

From Inner Shifts to Systemic Change: A Scoping Review of Sustainability Interventions

Despite the proliferation of sustainability and leadership behaviour change interventions, trends toward sustainability continue to deteriorate across most social and ecological domains. These trends represent a profound opportunity for novel and hopeful transformations across scales.

Inner transformations, including shifts in values, beliefs, worldviews, and capacities, are increasingly recognized as essential for enduring change. Inner transformations are linked to the cultivation of character traits, such as empathy, ethical discernment, relational maturity, imagination, and systems thinking. Character shapes how individuals and institutions interpret, respond to, and lead in the face of challenges. Despite growing interest in leveraging inner shifts for sustainability progress, there is little known about the extent to which interventions generate lasting change. Furthermore, there remain substantial gaps of understanding regarding effective ways to evaluate how interventions seeking to drive intervention contribute to sustainability progress, as well as their long-term implications for leadership.

This research addresses that gap through a scoping review that maps sustainability interventions and their relationships to inner dimensions relevant to sustainability leadership. Guided by a pre-registered protocol (INPLASY, 2025; Protocol 7668) and PRISMA-ScR, we searched SCOPUS, EBSCO, and ProQuest (2015–2025) for peer-reviewed interventions (in-person and virtual) linked to sustainability and behavior change. Screening and deduplication in Covidence yielded 221 eligible articles. A modified Critical Appraisal Skills Programme (CASP) assessment was applied to evaluate methodological quality, ethical considerations, follow-up adequacy, and sustainability relevance. Upon final review, only seven studies met our criteria for in-depth qualitative analysis.

Through reflective thematic analysis, we identified four recurring themes across the interventions that demonstrated more credible and sustained positive outcomes. First, effective interventions engaged “head, hands, and heart,” combining cognitive learning with practical skill-building and affective, relational connection. This helped participants translate awareness into action while nurturing qualities such as empathy, care, and responsibility. Second, a strong sense of community was important for encouraging peer learning, intergenerational exchange, and developing emergent leaders. In this context, organizational support increased retention, legitimacy, and the likelihood that changes persisted beyond the intervention period. Third, interventions were most effective when they took a comprehensive approach to address sustainability challenges holistically, acknowledging wider social, ecological, and economic impacts. This strengthened character development and leadership competencies such as ethical decision-making, adaptability, agency, and systems thinking. Fourth, making sustainability tangible for participants, for example, by addressing real-world problems in their communities, inspired multi-solving approaches. In these contexts, interventions created conditions for multiple synergistic sustainability benefits to co-emerge, benefitting both social and ecological systems, including increased wellbeing, empowerment, stewardship, and quality of life. Technology and gamified approaches were especially useful when they created safe environments for experimentation and supported, rather than sought to replace, relational and experiential learning.

In conclusion, our scoping review highlights timely opportunities for sustainability interventions focused on inner transformations to respond to the urgent challenges of our times. For sustainability leadership, these findings highlight the need to shift from intervention designs

focused exclusively on knowledge sharing toward designs that cultivate inner capacities alongside practical leadership competencies. By integrating objective and longitudinal evaluation, attunement to local contexts, and long-term organizational support, interventions are better positioned to increase ethical leadership and its impact on collective wellbeing whilst simultaneously supporting progress towards sustainability.