other leadership roles at the top level of rugby union. Similarly, the English Premier League [EPL] football showcases a diverse playing population, yet there have only been 11 non-European EPL managers in over 30 years [15].

The purpose of this article is to advocate for ways of 'rethinking leadership' that challenge the current dominant ethnocentric, gender-biased, leader-centric orthodoxy. We draw on the theoretical discussions of Chin and Trimble [3] to advocate for an expanded global and diverse leadership paradigm that is underpinned by clearly delineated dimensions of diversity and cultural competence and which recognise the importance of the organisational and cultural contexts. Specifically, we advocate for recognising the value of understanding why and how diversity and cultural competence can be integrated into sports leadership, as well as recognising that the leaders and members of the organisation have multi-layered and overlapping social identities. This advocacy work occurs by exploring a deep-level 'global and culturally diverse leadership' paradigm [3].

This article is significant for four reasons, with the first and second reasons being interlinked. This article is topical and contributes to what researchers in the sports leadership and sports coaching fields have called a key challenge, one of cultural competence [16–18]. 'Cultural competence', however, remains largely ill-defined and conceptually 'cloudy' in these fields [19,20], a critique that can equally be levelled at 'diversity' [21]. Thus, this article is significant because it advocates for the integration of diversity into all discussions of leadership. The third reason this article is significant is that asking 'why' questions of the leadership orthodoxy 'raises the possibility that scholarship and leadership practices become more relevant for progressively diverse populations' [6] (p. 128) and supports those urging leaders to act ethically. The power of asking such questions and expecting leaders to act ethically was highlighted when questions were asked why the now ex-Spanish Football Association chief, Rubiales, thought it was appropriate to give player Hermoso an unsolicited kiss on the lips after Spain's Women's World Cup victory in 2023. Fourth, this article contributes to the discussion on leadership by shifting the discussion from primarily focusing on the individual leader–member exchange (e.g., athlete–coach dyad) towards a broader discussion that incorporates sociocultural, pedagogical, and indigenous theories, which focus more on collectivist meaning-making rather than competitive unidirectional leader-centrism.

To achieve the purpose of this article, as described above, it is structured thus. Following this introduction is a discussion of a body of literature that views leadership from a sociocultural perspective and challenges the orthodoxy associated with a Western leader-centric model of leadership. The literature is drawn from leadership studies generally and sports leadership and sports coaching more specifically. Succeeding this discussion is an introduction of a diverse leadership paradigm that challenges the Western leadership orthodoxy by asking new questions and advocates for expanding our thinking about 'how leadership is perceived, enacted and appraised' [3] (p. 17). The penultimate section of this article is a discussion of the implications of adopting a diverse leadership paradigm for policy, practice, development, and research of leadership. This advocacy article does not end with a definitive conclusion; rather, it ends with an invitation to participate in a journey to realise the potential of diverse leadership.

2. Towards a Sociocultural Paradigm Shift: What Does the Literature Say?

The following is not an exhaustive overview of the leadership literature, which is not possible given the expanse of academic and professional literature published on leadership. For example, when Cassidy and colleagues [6] typed 'leadership' into Google Scholar, the outcome was 'About 4,520,000 results', with 'About 779,000 results' occurring from 2017. In the latter category, 29% of the results discussed leadership from a sociocultural perspective, while the majority were informed by psychology and business/management/organisational studies, with the focus of the latter being on individual human behaviour. In line with Deloitte's 'call to action' [1] and Chin and Trimble's [3] appeal for leadership to acknowledge diversity, cultural competence as well as organisational and cultural contexts, the following discussion focuses on sociocultural perspectives of leadership which challenge the Western leader-centric models of leadership. Additionally, it draws on recently published discussions of leadership generally and, more specifically, leadership in sports and sports coaching [6].

Cassidy and colleagues [6] describe leadership in sports, when viewed through a sociocultural lens, to be, amongst other things, 'a complex, social, cultural, relational, situated, and pedagogical practice' (p. 127). Similarly, Leberman and Burton [22] argue for leadership to be viewed as 'a "moment" of *social* relation' (p. 8, *emphasis added*), while Schull [23] advocates for recognition to be given to the way in which perceptions of leadership are 'influenced by an individual's experiences—both past and present—and are shaped by collective beliefs within a specific *socio-historic context*' (p. 103, *emphasis added*). However, calls to view leadership from a sociocultural perspective are not new. Over 20 years ago, Osborn and colleagues [24] made a case for a *contextual* theory of leadership.

In the 21st century, leaders are expected to deal with rapid change and uncertainty whilst developing practices in order to recognise diversity and make their organisations more sustainable [6]. But to achieve the latter, 'they need to do more than reduce their organisation's carbon footprint' [6] (p. 129). Adopting sustainable practices also requires 'leaders to consider the human capital involved in their organisations and the way in which their organisation is culturally sustaining' (p. 129). Given the above, it is not surprising that there is a growing demand for knowing *how* to become a leader. While the research and resources to support leaders in understanding leadership from sociocultural perspectives are limited, researchers have been working in this area for some time. For example, nearly 30 years ago, Blunt and Jones [25] explored the limits of Western leadership theory in the context of East Asia and Africa and outlined 'some preliminary alternatives to Western notions of leadership, in an attempt to show '*how*' culture might be taken into account' (p. 7, *emphasis added*).

While there may be a desire to focus on how to become a leader who can cope with the challenges of the 21st century, it is also important to recognise that there is 'no single best way to lead' and 'effective leadership is contingent on particular environmental and elemental factors that leaders must recognize to optimize their own leadership attributes' [9] (p. 13). With this in mind, Spiller and colleagues [9] describe and discuss 'wayfinding leadership', which is 'guided by a philosophy of recognition' (p. 17). They contend that such a philosophy

> "requires leaders to recognise the importance of cultivating the "potential" of people, the existence of "many sources of knowledge", the need to "continuously refresh" their thinking, the value in being "emotionally self-aware", the benefits of seeing "not only the 'thing' but also the between things... [and] discern relationships and patterns", and the importance of knowing what is happening in the "*now*" whilst being clear about the destination they wish to go (p. 17, *emphasis in original*)."

Informed by the above philosophy, Spiller and colleagues [9] identify five 'waypoints' that they use to frame their wayfinding perspective of leadership. One of the waypoints focuses specifically on an '[o]rientation on *how* to lead' (p. 29, *emphasis added*). The principles of this waypoint encourage leaders to 'remain open to new possibilities' (p. 29), understand their world is about 'becoming', hold 'a deep belief in the power of co-constructing one's destiny' (p. 36), and place attention 'on the process' (p. 38) and 'the growth in people on the journey' (p. 41).

One of the reasons why researchers are paying more attention to sociocultural and pedagogical approaches to leadership is that they are recognising a desire or expectation that leaders acknowledge the complexities of leadership. The value of adopting these approaches to leadership is highlighted by Paris [26], who drew on his experience of working in an education context to suggest that there is value in using the term '*culturally sustaining pedagogy*'. This term 'supports the value of our multiethnic and multilingual present and future' and requires the adoption of pedagogical practices that are 'responsive of or relevant to the cultural experiences and practices of young people' [26] (p. 95).

A challenge facing leaders in this increasingly diverse world is that it is unlikely that they will only interact with people who look, think, and behave like them. One strategy that has been suggested to enhance interactions between members of diverse populations has been for people to become more culturally competent. Yet, there have been debates over what constitutes competence as well as cultural competence. The debates occur because there are numerous interpretations/models of competence, with many of them focusing on defining 'measurable, specific, and objective milestones describing what people have to accomplish to consistently achieve or exceed the goals for their role, team, division, and the whole organisation' [27] (p. 28). Frelin [28] questioned this interpretation and drew upon the work of Biesta to describe competence as the 'ability to do things' (p. 6), all the while recognising that having ability alone is not enough. She contends that the practitioner, in this case, the leader, is required to demonstrate competence, as well as 'educational judgement', aka 'professionality' [28] because, as Biesta [29] points out, 'a teacher who possesses all the competences teachers need but who is unable to judge which competence needs to be deployed when, is a useless teacher' (p. 10).

Other debates have occurred around what constitutes cultural competence. The term cultural competence evolved from terms such as cultural sensitivity and cultural awareness and has been described as the ability to '...apply knowledge and skill appropriately in interactions with clients' [30] (p. 9). Additionally, the ability to apply knowledge and skill requires recognition and understanding of foundational notions such as culture, race, diversity and marginalisation [30]. Yet, there have been debates around the merits of developing approaches such as cultural competence and associated concepts, e.g., culturally relevant pedagogy [31], culturally responsive teaching [32], culturally relevant education [33], and culturally relevant cycle [34]. One of the challenges levelled at the above approaches is that they can 'reflect an essentialist view of culture, that is, that there is an "essence" that marks all members of one cultural group as being distinctively different to another' [6] (p. 40). Suggestions have been made as to how this essentialism can be overcome. For example, Curtis and colleagues [35] advocate for practitioners, in this case, leaders, to 'critique the "taken for granted" power structures and be prepared to challenge their own culture and cultural systems rather than prioritise becoming "competent" in the cultures of others' (p. 16). Hammersley [36] challenges essentialist views of culture by engaging with the concept of intersectionality, which recognises the ways in which our identities 'are multiply defined in terms of "race"/ethnicity, sexual orientation, social class, ability/disability, and other dimensions as well' (p. 56). Organisations also have a role to play in overcoming such essentialism. McNamee [37] suggests that the pursuit of *eudaimonia* (human well-being or flourishing) is worthwhile but recognises the difficulty with such a position, especially when living in this diverse world, because there is no universal understanding of what constitutes 'excellence' or a 'good life'. Yet, McNamee [37] contends that focusing on developing excellence could be a way to engage with the ideas of competence, specifically by acknowledging that judging competence and excellence is influenced by the context in which it occurs, and therefore, any judgement requires flexibility and 'professionality'.

Sports Leadership and Leadership in Sports Coaching

Leadership practices and the theorising of leadership in the sporting context reflect the trends in the broader leadership context, with the majority of the sports leadership research being informed by the management/organisational literature, e.g., [38–40], and by psychology, e.g., [41]. Yet, there are hints, even within the aforementioned texts and certainly elsewhere, that sports leadership is on the brink of a paradigm shift. For example, the *Journal of Sport Management* published a Special Issue—*Sport Leadership: A New Generation of Thinking* (2018). The rationale the editors gave for the Special Issue [42] was that there was

> ". . . a foundational bias in the literature towards researching traits and characteristics of individual leaders (often white, male) (Burton, 2015) where leader-centred perspectives and theories, such as transformational, transactional, and charismatic, have taken prominence (Welty Peachey et al., 2015). A response to concerns about the leader-centric focus (sometimes referred to as the hero leader—often propagated by the sports media) has been the emergence of follower-centred perspectives on leadership (Uhl-Bien, Riggio, Lowe, & Carsten, 2014) (p. 77)."

When calling for contributions to the above Special Issue, the editors requested that contributors emphasise what they called a 'social construction' view of leadership, which 'views leadership as a social, collaborative, relational experience focusing on the idea that leadership emerges from the interactions and constructions of people in a particular context' (p. 77). It was acknowledged that

> "leadership models developed in Western settings are largely based on assumptions that the basis of human motivation is individualism and competition (which is less relevant for many indigenous cultures). It is potentially these assumptions that have fuelled the preoccupation with the individual leader as the focus of leadership scholarship (Grint, 2005) (p. 80)."

The editors also recognise that the diverse contexts and social structures within which leaders operate also impact who gets the opportunities to lead and how they lead. So, the stated mission for the above Special Issue was to 'understand leadership from the point of view of those less visible within sports management/journals (i.e., women, non-Western societies)' (p. 80). But the hint of a paradigm shift in sports leadership is not confined to sports management. Work occurring in sports psychology also hints at a conceptual shift that recognises the 'cultural composition of both the client and the practitioner' [43] (p. 283; also see [19]). However, Schinke and Moore note that despite sports psychologists often working with athletes from diverse cultural backgrounds, the field of sports psychology has 'been slow to join the dialogue or to learn from' professional psychology colleagues who have 'long embraced the integration of cultural practices' [43] (p. 283). This lack of engagement was one rationale given for the *Journal of Clinical Sport Psychology* publishing a Special Issue in 2011 entitled *Culturally Informed Sport Psychology*.

In the sports coaching literature, there is a growing body of scholarship that focuses on sociocultural competence, cultural context, cultural diversity, cultural awareness, and diversity and inclusion, e.g., [20,21,44–48]. Additionally, there is a hint that there is a greater willingness by some to entertain a paradigm shift in how leadership is understood and practised. For example, in a study that explored how Olympic athletes viewed the characteristics of their leaders and managers, the athletes identified their least favoured characteristics as being self-focused, haughty self-belief, inauthentic, manipulative, and success-obsessed [49]. These least favoured characteristics are consistent with the 'idealised' command-and-control 'Alpha' leadership style, eschewed by Trimble (see [50]), which is prevalent in sports leadership and is particularly revered in the West, where sports leaders and managers are reluctant to appear collaborative, altruistic, fluid, or remotely vulnerable in the face of complexity, plurality, and uncertainty (see [51,52]). These pathologies are captured by Gearity, who decries '[t]he (sexist, racist, heteronormative) Great Man myth of leadership with its ties to business and military rationalities' [53] (p. 375) that are so apparent in sports coaching. Gearity explains that these characteristics are supported in neoliberal times because they reflect the view of 'CEO-coach-as-sovereign', privileged, self-orientated, and all-powerful (p. 377).

Recently, other sports coaching scholars have argued that there remain deeply ingrained foundational social identity biases such as racio-ethnic (folkloric) prescriptions about who makes an effective leader [44,53]. These biases are foundational to the Western leader-centric paradigm that fetishises the podium culture of winning at all costs as the ultimate (and only) predefined and reductive measure of leadership effectiveness. This 'idealised' leadership approach is reproduced by homogenous and dominant in-groups. Recognising this, Culver and colleagues [54] call for improved diversity in coach development at the levels of recruitment, language, learning, and development. Similarly, Rynne and colleagues [55] advocate for coach developer training to enhance understandings of indigenous participants' local knowledge systems matched by appropriate instruction. This aligns with what Gearity and colleagues [18] regard as coach developers' racial privilege.

The above-referenced work in sports leadership and sports coaching suggests that researchers in these fields are beginning to acknowledge the need for an ethical, nuanced, multilevel analysis of leadership that incorporates not just individuals, dyads, and teams but larger groups, organisations, and systems within cultural contexts, which views leadership as 'socially constructed', i.e., leadership as a social, relational, collaborative, contextual, complex, and strategic dynamic in ever diverse organisational and cultural contexts, e.g., [42,56–59]. The body of literature supporting this paradigm shift (re)conceptualises sports (coaching) leadership as sociocultural, pedagogical, and indigenous [6]. Additionally, those researchers whose work reflects the 'social identity' paradigm in sports (i.e., race, ethnicity, gender, sexuality, (dis)ability, class, lived experience) not only shed light on social justice biases, barriers and underrepresentation, e.g., [60–62], but are also beginning to inform the bourgeoning literature on racio-ethnic issues and the gendered nature of sports leadership, gender equity and institutionalised underrepresentation of women in sports leadership, e.g., [59,63–66]. These interrelated paradigm shifts represent epistemological and normative turns towards more responsible, principled, ethical, altruistic, virtuous, inclusive, and collectivist positions in sports leadership and constituent fields.

Despite the above shifts, much of the discussion of leadership in sports coaching is confusing, and there appear to be assumptions by many that there is a shared understanding of what leadership means. Arguably, this lack of definitional and conceptual coherence [67] is exacerbated by the value coaches place on biographies and autobiographies of winning individual coaches, which Stoszkowski and Collins [68] identify as coaches' second most popular method used to inform their practice. However, Cassidy and colleagues [6] contend that 'the relevancy and variability of the quality of the biographies and autobiographies could contribute to the lack of clarity surrounding the discussion of leadership in informal sports coaching resources' (p. 136). Alongside the confused state of the discussion around leadership, there is also limited conceptual clarity around what constitutes diversity and cultural competence and how these concepts are delineated and operationalised [19–21]. While the sociocultural paradigm shifts highlighted above are positive, there remains work to be carried out to understand how sports organisations can leverage differences to become culturally competent. Also, there remains the challenge and opportunity regarding how to bring leadership and diversity together and how to move beyond a narrowly defined leader–follower exchange paradigm.

3. Beyond Leader–Member Exchange (LMX): A 'Diverse Leader Member Organisational Exchange' (DLMOX) Paradigm [3]

Expanding the entrenched (dyadic and dominant) leader–member exchange approach to sports leadership is a key focus of this article. Building on the introduction and the discussion of the referenced literature and gaps therein, the attention now turns to introducing key ideas from Chin and Trimble's 'diverse leader member organisational exchange' paradigm (DLMOX) [3]. First, it is worth saying that, in this section, we explicate a leadership *paradigm* and not a linear behaviouristic leader trait model with typically discrete specifications. As such, this section is conceptually oriented in keeping with the advocacy impulse behind this article. Second, the DLMOX paradigm is integrative and interdependent, so discussing one aspect as a discrete unit is impossible and unhelpful in any event. Third, because the paradigm is not a prescriptive leadership 'treatment' nor a copper-etched system, there is a certain fluidity to how the concepts might apply to the readers' context.

To begin, it is instructive to briefly map out Chin and Trimble's underlying logic [3] using the following propositions:

- Leadership concepts, practice, and research are largely representative of Western (North American, Eurocentric), ethnocentric, and gender biased (white and male) and are narrowly defined in terms of other dimensions of social identity (middle class, heteronormative, able-bodied). This has led to a Western leader-centric paradigm that has become the 'idealised' universal approach, and this hegemony has gone largely unchallenged;
- This leader-centric and techno-rational hegemony is increasingly inadequate in the face of globalisation, shifting social values (e.g., social justice), and proliferating heterogeneity. Culturally competent leadership is required as the catalyst for more diverse, responsible, and responsive leadership;
- The orthodox 'leader member exchange' (LMX) orientation is dyadic and lacks an appreciation of the diversity of social identity and lived experience, as well as lacking a multilevel analysis of diverse organisational and intercultural contexts;
- Recognising and including diversity (D) and organisational contexts (O) is critical in order to transcend the prevailing leader-centric, dyadic, and decontextualised LMX paradigm;
- Cultural competence, as a catalyst for diversity, occurs across three organisational dimensions: *climate* (values, norms, policy), *core/curriculum* (strategy, programmes, operations, content, resources), and *composition* (leaders, members, stakeholders);
- A 'diverse leader member organisational exchange' paradigm (DLMOX) is proposed to expand previous conceptualisations of leadership.

3.1. Challenging the Western Canon of Idealised Leadership

Chin and Trimble's point of departure is that 'a paradigm for diversity leadership is important. . . [because] we need to ask new questions, create new paradigms, and identify new dimensions to expand our thinking about how leadership is perceived, enacted, and appraised' [3] (p. 17).

The rationale Trimble and Chin [69] provide for challenging the Western canon of 'idealised' leadership is that

> "[w]ith few exceptions the current theories and research on leadership neglect the value of cultural diversity when considering different leadership styles. [They] omit dimensions of diversity in researching how leadership is exercised, and the values effective leaders promote. Yet, there's little question the growing population diversity in our complex and uncertain world requires a deep understanding of how effective leadership is exercised and the role leaders will play in managing the changes ahead. . . [the] entrenched models are overwhelmingly eth-

> nocentric, and gender biased. They draw on narrow, cultural-specific knowledge and practices that simply are not relevant for a diverse and global population, nor applicable in varying contexts and changing social environments' (p. 1)."

This rationale is further evident in Chin's keynote presentation [70], in which she asks questions about the consequences the 'entrenched models' have on our understanding of leadership and what they might mean for people and their communities. She asks questions that focus on who and what 'is congruent with leadership and being a leader' before reflecting on the ways in which orthodox models of leadership and their subsequent rules are 'often culturally specific and narrowly based on those who are already in privileged positions'. She continues by pointing out that so often

> "[w]e base our principles, policies, and practices on a culture that reinforces values that are held by a dominant group, which mitigates against change, diversity, inclusion, and collaboration. And diversity is not just about counting the numbers and saying we have representation."

Chin [70] goes on to say that if we are to challenge the orthodoxy of leadership, then 'you have to pay attention to those around you; who are the unfavoured category? Effective leaders develop shared outcomes that reflect the diversity and goals of all their people and members'. Having mapped out the general logic and provided the rationale for the DLMOX paradigm [3], the following discussion focuses on the characteristics and the dimensions of diverse leadership, as well as how cultural competence can be viewed as a catalyst for diversity that can be leveraged throughout the organisation.

3.2. Characteristics, Dimensions, and Prototypes of Diverse Leadership

Diverse leaders and members in diverse organisations are at the heart of Chin and Trimble's multilevel DLMOX paradigm [3] as they seek to 'incorporate the ways diversity shapes our understanding of leadership and its effects' (p. 6). Instrumental to the development of the DLMOX paradigm were responses to surveys and interviews conducted with 190 culturally diverse leaders from across the globe, who were asked to describe the characteristics that were most and least important to them in their leadership also [69–71]. In doing so, the participant leaders identified the following characteristics:

- *Most important*: adaptability, integrity, authenticity, honesty, and communication;
- *Least important*: aggressive, conflict-inducer, dominant, self-centred, and status-conscious.

Subsequently, Chin and Trimble [3,70,71] identified five 'dimensions' of diverse leadership (i.e., constructive, imaginative, principled, synergistic, virtuous) that underpin their non-Western diverse leadership 'prototypes' (i.e., Daoist, Silent/Invisible/Reluctant, Benevolent Maternalism/Paternalism, Feminist, Servant, Theory Z) (also see [2]). Fundamental to all these leadership 'prototypes' are mutuality, collectivism, benevolence, familial affiliations, and the self as *inter*dependent. Importantly, diverse leaders operate from an 'affirmative paradigm', i.e., have courage (to stand up, risk and disrupt), be resilient, maintain integrity, accept the title of leader, be confident (not apologetic for your difference), and translate negatives into positives. While we have merely touched on the above characteristics, dimensions, and prototypes, we can nonetheless see that diverse leadership is a collective and interdependent endeavour rather than the assertive efforts of the individual leader. However, for Chin and Trimble [3], diversity is more than this; diversity is indeed about inclusion and equity, but at the heart of diverse leadership is cultural competence, which merits some attention.

3.3. Cultural Competence as a Catalyst for Diversity: Climate, Core/Curriculum, and Composition

Chin and Trimble [3] suggest that cultural competence is evident when the organisation pays attention to issues of diversity as well as being intentional and systematic about diversity in its *climate* (values, norms, policy), *core/curriculum* (strategy, programmes, operations, content, resources), and *composition* (leaders and members). Cultural competence, therefore, is much more than counting the numbers for representation by obtaining a seat at the table, claiming affirmative action, or ad hoc cultural sensitivity training [70,71]. Cultural competence is what the organisation does. Cultural competence, as a catalyst for diverse leadership, is an important driver behind the DLMOX paradigm because it brings leaders, members, and organisations together as diversity is embedded purposefully in the organisation's climate, core/curriculum, and composition. These points are developed further in the next section as we consider some implications of shifting towards a diverse leadership paradigm.

4. Implications and Discussion

We now consider the implications, i.e., the significance, tensions, and ramifications of a global and diverse leadership paradigm for the policy, practice, development, and research of leadership, and, indeed, how leadership might be (re)conceptualised. The reconceptualisation initially moves from higher levels of abstraction—rethinking leadership, out of necessity, starts at a conceptual level—to more specific implications. These implications are informed, or otherwise inspired, by the work of Chin and Trimble [3] and colleagues [2,72,73], whose work is implicit in the primer questions chosen to frame the discussion in this section. The primer questions stem from an overarching question that can broadly be summarised thus: What might enable diverse leadership, and what might constrain diverse leadership? The following (sub)questions have been identified because of their significance for rethinking leadership development. In answering each (sub)question, we discuss corresponding tension and ramifications because these implications are as pressing for leadership across multiple domains as they are for leadership in sports organisations and sports coaching.

4.1. Am I Constrained as a Leader if My Social Identity, at Least as It Appears on the Surface, Is Not so Obviously Diverse?

To answer this question, it is important to recognise two key points. First, 'lived experience', as an oft-overlooked dimension of social identity, matters. It matters because diverse lived experiences may contribute to divergent thinking, which is perhaps not as readily identifiable as other dimensions of social identity. Second, culturally competent leadership requires a level of 'cultural humility', which Chin [70] describes as other-oriented, curious, and humble. Chin [70] pointedly identifies in her keynote address that 'if you think you're culturally competent then you're not' because there is an even deeper level of understanding, which is cultural humility, and cultural humility is about 'adopting an interpersonal stance that is other-oriented' (also see [19]). Without such cultural humility, tensions may arise if it is implied that unless leaders have easily identifiable diverse social identities, then they cannot expect to be diverse leaders. Also, there is the potential for tensions to arise if certain social identities and certain lived experiences are seen as favoured while others are unfavoured. The ramification of creating favoured and unfavoured categories of social identity is that bias and exclusion continue. To this end, acknowledging that life experience is also part of one's social identity, alongside other dimensions of social identity and their intersectionality, enables diverse leadership and mitigates exclusion and inequity. The next (sub)question of significance is a related one.

4.2. With Diverse Leadership Is There a Danger of Mirroring in Reverse, i.e., Do We Simply End up with Another Idealised and Dominant Leadership Hegemony?

The case for a shift towards the DLMOX paradigm, as we have advocated, starts at the sociocultural levels by problematising the idealised, universalised leadership canon with its (colonial) knowledge hierarchy and its pedagogical processes that legitimate and maintain such a leadership monoculture. However, in advocating, we also always need to take great care not to set up unhelpful dichotomies such as *Western hegemonic bad* vs. *non-Western diverse good*. Jimenez-Luque [73] captures this tension when he argues that

> "it is important to clarify that the critique of the hegemony of Western knowledge does not imply that Western epistemology is not valuable. A critical and decolo-

> nial perspective means that although Western knowledge in general, and Western theories of leadership in particular, are central to understanding [sic] the complex phenomenon of leadership, they (1) are not the only ones, (2) only represent a local perspective, and (3) need to acknowledge their position of power and privilege regarding other cultures as a result of colonialism and the epistemicide."

Simply repudiating the Western hegemonic paradigm outright, without understanding it, may unwittingly create a new idealised diverse leadership hegemony, whereby the Western epistemology is summarily dismissed in favour of all that is non-Western. As such, there is an inherent tension and a risk of mirroring in reverse the universalising colonial logic of Western leader-centrism [72] that we are here trying to advocate against. The ramification of a shift towards diverse leadership for organisations is that ongoing collective discussion amongst leaders and members, of all social identities and lived experiences, of the prevailing leadership logic and its effects will be a critical antecedent to the process of rethinking leadership. Rethinking leadership certainly requires unlearning and decolonising [72,73], though great care should be taken in navigating this choppy passage. This is all easier said than done, but the following (sub)questions might be a useful starting point.

4.3. If Dominant Western Leader-Centric Approaches Are Increasingly Inadequate and Unresponsive to RAPID Change, Then How Do We Begin to Rethink Leadership?

Implicated in any rethinking enterprise is understanding the views of leaders and members. Understanding the significance of paying attention to all constituents, Chin, Desormeaux, and Sawyer [74], for example, ran a diverse leadership summit that was predicated on the following questions:

1. How do you view leadership?
2. How is your exercise of leadership influenced by the context in which you lead, the multiple dimensions of your identity, and your lived experiences associated with culture and minority status?
3. How do you project the kind of leadership needed for the future, given the rapid change, growing diversity, and increased globalisation in society?

The participant responses gave rise to the following four competencies:

- Leveraging personal and social identities;
- Utilising a global and diverse mindset;
- Leveraging community and organisational contexts;
- Promoting a diversity-supportive and inclusive climate.

In turn, each competency was underpinned by detailed sets of dimensions (see [74]). The significance is that rethinking leadership should be collective and socially constructed rather than prescribed or mandated. The ramification of the positional leader 'going it alone', by failing to include all constituents is that the prevailing leadership orthodoxy simply gets reproduced under a new name. Rethinking leadership from a global and diverse perspective should start by asking leaders and members, across dimensions of social identity and lived experience, some foundational questions about (a) the nature of leadership, (b) the role of context, and (c) the congruity between the demands of our globalised world and how leadership is construed, enacted, and evaluated. Such rethinking, according to Chin [70], starts with unlearning and might also include a discussion of the following and their potential ramifications:

- What and whose knowledge, practices, and behaviours are privileged, propagated, and protected? In what and whose name is the prevailing leadership paradigm in service?
- What epistemologies and knowledge systems are missing or have been banished from the dominant picture? Is there room for expanded conceptualisations of leadership?
- Who is missing from the leadership picture, who are the unfavoured categories, and who gets to lead?

However, when asking these questions, there will naturally be degrees of scepticism, fear, and rejection, especially from the dominant in-groups. This brings us to the next (sub)question.

4.4. What Are Some of the Challenges of Shifting towards Diverse Leadership, Especially for the Command-and-Control-Style Leader and for Those Whom They Lead?

Naively expecting dominant in-groups, who may have vested interests in maintaining the status quo, to change their leadership thinking and practice will invariably be accompanied by scepticism and resistance. One obvious implication of shifting towards diverse leadership will be fear of losing legitimacy, i.e., leader identity, power, influence, authenticity, and credibility. Diverse leadership could be (mis)construed as soft, indecisive, and endlessly acquiescent, and misattribution has real implications if left unchecked. Recognising this tension, Chin and Trimble's notion of the diverse leader adopting an 'affirmative paradigm' [3,70,71] is significant because they contend that diverse leaders are, amongst other qualities, called to be collaborative, collectivist, altruistic, and socially just but at the same time to be unabashed by accepting the title of leader, having the courage to make decisions and to take risks, and embracing difference rather than apologising for it.

In the same vein, tensions may arise for members who hold tight to ingrained cultural expectations about what and who their leaders should be and about what constitutes leader legitimacy and effectiveness across societal, organisational, and individual levels (see [59,64]). The potential ramifications of orthodox-style leaders modifying their leadership styles to account for context are that members become concerned about their leader's authenticity [3,70]. Therefore, pre-empting leader and member expectations and concerns regarding change should be a collective endeavour that implicates the organisation across its climate, core/curriculum, and composition so that individuals or teams are not left to navigate these tensions ad hoc and alone.

As a case in point, take an organisation that has recruited and promoted leaders with more diverse social identities than the dominant in-group. Subsequently, it turns out that these diverse leaders simply end up leading more like the command-and-control in-group who recruited and promoted them in the first instance (see [69,72]). This is an example of where the ambition to become more compositionally diverse has not necessarily been matched by a diversity-supportive climate and core/curriculum. This organisation may look more representationally diverse but is far from culturally competent or equitable, and this may create tensions amongst constituents with respect to both the inclusion strategy and the newly appointed leader's authenticity. One recommendation that Chin [70] proposes is to 'leverage social identities, lived experience and the organisational climate' by establishing what she calls 'interdisciplinary intercultural partnerships' as a way of advancing greater cultural competence, which might start by exploring the aforementioned scepticism, fear, and resistance.

4.5. All This Collaboration and Adapting to Context Takes Time—Is It Worth It?

There is no escaping the fact that it will take time for leaders to gain a diversity of perspectives by paying attention to members across organisational levels and across dimensions of social identity. While collaboration and a collectivist approach demand more time and energy, without this investment, innovation arguably remains stifled. Where leaders take the time to obtain multiple perspectives, including dissenting voices and contrarian views—and all things being equal—diverse leadership has the potential to mitigate against 'group think' [3,70], whereby individuals acquiesce in homogenous groups to reconfirm and reproduce each other's preferences, biases, and decisions. The ramification of this for organisational climate and curriculum is to deliberately promote, practice, and recognise divergent thinking across functional levels and member identities so that innovation can flourish. What might emerge if there was less concern with hierarchical lines of command and correspondingly less opportunity for groupthink? Difference makes a difference when it comes to collaboration and innovation, and this is what diverse leadership can bring [3,70,71]. But how should we prepare leaders and organisations to collaborate with diverse members, to adapt to diverse contexts, and to be socially just in doing so?

4.6. How Should We (a) Prepare Leaders for Diverse Leadership and (b) Evaluate Them?

In chapters 8 and 9 [3], Chin and Trimble consider implications and dilemmas for leadership development at individual and organisational levels, as well as aspects of evaluation within their paradigm (leadership effectiveness assessed across quantitative, qualitative, and evaluative data). While a fuller explication of these chapters is beyond the scope of this section, the authors identify three 'applications' for training culturally competent leaders:

- Leader self-awareness: Self-assessment;
- Leader skills: Developing cultural fluency;
- Leader knowledge: Dimensions of cultural difference.

They then present several dilemmas implicit in the development of diverse leaders, such as self-awareness and identity, expectations and image management, negotiation, intercultural communication, collaboration and decision-making, problem-solving and managing conflict, work culture, and team-building (global teams). The central point to be made here is that for leaders to be culturally competent and responsive in the adaptive spaces between diverse member composition, organisational climate, and member expectations, they will be required to adapt their styles across contexts. The fundamental challenge and tension then are to find ways of becoming more 'practically wise', which Jones and Hemmestad [75] describe as someone who displays self-awareness, discernible judgement, intuitive situational literacy while attuned to emergence, context, and ethical imperatives (*phronesis*). As such, the wider ramification of this rethinking is that leadership development and evaluation of leadership is no longer simply about the production of something that requires predetermined outcomes and assertive top–down influence (*poiesis*).

Although the above discussion of implications is far from exhaustive or prescriptive, our aim is to explore the significance, tensions, and ramifications involved in a paradigm shift towards diverse leadership for sports leadership and leadership beyond.

5. Conclusions

Sports leadership, like other areas of human endeavour, operates in increasingly heterogeneous global and diverse contexts through exchanges between leaders and members with ever-diverse social identities and lived experiences. The purpose of this article, in line with the objective of this Special Issue, is to advocate for ways of 'rethinking leadership'. In this article, we challenge the Western orthodoxy of leadership because it is overwhelmingly leader-centric, ethnocentric, gender-biased, and representative of a narrow range of social and cultural identities. As such, we advocate for a diverse leadership paradigm that is more socially just, altruistic, collaborative, and inclusive of *all* its members across dimensions of social identity and across organisational levels—one that is 'culturally competent'—even if there is a lack of coherence as to what constitutes cultural competence. Our contribution to this Special Issue highlights that diverse leadership can only be realised if we are conceptually clear on what cultural competence is and how it can be collectively constructed and embedded throughout the organisation's climate, core/curriculum, and composition. Gaining clarity around cultural competence is important because it is a catalyst for diversity and enhances the possibility that a paradigm shift towards diverse leadership can gain momentum. We invite practitioners and researchers in sports leadership and beyond to consider the potential of diverse leadership as an integrative and yet fluid paradigm. Rethinking leadership and the development of our leaders for a human future together has never been more necessary and urgent, and diverse sports leadership has an important part to play.

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