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Exploring Western Australian Young People's Contemporary Experiences and Perceptions of Their Relationship to the Natural Environment

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Abstract

Environmental changes and challenges have a profound impact on the psycho-social and overall well-being of young people. This qualitative study, grounded in eco-social work, explored how young people (aged 10–14) in Perth, Western Australia, experience and understand their relationship with nature. Purposive sampling was used to recruit 21 young people; data were generated through four semi-structured focus groups and analysed using thematic analysis within an interpretive orientation. Findings indicate that participants experience nature as a relational, emotionally significant presence central to well-being, identity, and belonging, rather than simply a setting that produces well-being through exposure. Participants demonstrated sophisticated environmental awareness and a strong orientation toward action, alongside significant barriers to engagement, including unequal access, institutional constraint, and exclusion from environmental decision-making. A further key finding concerns intergenerational communication: participants consistently sought honest information from adults and experienced managed reassurance as compounding, rather than easing, their environmental concern. These findings suggest that for this group of young people, their environmental knowledge, emotional engagement, and agency are already well established by early adolescence, and that apparent disengagement more often reflects structural exclusion than developmental limitation. The study concludes that recognising young people as active ecological agents, and addressing the structural conditions constraining their participation, is central to holistic wellbeing and to eco-social work practice, policy, and future research.

Keywords: adolescent wellbeing; eco-social work; natural environment; nature; Western Australia; young people



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1. Introduction

In contemporary societies, interest in children's and young people's attitudes and behaviours towards the natural environment (nature) has grown significantly, driven by several factors. Key factors include environmental changes and their potential repercussions on future generations, as well as the steady rise in mental health concerns among young people (Dickinson 2013; Patton et al. 2016). These concerns are prompting educators, parents, and policymakers to engage young people in conversations about sustainability and conservation (UNICEF 2020).

Social work has a longstanding commitment to social justice and advocacy across individual, community, and structural levels (Lekganyane and Sibanda 2026). In recent years, the profession's role in addressing ecological crises has been affirmed by the International Federation of Social Workers (IFSW) through *The Global Agenda*, which emphasises social and economic equality, dignity and worth of the person, sustainable communities, and wellbeing through human relationships (IFSW 2018). Ecological crises, often described as "threat multipliers," exacerbate existing inequalities, resource scarcity, conflict, and humanitarian emergencies (United Nations 2011; IFSW 2012). These interlinked challenges signal the urgent need for new eco-social contracts and highlight the importance of social work in collaborating across disciplines to develop innovative responses (Dominelli 2012; Ife et al. 2024; Lekganyane and Sibanda 2026). This study explores young people's contemporary experiences and perceptions of their relationship with the natural environment in Perth, Western Australia.

In this study, the natural environment refers to the contexts, relationships, and experiences young people have with animals, plants, water, land, weather, and other elements that exist independently of human manufacture. This definition is deliberately broad, reflecting the study's commitment to exploring how young people themselves define and experience the natural world, rather than imposing a predetermined conceptual boundary. This research also emerges at a critical historical moment: the first generation of young people to grow up entirely within the era of climate change is simultaneously navigating unprecedented pressures on emotional, social, and psychological well-being (Baird et al. 2025). Understanding how young people relate to the natural world is therefore not a peripheral concern but an urgent one, requiring attention to how young people themselves experience, value, and make meaning of that relationship, and to what this understanding means for social work practice, policy, and research (Ife et al. 2024). Despite this urgency, there remains limited empirical attention to how young people in Western Australia specifically construct meaning in their relationships with nature. This study aims to address this gap by providing valuable insights to add to the knowledge base.

Research on young people and nature in Western industrialised societies has grown over many decades. It has helped demonstrate how natural environments can support the health, development, and well-being of young people. This study does not seek to diminish these contributions; rather, it offers a complementary perspective, drawing attention to relational, contextual, and systemic dimensions of young people's experiences that remain comparatively underexplored, particularly within the Western Australian context.

1.1. Background

Young people are, and will continue to be, significantly affected by the profound and far-reaching impacts resulting from the transformations occurring across and within the environment (UNICEF 2019b). From the standpoint of social work, this ecological crisis carries profound implications for practice, policy, and education. To date, there has been minimal research in Australia examining the thoughts and feelings of young people regarding their relationship with the natural world. By fostering a deeper appreciation for nature, it is hoped that a generation will be inspired to become environmentally conscious and equipped to meet the challenges of a rapidly changing planet. This is not only important for the well-being of young people themselves but also for the broader collective responsibility to protect ecological systems that sustain life.

For people to thrive, nature and the environment must also thrive (Stuart-Smith 2020). Humans' relationship with the natural environment can be understood as a complex system of relationships with intrinsic and extrinsic feedback loops. This deep connection and understanding of the natural environment are crucial for humans to function effectively

and thrive. [G. Bateson \(1972\)](#) draws attention to the often-overlooked cognitive and emotional dimensions of ecological thinking. He argues that ecological awareness must account for the deep emotional currents that shape human perceptions, decisions, and relationships with the natural environment.

Anderson's *Ecologies of the Heart* examines the complex relationships between human societies and their environments, emphasising the pivotal role of emotion, belief, and cultural practices in shaping ecological sustainability ([Anderson 1996](#)). Anderson argues that sustainable environmental management cannot be understood through economic or scientific rationalism alone; instead, it requires attention to emotional and cultural dimensions that inform how people relate to nature. This study aimed to examine this connection in greater depth, and it forms a core premise of the qualitative research approach adopted to develop a rich and deep understanding of how young people construct meaning in relation to the natural environment.

1.2. The Global and Macro Concerns

The world is currently confronting unprecedented levels of social and environmental crises, including climate change, pandemics, enduring inequality, a lack of international consensus on geopolitical matters, and escalating conflicts, as highlighted by [Baird et al. \(2025\)](#). These crises are intricately linked and have a profound effect on individuals and communities, particularly on those who are most vulnerable ([Dominelli 2012](#); [Masuka et al. 2026](#); [Murenje and Sibanda 2026](#)). The interconnectedness of the crises is often called the ecological crisis. It is a multiplier of disadvantage as it significantly increases economic, social, emotional, and ecological challenges ([IFSW 2022](#)). Around 3.2 billion people (40%) of the global population are adversely affected by land degradation, and the most vulnerable are at the most significant risk of the social, economic, and political impacts of environmental degradation ([United Nations Environment Programme n.d.](#)). UNICEF is well recognised as a leading institute in children's rights and has developed the Children's Climate Risk Index (CCRI). The CCRI presents the first comprehensive view of climate risk from a child's perspective, highlighting the interconnectedness of the ecological crisis as a fundamental rights issue ([UNICEF 2019a](#)).

Prominent international frameworks and institutions, including the 2008 IUCN World Conservation Congress, the 1989 Convention on the Rights of the Child ([United Nations General Assembly 1989](#)), and the United Nations Sustainable Development Goals, consistently highlight the importance of providing children and young people with meaningful and interactive opportunities to engage with the natural environment. Such engagement is recognised as a critical concern for both public health and the achievement of global sustainability objectives. Therefore, how the ecological crisis is understood will inform thinking about solutions and opportunities. Global recessions, the globalisation of economic systems, increasing inequality, extensive migration, pandemics, climate change, natural disasters, and increased conflicts over natural resources require social workers to embrace innovative strategies to tackle these pressing challenges ([Bailey and Gerrish 2024](#)).

1.3. Fostering Connection—Green Programs and Policies

Efforts to foster a connection to the natural environment include promoting outdoor education, encouraging nature-based activities, and fostering a sense of environmental stewardship among young people. By integrating nature into daily routines and activities, individuals can reap the myriad benefits that come from a strong connection to the natural world. These protective advantages underscore the importance of connecting with nature to enhance overall well-being and promote a healthier, more balanced lifestyle. The therapeutic benefits of nature as a therapeutic intervention are well-researched and widely

accepted (Cleary et al. 2020). As such, government funding programs have been growing in popularity and providing more significant opportunities for people to connect with the environment by incorporating nature programs or green spaces across various sectors (health, education, statutory services, and community development) (Putra et al. 2021). For example, Bush kindergarteners are in educational settings where children learn through play outside, creating an enjoyable learning experience in nature.

Similarly, for school-aged children/young people, outdoor education programs are widely recognised as providing a holistic approach to learning that benefits students academically, socially, and emotionally (Victorian Government Department of Education 2021). For many decades, governments have funded various outdoor programs in education and statutory services programs for young people who find themselves in the justice or child protection system. It is acknowledged that there are mixed views on the efficacy of the programs, particularly as an intervention to reduce reoffending (Mohan et al. 2022). However, of interest for this current study is the acceptance and popularity of nature as a therapeutic tool, particularly for young people.

In health settings, the use of green spaces and green prescribing, where healthcare professionals recommend that patients spend time in nature as part of their treatment plan, has gained significant popularity over the past few decades. The Olivia Newton-John Cancer Wellness and Research Centre in Melbourne, Australia (Olivia Newton-John Cancer Research Institute n.d.), is a contemporary example of how health settings incorporate green spaces to create a more holistic and supportive environment for healing and well-being for patients, visitors, and staff. Similarly, the Royal Children's Hospital in Melbourne has integrated greens space throughout. At a community level across Australia, governments regularly provide grants and funds to support local community garden initiatives, driven by solid evidence-based research demonstrating benefits to individuals and the broader community. A community garden is a shared space where individuals or groups gather to cultivate fruits, vegetables, flowers, and other plants. Stuart-Smith (2020), a UK-based psychiatrist and researcher, advocates that working with nature can have a profoundly transformative effect on our health, well-being, and confidence.

Sue Stuart-Smith's work suggests that engaging with natural environments can lead to significant improvements in mental health, including reduced symptoms of anxiety, depression, and loneliness, while also contributing to community connection (Stuart-Smith 2020). The author further highlights the role of nature in strengthening self-confidence and self-esteem, as individuals often experience a sense of accomplishment, connection, and meaning through engagement with the natural world (Stuart-Smith 2020). Awe, as an emotional response to experiences perceived as vast, meaningful, or beyond ordinary understanding, may also contribute to these processes by supporting psychological well-being, emotional regulation, perspective-taking, and a greater sense of connection beyond the self, with natural environments commonly providing the context in which such experiences emerge. Together, these perspectives reinforce the importance of incorporating nature into daily life as part of a holistic approach to health and well-being.

1.4. Australian Context

Connell et al. (2014) highlight a disconnect between young people's environmental values, actions, and well-being. Although young people frequently express strong support for environmental principles, this does not consistently translate into everyday ecological behaviours such as recycling, waste reduction, or broader forms of environmental participation. Moreover, the relationship between environmental concern and well-being is complex; caring about the planet does not necessarily enhance young people's happiness or resilience and may, in some cases, contribute to stress or feelings of disconnection. In their

large-scale study of more than 5600 secondary school students in Brisbane and Melbourne, Connell and colleagues found that while young people articulate significant concern for environmental issues and align with pro-environmental values, this concern is often not grounded in deep ecological understanding or accompanied by sustained engagement beyond routine household practices (Connell et al. 2014).

These ideas are echoed in work by Louv (2005), who introduced the concept of nature deficit disorder. Louv uses this term to describe the growing separation between young people and the natural world. While not a clinical diagnosis, the concept highlights concern about the developmental and well-being impacts of this disconnection. It draws attention to how contemporary childhoods, increasingly shaped by indoor and digital environments, may limit opportunities for meaningful engagement with nature.

From an eco-social work perspective, this gap between values, action, and wellbeing illustrates the importance of fostering critical ecological literacy, collective agency, and opportunities for meaningful environmental participation. Without such support, young people's environmental concern risks being experienced primarily as anxiety or powerlessness, rather than as a resource for ecological citizenship and social transformation.

In contrast, Keith et al. (2022) investigated the perspectives of over 1000 Australian children and young people (aged 8–14) on the importance of nature. The study employed an online qualitative survey, utilising thematic analysis to interpret participants' open-ended responses. The findings revealed that young people valued nature for both its utilitarian functions, such as providing essential resources and supporting life, and its intrinsic qualities, including beauty and emotional resonance. Many respondents described nature as a source of happiness, calm, love, and freedom. While the majority of participants expressed positive sentiments, a smaller group articulated ambivalence or fear toward nature. The study underscores the complexity and depth of young people's understandings of nature, highlighting the importance of incorporating diverse youth perspectives into environmental education and policy.

Within the Australian context, interest in young people's relationships with the natural environment has grown considerably, with much of the emerging research concentrated in the Eastern States. Notably, a literature scan identified no studies specifically examining how Western Australian young people perceive or experience their connectedness to nature—a significant gap given the state's extraordinary environmental diversity, geographic isolation, and distinct biodiversity. Western Australia's unique ecological character, combined with the reality that young people here are likely to experience climate impacts in ways that differ markedly from other regions, makes this an especially critical area of inquiry. Understanding how young people in this context construct meaning in their relationships with nature holds important implications for policymakers, environmental educators, and social work practitioners seeking to address the well-being and ecological challenges that younger generations will increasingly face.

1.5. Theoretical Framework: Eco-Social Work

As a study grounded in social work and situated within the discipline's growing engagement with ecological practice, eco-social work is retained here as the study's organising theoretical lens: it has been employed as the professional, ethical, and justice-oriented architecture within which the research questions, analysis, and practice implications are framed. This is a deliberate disciplinary choice rather than a claim that eco-social work is the only lens capable of accounting for young people's relationships with nature. The ideas discussed below add useful, individual-level perspectives. They support and extend this main framework rather than compete with it.

Eco-social work provided a critical theoretical lens for this study, offering a framework to understand the interdependence of human well-being. This theoretical approach challenges traditional anthropocentric and individualistic perspectives by foregrounding environmental justice, sustainability, and the ethical responsibilities of social work practice within the context of climate change and ecological crisis (Lekganyane and Sibanda 2026). The theoretical foundations of eco-social work in Australia are often attributed to key academics Dominelli and Ife, who have articulated complementary approaches to environmental social work practice. Eco-social work is defined as a practice that “intervenes to protect the environment and enhance people’s well-being by integrating the interdependence between people and their social, economic, and physical environments and among people” (Dominelli 2012, p. 8). This definition emphasises both the protective and enhancement functions of practice while highlighting the critical interconnections between human and environmental systems.

Much of the prevailing literature on young people and nature has tended to treat nature primarily as an external resource, a therapeutic exposure yielding measurable well-being benefits such as stress reduction or mood enhancement. While this body of work has generated important evidence, it can render invisible the symbolic, ethical, and relational dimensions of young people’s engagement with the natural world (Anderson 1996). This pattern extends to how young people’s environmental attitudes are typically studied: research has tended to privilege researcher-defined, quantitative constructs over young people’s own interpretive frameworks, positioning them as developmentally deficient rather than as knowledgeable actors embedded within complex socioecological systems (Checkoway 2011; Keith et al. 2022). Eco-social work, together with the individual and emotional dimensions outlined below, helps keep attention on both young people’s lived experiences and the wider structural conditions that shape them.

Although eco-social work is the main theoretical lens for this study, ideas from environmental psychology also help explain young people’s experiences at a more personal level. Environmental identity refers to the extent to which a person incorporates the natural world into their sense of self, such that caring for nature becomes an integral part of who they are, rather than an external obligation (Green et al. 2016). Nature connectedness, a related but distinct construct, describes the subjective sense of belonging to, and kinship with, the natural world and has been associated with greater emotional well-being and pro-environmental behaviour among children and adults alike (Richardson et al. 2019). Place attachment, in turn, captures the emotional bonds that form between people and specific environments over time, shaped by repeated experience, memory, and meaning-making within particular settings. These ideas complement eco-social work. Although Eco-social work has a greater focus on wider issues of structural justice and collective responsibility, these ideas help explain how young people’s relationships with nature develop through personal experience, growth, and connection to specific places. Engaging with this literature alongside eco-social work, therefore, situates the present findings within a wider interdisciplinary conversation, rather than relying on a single theoretical perspective to account for participants’ experiences.

Dominelli’s critical structural approach draws particular attention to how environmental issues intersect with structural inequalities and the unequal distribution of power and resources. Her work emphasises that environmental degradation disproportionately affects marginalised communities, necessitating a social justice response that addresses both environmental and social vulnerabilities simultaneously. Similar views are echoed by Lekganyane and Sibanda (2026), who argue for environmental citizenship in social work. Complementing this perspective, Ife has argued for a fundamental paradigm shift in social work that embraces ecological consciousness and relational ethics. His work positions

the natural world not as external to human systems, but as integral to understanding and addressing human wellbeing.

The principles of eco-social work align closely with established social work values and professional mandates. The [Australian Association of Social Workers \(2020\)](#) emphasises the profession's commitment to human dignity, human rights, and social justice, mandating that social workers enhance collective wellbeing, address systemic barriers, and protect vulnerable populations from oppression. The integration of environmental concerns within social work practice reflects growing recognition that the right to a healthy environment constitutes a fundamental human right, encompassing access to clean air, safe drinking water, and non-toxic living environments. This environmental justice perspective acknowledges that a healthy environment is a prerequisite to enjoying other human rights, including the rights to life, health, and wellbeing.

Despite increasing recognition of the importance of environmental concerns within social work, environmental social work continues to face several significant barriers. One of the most persistent challenges is the lack of training and awareness among practitioners, many of whom report feeling ill-equipped to address ecological issues in practice ([Boetto 2017](#)). This is compounded by the profession's historical and ongoing emphasis on individual pathology and micro-level interventions, which often overshadow broader systemic or ecological perspectives ([Dominelli 2012](#)). Furthermore, environmental social work remains underrepresented in mainstream social work curricula, journals, and conferences, limiting its visibility and integration into professional discourse ([Gray et al. 2013](#)). These challenges underscore the need for a more transformative shift in social work education, research, and policy, one that positions environmental justice as central to the profession's mandate. Today, social work is increasingly seen as a frontline profession in the face of climate and environmental crises. Climate justice, the recognition that those least responsible for environmental degradation are often the most affected, aligns deeply with social work's commitment to human rights and equity. The future of the profession will likely depend on its ability to address both social and ecological challenges in an integrated, justice-oriented way.

Eco-social work in many ways can be viewed as an emerging field of practice with limited empirically validated frameworks for addressing ecological issues alongside youth mental health and social justice. Whilst there is relatively substantial literature arguing from a structuralist viewpoint, its incorporation into practice remains relatively limited. More research is needed on best practices, interventions, and policy advocacy that connect these domains. Australia has nonetheless emerged as a significant contributor to environmental social work scholarship, with growing institutional and community-based initiatives supporting the practical application of eco-social frameworks in education and practice.

Within the context of this research, eco-social work theory reinforced the importance of valuing young people's ecological knowledge and emotional connections to place, while attending to the broader structural and environmental conditions shaping their lived experiences. This positioning recognised young people not merely as recipients of environmental impacts, but as knowledgeable actors whose understandings of place, ecology, and environmental change constitute valuable forms of expertise, challenging traditional power dynamics within research and practice and creating space for youth perspectives to inform both understanding and action.

1.6. Research Questions and Objectives

The study's primary aim was to explore Western Australian young people's contemporary experiences and perceptions of their relationship to the natural environment. The study was guided by the following primary research question:

- How do young people in Western Australia experience and construct meaning in their relationship with the natural environment?

Other key questions under consideration were:

- How is nature used in everyday life to support wellbeing across home, school, community, and digital environments?
- How do warm data and systemic qualitative approaches enhance understanding of youth–nature relationships, and what do they reveal about methodological practice in this field?
- How do young people’s relationships with nature interact with school, digital, social, and institutional environments, and what systemic factors shape these interactions?

The objectives of the study were as follows:

- To conceptualise and contextualise young people’s experiences and perceptions of their relationship to nature.
- To gain deep and rich data insights into the meaning young people ascribe to their relationship with the natural environment.
- To gain insights into what is important to young people and how they perceive their relationship to the natural environment.
- To identify opportunities to co-design solutions/ideas for current and future ecological problems in the real world.
- To contribute to knowledge on young people’s lived experiences and provide weight to their opinions.
- To identify opportunities and implications for social work practice.

2. Materials and Methods

2.1. Research Design

A qualitative research methodology was adopted to gain deep and meaningful insights into how a group of young people in Perth, Western Australia, perceive and experience their relationship with the natural environment. The decision to use a qualitative design stemmed from the recognition that trying to develop a deeper understanding of young people’s relationship to nature is inherently subjective and influenced by multiple layers of meaning. For young people, these relationships are shaped not only by personal experiences but also by developmental stages, identity formation, peer norms, and access to green spaces. As such, a qualitative approach allows for an in-depth exploration of these complex and intersecting influences (O’Leary 2014). It also enables the researcher to engage directly with participants in a way that fosters trust, reflexivity, and co-construction of knowledge (O’Leary 2014). In summary, qualitative research offers a robust framework for examining the complex, lived experiences of adolescents’ relationships with nature. By prioritising depth, meaning, and context, this approach provides a foundation for generating insights that are grounded in real-world experiences and responsive to the needs of young people.

Through qualitative methods, researchers can uncover the subtle, contextual, and often overlooked aspects of social reality that are essential for developing effective interventions and policies to support young people’s mental health and well-being. O’Leary (2014) argues that researchers can gain a deeper understanding of people’s behaviours, beliefs, and experiences by employing techniques such as in-depth interviews, focus groups, and observational studies. Adopting this approach for the current study enabled the exploration of subjective perspectives and the identification of emerging themes. It provided valuable insights that may be difficult to capture through quantitative means alone (O’Leary 2014). Qualitative research, such as this study, is beneficial for investigating topics where context and meaning are crucial for understanding (N. Bateson 2021; Rubin and Babbie 2013).

A qualitative approach was both valuable and practical, offering significant opportunities to gain deep insights into real-world problems and to capture the richness and complexity of human experiences (Rubin and Babbie 2013). Unlike quantitative methods, which often reduce phenomena to numerical data, qualitative research allows for the exploration of meanings, emotions, beliefs, and social contexts that shape human behaviour. This made qualitative methods particularly well-suited for investigating complex social phenomena where the goal was to understand subjective experiences, perspectives, and interactions (O'Leary 2014).

By employing methods such as focus groups and participant observation, qualitative research provided rich, nuanced, and detailed data that reveal underlying motivations and contextual factors often overlooked by other approaches. Furthermore, the selected methodology aligns with critical and participatory traditions in social work and environmental education. By centering the voices of young people, particularly those whose perspectives are often marginalised in policy and research, this study aimed to generate knowledge and amplify the voices of young people by hearing their ideas on how to improve access to nature, enhance mental health support, and integrate environmental well-being into educational and social services.

2.2. Research Paradigm

This study's epistemology, informed by constructivist, participatory, transcontextual, and warm data perspectives, provided a framework for understanding how knowledge is co-constructed and situated, highlighting the importance of explicitly articulating epistemological assumptions in research design to ensure rigour, transparency, and ethical engagement (O'Leary 2014). This study adopted a constructivist paradigm to explore how adolescents construct meaning about their environmental relationships through social interaction and lived experience. Rather than seeking a single objective truth, constructivism recognises multiple subjective realities shaped by individual context and experience (Golafshani 2003; O'Leary 2014).

This study employed interpretive analysis as a guide to understanding how young people construct meaning about their relationship with nature. Interpretive analysis focuses on understanding participants' subjective experiences and the meanings they attach to phenomena, enabling researchers to uncover the complex ways in which individuals make sense of their world (Alston and Bowles 2020; O'Leary 2014). Interpretive analysis was particularly suited to this research as it enabled deep exploration of young people's lived experiences with nature and allowed for an inductive understanding of how young people interpret and construct meaning around their environmental relationships, honouring their voices as primary sources of knowledge (Alston and Bowles 2020).

To clarify the relationship between the study's several theoretical and analytical perspectives, it is useful to distinguish their respective functions. Constructivism provided the epistemological paradigm, informing how knowledge and meaning were understood as co-constructed rather than objectively discovered. Within this paradigm, an interpretive orientation guided how participants' meanings were approached during analysis. Thematic analysis, following Creswell's (2014) iterative spiral model, was the analytic method: it determined how transcripts were read, how codes were generated, and how emerging patterns were developed into candidate and then final themes. Eco-social work theory functioned as the principal conceptual lens through which the resulting themes were interpreted and situated within the wider literature, while transcontextual and warm data perspectives, discussed below, sensitised this interpretation to relationships and connections across social, cultural, and ecological contexts. The analytical process involved iterative cycles of data immersion, coding, and interpretation. Through iterative comparison of codes, candidate

themes, and the underlying transcript data, emerging themes were progressively refined to strengthen conceptual understanding (Engel and Schutt 2013). Reflective journaling and memo-writing throughout the process traced the evolution of interpretations, supported reflexivity, and recorded analytical insights. Peer debriefing provided external review of emerging interpretations, while member checking invited participants to verify whether interpretations accurately reflected their intended meanings (Golafshani 2003). These strategies ensured that the analysis remained grounded in the participants' perspectives while maintaining a critical awareness of the researcher's influence.

The study also adopted the transcontextual and warm data paradigms. Transcontextual is a theoretical perspective and research methodology that considers and gives weight to multiple contexts, "Transcontextual" in the inquiry process (N. Bateson 2021). N. Bateson (2021) defines warm data as information about interrelationships that integrates elements of complex systems. Bateson's approach to qualitative research methods is relatively new and untested. Extending her father's work, Nora Bateson developed the concept of *Warm Data*, a form of contextual information that captures the interrelationships across multiple domains of life, such as family, education, environment, and culture (N. Bateson 2021). Unlike "cold" data, which isolates variables, warm data acknowledges that human experiences, especially those involving meaning, emotion, and care, are inherently transcontextual. Transcontextual systems thinking invites us to consider how shifts in one domain reverberate across others, highlighting, for example, how young people's experiences of climate anxiety may intersect with their educational environment, digital engagement, peer relationships, and sense of place (N. Bateson 2021). This perspective emphasises the interconnectedness of systems and supports a holistic understanding of how environmental and social stressors are internalised and negotiated within people's everyday lives.

In summary, the study's epistemological stance directly shaped both the research design and analytical processes. These approaches were selected so that young people's voices were central; that the complexity of social, cultural, and ecological contexts was considered; and that the interpretive analysis captured the nuanced ways participants make meaning of their experiences with nature. By applying these frameworks throughout the study, the findings aim to reflect not only the realities of young people's environmental engagement but also the relational and situated nature of their perspectives, producing insights that are both ethically grounded and practically relevant.

2.3. Study Population and Sampling

The population for this study consisted of young people aged 10–14 years residing in and around metropolitan Perth, Western Australia. A total of 21 participants took part across four focus groups: 13 male and 8 female, with ages distributed as follows: three participants aged 10 years, six aged 12 years, ten aged 13 years, and two aged 14 years. This age range was chosen deliberately, as previous research has identified that between 10 and 14 years is the age at which young people are most likely to start to disengage with nature. Also, this age range captures a developmental period of heightened environmental awareness, identity formation, and growing capacity for abstract and critical thinking. Participants were recruited through a variety of community groups operating across the Perth metropolitan area. This multi-site recruitment strategy was adopted to ensure broader representation of socio-cultural backgrounds and lived experiences, rather than drawing exclusively from a single organisation or community context. Ethics approval was sought before commencing the study. The first step was to identify and approach community groups where young people are likely to attend. Initial contact was with community group leaders (adults) by providing an overview of the research (aims, methods, and intended

outcomes) and seeking permission to recruit and conduct the study with young people currently engaged with those groups. Group coordinators provided support in approaching prospective parents or guardians. Given the ages of the intended population, permission was sought from parents or guardians before approaching the participants.

Following approval from the community group coordinator and parents/guardians, prospective participants received information about their interest in volunteering for the study. Initial communication with young people was through their parents/guardians and the community group coordinator. Regarding the potential variability in participants' definitions of the natural environment, this diversity is viewed as a strength rather than a limitation. One of the study's core aims was to explore the meanings young people ascribe to the natural environment, including differing interpretations. The research accommodated this variability to gain a deeper understanding of how social, cultural, and personal factors influence environmental perceptions. Additionally, the study does not aim to produce generalisable claims, but rather to generate rich, context-specific insights consistent with the goals of exploratory qualitative research. The limitations and benefits of this recruitment strategy have been weighed as part of the research design.

This study did not aim for theoretical or thematic saturation. Saturation is a concept most closely associated with grounded theory and with studies seeking exhaustive coverage of a phenomenon (Strauss and Corbin 1990), which was not the aim of this exploratory, meaning-focused study. Instead, the goal was to generate rich, in-depth insight from a purposive sample capable of illuminating the range and depth of young people's experiences of nature (O'Leary 2014). Four focus groups, conducted across two modalities (one in-person and three online) with 21 participants aged 10 to 14 years, were judged sufficient to meet this aim: recruitment ceased once the research team agreed, through debriefing discussions held after the fourth focus group meeting, that the data generated were rich and varied enough to address the research questions in depth. On this basis, the study's contribution should be understood as analytical rather than statistical generalisation, with transferability to other contexts supported by the rich contextual description provided throughout the manuscript rather than by claims of exhaustive or representative coverage (Keith et al. 2022). It was not feasible to include the entire population in this study. Engel and Schutt (2013) argue that conducting research often involves only some of the population. As such, a non-probability sampling technique, namely purposive/judgmental sampling, was employed. For the current study, participants were chosen based on characteristics that align with the research goals (Engel and Schutt 2013). Additionally, the researchers used their judgment to determine which participants had the potential to hold information relevant to the study. Underpinning this judgment was an assessment of who was most likely to actively engage in the research process and their level of expressed interest, as they are more likely to express their opinions and experiences readily. Participants were selected based on age (10–14 years) and willingness to voluntarily engage in the study. The only demographic inclusion criterion was age. It is important to note that the sample was recruited exclusively from metropolitan or urbanised areas. While young people from rural and regional settings were not explicitly excluded, given that online participation was available, the recruitment process was primarily shaped by connections to community groups and the availability of participants. Beyond age and willingness to participate, no additional criteria were included. This approach aimed to capture a broad spectrum of experiences and perspectives.

2.4. Method of Data Collection

A qualitative method for data collection was employed, as it allowed for greater flexibility and adaptability by enabling researchers to adjust their approach should new

insights and challenges emerge during the data collection stage (O'Leary 2014). The explorative nature of this research made a qualitative approach more suitable for gaining deep insights than a quantitative method, which can sometimes be abstract and complex to interpret without context. Qualitative data can help explain the "why" behind the numbers, adding meaning and depth to statistical findings (Bordens and Abbott 2013). Given this open-ended aim, it was not appropriate to predefine or assume what constitutes each participant's definition or understanding of the natural environment before the interview. Participants were invited to articulate their own meanings and associations with the natural environment, allowing their understandings to emerge.

This research used a phased or two-step approach to data collection. The age and developmental stage of the participants were considered during the focus group, as children/young people can sometimes be prone to providing socially desirable responses to adults, which is often influenced by their desire to gain approval or conform to social expectations (Bergen and Labonté 2020). This behaviour can be particularly evident in settings such as interviews or any situation where children perceive that there is a "right" answer.

This behaviour can affect data collection within a research context, particularly when conducting assessments or interviews; socially desirable responses can skew the results, leading to inaccurate conclusions (Bergen and Labonté 2020). The focus-group format was selected in part to encourage interaction among participants and allow them to reflect on, elaborate, and respond to one another's experiences; the researcher nonetheless remained aware that the group context, participants' ages, and the presence of an adult researcher could still influence responses through social desirability or peer dynamics, a possibility discussed further in the Limitations section of this paper.

The use of focus groups in qualitative research across various age groups is widely accepted as a suitable method for exploring social issues and capturing rich knowledge that can inform policies and programs (Shaw et al. 2020, p. 291). The focus group allowed participants to hear from others about their experiences and gain new personal insights. These focus group discussions were semi-structured and guided by the researchers to enable participants to explore their personal perceptions and experiences of their relationship with nature. Individual one-on-one interviews were offered to each participant directly after the focus group, and they were also provided with the opportunity to contact the researcher at any stage before the conclusion of the study, either via email, phone or in person, should they wish to provide additional information. None of the participants took up this offer; however, they did provide feedback and clarification of the themes from the results as part of the member checking approach.

2.5. Method of Data Analysis

A qualitative data analysis method, namely, a thematic data analysis, was employed. Qualitative data analysis involves examining nonnumerical data to understand concepts, opinions, or experiences. The systematic and rigorous process ensures that the findings are meaningful and credible (Creswell 2014). Qualitative data analysis provided a comprehensive framework for understanding social phenomena by uncovering patterns and relationships (Engel and Schutt 2013). It is often inductive, and through meticulous and systematic analysis, qualitative research seeks to reveal the underlying themes and connections that shape our social world (Engel and Schutt 2013). Creswell's (2014) spiral model of thematic data analysis was used to analyse the data, which entailed the following five phases: organising the data; sorting the data; coding the data; identifying patterns, themes, relationships, and findings; applying theory; and explaining the findings.

Creswell's (2014) spiral model of thematic data analysis guided the analytic process in this study. The analysis was iterative rather than linear, moving back and forth across

five interrelated phases. First, the data were organised through verbatim transcription of the focus-group discussions and careful preparation of field notes and reflective memos. Second, the data were sorted into files by participant and grouped according to broad topical areas relevant to the research questions. Third, coding was undertaken by systematically identifying and labelling recurring concepts, experiences, and meanings within the young people's narratives, with open coding followed by focused coding using a consistent colour-coded scheme, and coding records retained to support an audit trail. Fourth, these codes were reviewed and clustered into patterns and themes, which highlighted key relationships and insights into how young people experience and perceive the natural environment in the context of metropolitan Western Australia. Finally, the themes were interpreted and explained through the lens of ecological and social work theory, as well as the existing literature on adolescent connectedness to nature, to generate a coherent account of the findings. Participant transcripts were coded and grouped into thematic categories, providing the foundation for interpretive analysis.

2.6. Measures to Ensure the Quality of Data

Qualitative research must be conducted thoroughly and methodically to generate meaningful and valuable results (Rubin and Babbie 2013). To be considered trustworthy, researchers are required to demonstrate that their data analysis is conducted with precision, consistency, and comprehensiveness. In this study, these principles were embedded by documenting, organising, and articulating the analytical methods in sufficient detail, enabling readers to evaluate the credibility of the process and consider the transferability of the findings (Engel and Schutt 2013). A data management system was developed in accordance with the University of Western Australia's (UWA) guidelines and approved by supervisors. The study adopted the criteria for qualitative research as outlined by Engel and Schutt (2013), which emphasise addressing a meritorious topic, ensuring rich rigour, demonstrating sincerity, establishing credibility, achieving resonance, contributing substantively, upholding ethical standards, and realising meaningful outcomes.

Data analysis procedures followed Creswell's (2014) recommendations, ensuring that the data were treated with care, accuracy, and completeness, while adhering to ethical requirements (Engel and Schutt 2013; O'Leary 2014). Consistent with the study's constructivist paradigm, trustworthiness was assessed against Lincoln and Guba's (1985) criteria of credibility, transferability, dependability, and confirmability, with reflexivity treated as a fifth criterion given its centrality to an interpretive epistemological position. Reflexivity was also prioritised, with the researcher critically reflecting on how their own backgrounds, culture, and experiences may have influenced interpretations and interactions with participants. This was supported by ongoing supervision and consultation with experts and peers, who provided feedback throughout the research process, further enhancing the study's confirmability and credibility (Creswell 2014).

Accurate and detailed record-keeping was maintained across all stages of the research, creating an audit trail that allowed transparency and supported the dependability of the study (Creswell 2014). In addition, member checking was incorporated by verifying findings with participants and, where appropriate, with their parents or guardians due to age. This step ensured that the participants' voices were authentically represented in the analysis (Creswell 2014). Finally, rich descriptions were employed in the presentation of findings to convey the nuances of young people's experiences with the natural environment in metropolitan Western Australia, thereby enhancing the resonance and potential transferability of the results.

2.7. Ethical Considerations

This research was granted ethics approval on 5 June 2025, provided by the Human Research Ethics Committee (HREC) at the University of Western Australia (UWA). Key ethical principles that were adhered to are as follows. The principle of avoidance of harm was adhered to, which included physical, psychological, or emotional harm. This was achieved by ensuring informed consent by the participants and their legal guardians and that they understood the purpose, scope, intended benefits, and any potential risks associated with the study. As part of the UWA ethics approval process, a risk assessment was undertaken, and the study was deemed a low-risk study.

Voluntary participation is a key feature of the methods being used in this study. To adhere to the principle of voluntary participation, participants and their legal guardians were provided with sufficient information about the study. The communications were developed to ensure they are tailored to the intended audience. This voluntary participation also included information about how participants can withdraw from the study at any point without prejudice. A process for supporting the participants was developed, and they were informed about it. The researchers addressed any questions or concerns participants may have had before they consented to participate in the study. This was to ensure that participants and their legal guardians felt comfortable and supported throughout the research process. In addition, during the qualitative data collection process, there were additional adult(s). If participants required additional support, information on how to access support was provided. Informed consent and explicit informed consent were obtained from participants before data collection. Regarding maintaining confidentiality, privacy, and anonymity for all participants, the UWA data management system has been utilised to ensure compliance with confidentiality and privacy. Deidentified reports of findings were employed to protect the identity of participants in research reports and publications.

3. Results

Four focus groups were conducted with a total of 21 young people aged between 10 and 14 years. The thematic analysis of focus group discussions revealed four interconnected dimensions of young people's contemporary relationship with the natural environment. Collectively, these themes illustrate how participants experience, interpret, and act upon their connection to the natural world, highlighting the interplay between emotional, cognitive, social, and contextual influences. Table 1 below summarises four key themes identified from the focus group data, with descriptions highlighting the core ideas and patterns represented within each theme.

Table 1. Thematic Summary Table.

Theme	Description
Emotional Connection to Nature	Nature as a safe sanctuary
Inclusivity of Nature	Universal belonging and mutual connection
Environmental Awareness and Concern	Head, heart, and hand
Youth Agency and Proactive Engagement	Desire to contribute and co-create

Together, these themes provide insight into how young people's experiences are shaped by emotional attachment, environmental concern, opportunities for agency, and the social and institutional contexts in which their relationships with nature are intertwined.

3.1. Emotional Connection to Nature: Nature as Safe Sanctuary

An emotional bond between participants and nature emerged as a central finding across all four focus groups. Participants across age groups consistently described nature

as a calming, nurturing refuge, often employing metaphors that reflect a deep sense of comfort and belonging. One participant expressed this connection by stating:

Nature is just like a second mother for me, because it is the calmest place I have ever known. The real world is so busy and loud, but nature is not just like that.

Others described nature as a haven where they could relieve stress and express emotions without judgment:

Sometimes I feel like I'm talking to a tree. . . maybe that is the thing that can listen to me so I can release everything that I have to release.

Participants consistently highlighted sensory experiences that foster relaxation and peace:

It's just relaxing. There are no people, only the birds that fly like this. . . (participant demonstrates bird flying).

It is not noisy when you sit under a tree, and you can hear the wind. . . it makes a really cool voice, and we can release our stress when we are sitting under a tree.

The metaphorical and literal sense of sanctuary highlights nature's crucial role in supporting the emotional well-being and resilience of young people.

These accounts show that nature did more than reduce stress. Participants described nature as a relationship. They saw it as steady, non-judgemental, and emotionally available. These qualities are social and relational, not just features of a physical place. This difference is important. Well-being did not come only from being exposed to green space. It also came from the relationship young people felt with nature. This idea appears again in the themes that follow and is a central contribution of this study.

3.2. Inclusivity of Nature: Universal Belonging and Mutual Connection

The data revealed a strong theme of inclusivity across all four focus groups, where young people perceive nature as a universal space that is accessible and belongs to everyone. Participants articulated an understanding that nature is not exclusive but embraces all individuals as part of a shared environment. One participant emphasised this universal belonging, stating:

I think nature is a place where everybody can be, where everybody belongs. Everybody can be in nature. Everybody can enjoy it, and it is really nice to be part of it, looking at all the cool things and bonding together. It is a great place for all of us to be in.

This perspective highlights a vision of nature as an egalitarian space fostering connection and community. It suggests that nature serves not only as a physical environment but also as a social space for shared experience and inclusion. Further reflecting this, another participant expressed the idea of a reciprocal relationship between humans and nature:

Nature is like everybody; everybody can stay in nature. Nature belongs to the people. And the people belong to nature.

This sense of belonging frames nature and people as deeply interconnected, emphasising mutual respect and coexistence rather than separation or dominance. It conveys a relational worldview in which humans and nature are entwined and responsible for each other. A third participant reinforced this interconnectedness by situating humans as an integral part of nature:

For me, nature is everything surrounded by us, and also, we are a part of nature too. I think I am also a part of nature, and we all are a part of nature because we can do lots of things for nature, and I think our surroundings are also nature.

This reciprocal framing, that nature belongs to people and people belong to nature, emerged spontaneously and consistently across participants, without being prompted or introduced by the researchers. A systems-informed perspective helps explain why: rather than isolating nature as a discrete variable, participants' accounts moved fluidly across emotional, social, ethical, and relational registers simultaneously. This transcontextual quality, meaning shifting and accumulating across domains rather than sitting within a single one, is not well captured by other frameworks that treat connectedness to nature as a fixed, individually held attribute, and points to the relational account developed throughout this study.

3.3. Environmental Awareness and Concern: Head, Heart, and Hand

The data revealed that participants across all four focus groups possess a nuanced understanding of environmental issues, often intertwining knowledge with emotional responses such as sadness, frustration, and concern. Several participants identified specific environmental threats; for example, one of the participants stated:

I see problems like plastic being thrown into nature, rubbish being left behind, cars emitting CO₂ into the atmosphere, and the chopping down of trees, which are one of our main oxygen sources.

Another participant conveyed the growing complexity of these challenges:

So, it will just become trickier and trickier to solve environmental problems if we do not pay attention.

This awareness extended beyond immediate issues to a clear understanding of inter-generational responsibility:

Some adults forget that the future they are leading will be in our hands, and it will be in our hands to solve the problems that they leave behind.

Participants expressed a sense of urgency and ownership over environmental stewardship, framing climate change as a human-created problem:

Climate change is the monster that we made ourselves. So, if we are scared about it, we need to recognise that it is our monster, we made it, so we should be able to destroy it.

Across the four focus groups, expressions of environmental concern were accompanied by emotional weight. Several participants independently described feelings of sadness about the treatment of animals and natural habitats, revealing an ethical and empathic orientation extending beyond immediate self-interest. One participant reflected:

It was so sad because the animals also want to be free, but people are not giving them freedom.

This emotional dimension of environmental awareness aligns with what eco-social work scholars describe as ecological grief, an affective engagement with environmental issues that, when appropriately supported, can serve as a powerful motivator for action.

Across these accounts, participants consistently reasoned about environmental problems as products of interacting systems, economic incentives, institutional practices, and collective behaviour, rather than as isolated individual failings. This capacity to hold structural explanation and moral judgement together, rather than collapsing one into the other, reflects a systems-level understanding not typically expected of, or specifically sought out in, this age group, and is developed further below.

3.4. Youth Agency and Proactive Engagement: Desire to Contribute

Beyond awareness, participants across all four focus groups demonstrated a strong desire to participate in environmental solutions actively and proposed concrete ideas. The breadth of the dataset revealed not only the consistency of this desire across different community contexts but also the diversity of strategies young people envision:

If kids had a voice, a lot of this would already be different. Many children have so many great ideas about what we can do.

They suggested practical educational initiatives:

If schools had mandatory environmental classes, we could sometimes work on different ways to help the school.

Public awareness and creative engagement were also emphasised:

Maybe kids could design some kind of thing together. . . like a public statement on TV or around the neighbourhood.

We could put stuff in people's emails to inform them about what is happening and how we can help.

Participants recognised that responsibility extends to industries:

We have to get some ideas for the people running factories because air pollution happens when factories release gases.

These statements reflect the participants' willingness and capacity to engage as active environmental agents, challenging stereotypes of passivity. Considered alongside the preceding themes, this pattern reframes the analytical question the findings pose. The data do not suggest that participants need to be motivated toward environmental engagement; motivation, knowledge, and readiness to act appear already well established. What the data instead point toward is a mismatch between participants' demonstrated capacities and the structural and institutional conditions, including access, cost, and exclusion from decision-making, that determine whether those capacities can be acted upon. This distinction is developed further in the Discussion.

4. Discussion

The study has explored the experiences and perceptions of a group of young people from Western Australia regarding their relationship with nature. Participants were highly engaged across all four focus groups, offering rich and consistent insights. The study findings revealed that young people experience nature as a deeply emotional and symbolic space, often described as a safe sanctuary or "second mother." This aligns with social theories that emphasise the relational and affective dimensions of human–nature interactions, such as eco-psychology and symbolic interactionism.

The participants' reflections on mutual belonging and interconnectedness with nature resonate with relational ecological frameworks, positioning nature not as a separate entity but as a co-constitutive part of their identity and social world. Additionally, their insights into intergenerational communication and environmental responsibility situate these experiences within broader societal and cultural contexts, demonstrating how young people navigate and negotiate their ecological identities amid social dynamics. These accounts of mutual belonging also raise questions concerning place attachment: the emotional and relational bonds that form between people and the specific environments they inhabit. While the present data speak more directly to a generalised sense of belonging to nature than to attachment to particular named places, participants' descriptions of reciprocal

belonging suggest that situated, everyday experience of place may be one route through which this broader sense of connection develops.

The findings also reveal that participants articulated multifaceted meanings associated with nature, including emotional refuge, relaxation, and well-being. Nature was consistently depicted as a space offering peace, sensory engagement, and emotional release, underscoring its therapeutic value. Moreover, nature was understood as a democratic and inclusive space that fosters social connection and belonging, highlighting the collective and social dimensions of their experiences. These rich, nuanced descriptions provide valuable insight into the complex personal and social meanings young people attach to their interactions with the natural world.

The participants demonstrated a sophisticated understanding of environmental challenges, including pollution, deforestation, and climate change, reflecting a strong sense of concern and urgency. They emphasised the importance of environmental education and the need for practical action, revealing that knowledge alone is insufficient without corresponding engagement. Furthermore, participants emphasised the importance of balancing technology use with nature exposure to maintain mental and emotional well-being, indicating a keen awareness of the impact of their relationship with nature on daily life and health. This provides insights into the integrative role nature plays in their overall well-being and lifestyle.

The findings indicate that young people are ready to and do contribute actively to environmental solutions. Participants proposed concrete ideas such as implementing mandatory environmental education in schools, creating community awareness campaigns, and harnessing children's creativity for public communication. These views are confirmed in the literature by Lekganyane and Sibanda (2026). These suggestions not only demonstrate agency and initiative but also provide practical avenues for co-design and collaborative problem-solving. The expressed desire for meaningful involvement challenges traditional, adult-centric approaches and advocates for the inclusion of youth in ecological decision-making.

By centring young people's voices, this research enriches existing knowledge on youth–environment relationships. The findings of this study reflect their sophisticated understanding of ecological issues and their frustrations with adult dismissal, highlighting the social barriers young people face in environmental discourse. Articulating their perspectives, concerns, and proposed actions validates their lived experiences and positions them as knowledgeable stakeholders. This contribution challenges prevailing narratives of youth passivity, asserting the significance and legitimacy of young people's opinions in shaping environmental futures.

While several of the broad themes identified in this study echo prior Australian and international research on youth–nature relationships, this study makes three contributions that extend rather than merely replicate that literature.

First, it addresses a documented geographic gap. It provides a qualitative account of Western Australian young people's relationship with nature. This context has its own biodiversity, urban–rural geography, and climate exposure profile. Findings from the Eastern States cannot be assumed to apply here.

Second, the specific configuration of themes identified offers something the wider literature rarely captures together: participants' explicit framing of intergenerational trust and responsibility, their articulation of eco-anxiety alongside a demand for honest adult communication, and their sense of exclusion from environmental decision-making. Together, these form a more relational and dialogic account of youth environmental engagement. Much of the existing literature instead documents young people's environmental knowledge or

concern on its own, separate from the intergenerational relationships in which that concern is embedded.

Third, and most fundamentally, this study reframes what well-being means in this context. Much of the existing literature treats nature as an intervention or exposure that produces well-being as an outcome. Participants in this study described something different: a relationship, characterised by belonging, reciprocity, and responsibility, through which well-being emerged. This distinction bears directly on the widely documented “adolescent dip” in nature engagement (Keith et al. 2022; Richardson et al. 2019). Participants’ accounts suggest that the emotional, relational, and ecological capacities linked to strong nature connectedness are already well established by early adolescence. Apparent disengagement more often reflects structural and institutional barriers, including exclusion from environmental decision-making, than a genuine decline in interest or capacity.

The findings indicate that young people experience nature as an important source of well-being, identity, and emotional regulation, yet their ability to maintain these connections is shaped by access to green spaces, cultural influences, structural constraints and social pressures. The data also suggests that social workers can strengthen practice by intentionally incorporating nature into therapeutic and group work, facilitating open discussions about environmental concerns, and supporting opportunities for meaningful environmental engagement. Furthermore, the findings indicate the importance of advocating for equitable access to natural environments and recognising young people as active ecological citizens (Lekganyane & Sibanda). These implications suggest that eco-social approaches can enhance adolescent well-being while positioning social work as a key profession in addressing both social and environmental challenges.

From an eco-social work perspective, findings of the study indicate that participants articulated a clear awareness of environmental injustice and intergenerational inequities, positioning themselves as inheritors and potential rectifiers of environmental harm perpetuated by preceding generations. For example, one participant discussed:

“Some adults sometimes forget that the future they are leaving will be in our hands. . . it will be in our hands to solve the problems that they leave behind.”

This finding aligns with Dominelli et al.’s (2018) assertion that climate change represents a profound intergenerational justice issue, where young people bear the consequences of decisions made by previous generations. The participant’s recognition of this responsibility reflects what Bailey and Gerrish (2024) describe as “ecological grief”, which refers to the emotional burden carried by young people as they confront environmental degradation. Similarly, expressions of empathy extended beyond human communities to non-human others, revealing ecological justice concerns:

“It was so sad because the animals also want to be free, but people are not giving them freedom.”

This perspective illustrates what Anderson (1996) refers to as “ecologies of the heart,” where emotional connections to non-human life forms form the basis for environmental ethics and action. The participant’s recognition of animal agency and rights reflects a sophisticated understanding of interspecies justice that extends beyond anthropocentric concerns. Participants’ moral reasoning extended further still, to an understanding of the structural and economic conditions that constrain adult behaviour, reflected in one participant’s observation that “I think some people are blinded by money. . . they know they are doing the wrong thing, but they cannot stop.” This statement moves beyond a simple attribution of blame: the participant holds two things at once, that the behaviour is wrong and that the people responsible for it are themselves constrained by forces they may not fully control. This capacity to reason about systemic constraint alongside moral judgement

suggests that participants' environmental understanding was not purely cognitive or purely affective, but integrated knowledge, emotion, and an emerging awareness of the structural conditions that shape environmentally harmful behaviour, a form of reasoning that goes beyond what simple measures of environmental concern typically capture. Moreover, participants critiqued adult gatekeeping and dismissal of youth perspectives, emphasising a need for intergenerational accountability and inclusive decision-making:

"Kids are thinking more deeply about nature than adults sometimes. We want adults to listen because it is our future."

This critique resonates with [Checkoway's \(2011\)](#) analysis of youth participation, highlighting how adult-controlled information dissemination can increase young people's anxiety while reducing their sense of agency. The data reflect the emphasis of eco-social work on the intersection of environmental degradation and social marginalisation, illustrating young people's critical consciousness regarding their exclusion from environmental governance and the ethical imperative for empowerment and justice ([IFSW 2022](#)).

The analysis of focus group data through the Environmental Identity Development (EID) model reveals that participating young people are/have successfully navigated the foundational stages of environmental identity formation, demonstrating profound trust in nature as a "second mother" and "safe space," creative spatial autonomy despite institutional constraints, and advanced environmental competency through sophisticated systems thinking and nature-based emotional regulation strategies in light of their ages. Participants show exceptional readiness for environmental action, articulating specific collective intervention strategies including community advocacy, peer education, and public awareness campaigns. However, their progression to the final stage of environmental action appears to be systematically constrained by adult gatekeeping, information suppression, and exclusion from environmental decision-making processes.

This suggests that barriers to full environmental identity development are not developmental deficits within young people, but rather structural impediments within adult-controlled systems that prevent meaningful youth participation in environmental matters. The findings of the study indicate that young people possess the environmental consciousness, competency, and collective action orientation necessary for environmental leadership yet require systemic support to complete their environmental identity development through authentic opportunities for environmental agency. The consistency of these patterns across 21 participants and four focus groups, conducted across diverse community settings via both in-person and online formats, lends credibility to the findings and supports their relevance for informing future research, policy, and practice.

The findings of the study reveal what [Gienger et al. \(2024\)](#) term "eco-anxiety and ontological insecurity" among young participants, psychological distress arising from environmental threats and uncertainty about the future. One participant echoed the following sentiments.

Adults tell us everything is okay, but we want to hear what is really going on.

A related account made the effect of this reassurance explicit:

Adults need to stop telling us what is happening... that just makes us know something is wrong.

This statement reflects the double burden young people carry—environmental anxiety, coupled with frustration at being excluded from meaningful information and decision-making processes. [Gienger et al. \(2024\)](#) argue that responsible environmental education must acknowledge these anxieties while providing pathways for agency and hope. Read together, participants' statements on anxiety, information, and exclusion suggest something

more specific than generalised environmental concern. The pattern is, in effect, a double exclusion: managed reassurance of the kind participants describe communicates both that a problem exists, since children are rarely persuaded by blanket reassurance, and that adults do not trust them to handle honest information about it. Trust itself was not directly measured in this study, and this pattern is better understood as a strain in communication and perceived exclusion than as an established finding about levels of intergenerational trust. Framed this way, eco-anxiety in this dataset may function less as a free-floating emotional response to environmental threat and more as a relational signal, arising at the point where young people's demonstrated capacity to understand ecological complexity meets adults' reluctance to share information or decision-making power with them. This reading is consistent with children's participation-rights scholarship: [Lundy \(2007\)](#) argues that Article 12 of the UN Convention on the Rights of the Child requires not only that children's views be heard, but that they be given due weight and acted upon, and that meaningful participation is impossible without honest information about the matters concerned. Participants' demand to "hear what is really going on" can therefore be read as a participation-rights claim as much as an emotional one. This reframing carries a practical implication that a purely descriptive account of eco-anxiety would not: interventions aimed only at managing young people's anxiety, without addressing the communication and power imbalance that appears to accompany it, risk treating a symptom while leaving its relational context intact.

An eco-social work theoretical lens highlights the complexity of young people's experiences with nature and the environment, and their critical environmental justice consciousness and need for empowerment ([IFSW 2022](#)). Similarly, a transcontextual warm data framework reveals rich relational patterns underpinning their connections to nature, technology, and adults, supporting research by [Hughes et al. \(2019\)](#) on the critical nature of early nature engagement. The findings align with those of [Keith et al. \(2022\)](#) and strongly support arguments for youth-centred participatory approaches to environmental issues ([Ozer 2017](#)), challenging traditional developmental assumptions that position young people as passive recipients of environmental education rather than active agents of environmental change ([Sibanda 2025](#)).

The findings of the study reveal these young people are what [Reece and Kohler \(2025\)](#) term "resilient youth", encapsulating young people as capable of sophisticated environmental analysis and committed to environmental action despite facing significant systemic barriers. Their perspectives challenge adult assumptions about environmental education and participation, calling for approaches that recognise their capabilities while addressing their legitimate concerns about environmental futures. This study highlights the potential of young people as active environmental agents and advocates within their socioecological contexts, while underscoring the urgent need for institutional and social changes that support their meaningful participation in environmental decision-making.

The findings of the study suggest that young people have a complex and deeply felt relationship with nature, encompassing emotional, cognitive, social, and practical dimensions. Their descriptions portray nature as an emotional sanctuary vital for well-being, accompanied by sophisticated environmental awareness and a clear sense of responsibility. This aligns with previous research of a multidimensional model of nature connectedness, which encompasses emotional, experiential, and cognitive elements ([Richardson et al. 2019](#)). The participants' sophisticated understanding challenges traditional assumptions about young people's environmental knowledge and capabilities ([Evans et al. 2007](#)), while their emotional investment in nature reflects what [Anderson \(1996\)](#) describes as "ecologies of the heart", which refers to deep affective connections that motivate environmental action.

Importantly, young people can and want to assert their agency and express eagerness to participate in environmental solutions, but face barriers in intergenerational communication that can hinder their involvement. This tension reflects what Checkoway (2011) identifies as a fundamental challenge in youth participation: the gap between young people's demonstrated capabilities and adults' willingness to recognise and support their agency. The participants' desire for authentic dialogue aligns with UNICEF's (2019a) guidelines on meaningful youth participation, which emphasise the importance of honest and respectful intergenerational communication.

Taken together, these findings shift the analytical question. The issue is not whether young people are connected to nature. It is whether the social and institutional environments around them recognise and enable the agency that comes with that connection.

Read against the wider eco-social work literature, eco-anxiety, perceived exclusion, and calls for honest communication are not separate concerns. They are facets of a single relational problem: young people's ecological knowledge and motivation to act currently outpace the opportunities adults and institutions give them to act on it.

This has direct implications for social work practice and policy, developed further in the sections that follow. It also points to a need for future research examining how young people's ecological agency might be structurally supported, rather than managed as an emotional response.

5. Conclusions

The study has generated rich insights and achieved its research aims and objectives, providing a nuanced understanding of young people's experiences and connections with the natural environment. The study has revealed important insights that challenge the typical perceptions of adults regarding how young people connect with nature and the environment, specifically that young people are disconnected from nature and have a limited understanding of the broader contextual factors influencing or impacting the natural world. The research shows that young people have a complex and meaningful relationship with nature that goes much deeper than adults often realise. Through listening to their own words and experiences, this study provides insights into how young people see nature and what it means to them in their daily lives.

The findings suggest that young people may be more environmentally aware and capable than is often assumed. The young people demonstrated a strong understanding of environmental issues, a deep care for nature and animals, and a clear desire to contribute to solutions. For these participants, nature serves as an emotional sanctuary, providing calm, joy, and a sense of connection. They also perceive nature as inherently inclusive, a shared space to which everyone belongs, and in which everyone has a role. These findings highlight the need for greater youth inclusion in environmental decision-making, recognising young people as capable stakeholders whose perspectives and actions are essential for sustainable futures. It can be concluded that young people are not only learning about the environment, but they are also actively thinking about it, feeling connected to it, and wanting to protect it. This challenges a commonly held view that young people need to be taught about the environment before they can develop a genuine concern for it.

5.1. Limitations of the Study

While this research provides valuable insights, several limitations should be acknowledged. The study involved a small sample of young people from metropolitan areas in Perth, Western Australia, which limits the transferability of findings to other regions, cultural groups, or socioeconomic contexts. This restriction also presents opportunities for future research to replicate the study with rural and regional young people,

exploring potential similarities or differences in their experiences and perceptions of the natural environment.

The qualitative design means that findings are not intended to be generalised to all young people. While the insights are meaningful for understanding some participants' experiences, they require further testing and expansion through studies with larger and more diverse samples. Additionally, recruiting participants through established community groups may have introduced selection bias, as participants were already more engaged with community initiatives. To mitigate this, future studies could purposively group participants to include a range of engagement levels and participant backgrounds, enhancing the breadth of perspectives captured within the study.

Furthermore, as with all qualitative research, the positionality of researchers, prior experiences, and interpretive lens may have shaped data collection and analysis. Reflexive practices, supervision, and member-checking were used to minimise bias and enhance trustworthiness; however, these factors should still be considered when interpreting the findings.

A more comprehensive reflection on two further limitations is warranted. First, the relatively small, urban-based sample means the findings speak most directly to the experiences of metropolitan Perth young people, who have reasonable access to community groups and, in most cases, some existing engagement with green space. As such, the findings should not be read as representative of young people in rural or remote areas, whose relationships with nature may differ substantially. Second, participants' age and the topic's alignment with socially valued environmental attitudes raise the possibility that some responses were shaped by social desirability rather than solely reflecting participants' private views. This risk may not have applied uniformly across the study: the in-person focus group and direct visibility to the researcher and peers created conditions under which socially desirable responding is more likely, whereas the three online, written focus groups may have partially reduced this risk, as participants were not visible to the researcher or their peers while responding (Bergen and Labonté 2020). While the option of individual follow-up and member checking was intended to mitigate this risk overall, the consistently positive framing of nature across participants may partly reflect social desirability rather than an absence of ambivalence, and this possibility should be weighed when interpreting the uniformly positive valence of the findings.

5.2. Significance and Implications of the Study

Despite the above-mentioned limitations, the study makes important contributions to understanding young people's environmental experiences. This study highlights key implications for social work practice, showing how young people navigate environmental, social, and ethical challenges that impact their well-being and development. Findings suggest that practitioners can support youth agency, growth, and environmental engagement by integrating ecological and systems-based approaches that consider broader social and structural contexts.

Consistent with the study's disciplinary grounding in social work, discussed in Section 1.5, eco-social work provides the organising lens for the implications developed below. This choice brings three commitments to bear on the findings. First, it insists on structural analysis of the institutional conditions that enable or constrain young people's ecological engagement, rather than focusing only on individual attitudes or behaviours. Second, it positions young people as active participants and knowledge-holders, not passive recipients of environmental education or intervention. Third, it expects research findings to translate into concrete guidance for practice and policy, not remain at the level of description.

These implications are meant to extend the existing literature on nature-based interventions and the therapeutic benefits of green space, not displace it. That literature has established an important evidence base. The contribution offered here is complementary: a rationale for practice grounded in participants' own relational accounts of nature, together with closer attention to the structural and intergenerational conditions under which existing approaches are likely to succeed or fall short.

5.2.1. Integrating Nature into Direct Practice—Well-Being

Social workers can intentionally utilise natural settings and incorporate nature-based activities into their work with young people. This may include holding sessions outdoors; incorporating gardens, parks, or other natural spaces into group work; and drawing on evidence about the therapeutic benefits of contact with nature. Partnerships with environmental groups and outdoor education programs can further expand opportunities for young people to connect with the natural world in supportive ways.

More fundamentally, the findings suggest that practice should begin from the assumption that a relationship with nature already exists, rather than treating nature as something to be introduced or delivered as an intervention. The practical task is therefore to identify, acknowledge, and support the relational dimensions of ecological engagement that young people already describe, including belonging, reciprocity, and emotional safety, rather than to deliver nature contact as a discrete therapeutic input. This suggests a modest addition to standard wellbeing assessments: alongside social and family relationships, practitioners might ask about the quality and continuity of a young person's relationship with nature, since disruption to that relationship, for example through relocation or a change in school policy, may itself constitute a meaningful relational loss.

5.2.2. Supporting Youth-Led Interventions

Rather than positioning adults as sole decision-makers, social workers should enable young people to lead their own environmental projects and initiatives. This can involve supporting youth-led groups, providing platforms for young people to share environmental knowledge with others, and creating intergenerational dialogues where young people are recognised as teachers and leaders. Supporting young people's own ideas fosters agency and aligns with participatory approaches in social work.

5.2.3. Addressing Environmental Concerns

Eco-anxiety among young people should be acknowledged and taken seriously. Social workers can facilitate peer discussion groups where environmental concerns are openly explored, create opportunities for young people to take meaningful environmental action, and provide honest information about ecological challenges alongside pathways for empowerment. In doing so, social workers can help transform environmental worry into resilience, hope, and skills for leadership and activism.

The findings caution against treating eco-anxiety primarily as an individual emotional-regulation concern. Participants' environmental concern in this study was closely bound up with relational investment, systems-level reasoning, and moral awareness, rather than presenting as a standalone symptom. Given evidence that perceived powerlessness and exclusion from decision-making can worsen eco-anxiety (Clayton et al. 2017), the most effective practice response is likely to be structural as much as therapeutic: creating genuine opportunities for young people to contribute to environmental solutions, and providing honest, age-appropriate information rather than managed reassurance, which the findings above suggest young people readily perceive as evasive.

5.2.4. Promoting Social and Environmental Justice

Social workers have an important role in recognising that environmental problems are also social justice issues. This includes challenging policies that marginalise young people from environmental decision-making, ensuring equitable access to green spaces regardless of socioeconomic background, and supporting environmental justice initiatives that address disproportionate impacts on disadvantaged communities. Integrating environmental concerns into assessments of young people's needs strengthens holistic, eco-social practice.

This extends to advocacy for young people's information rights specifically: the recognition, consistent with Article 12 of the UN Convention on the Rights of the Child (Lundy 2007), that young people are entitled to honest information about the environmental conditions that affect their lives and futures, and that genuine participation is not possible without it. At a policy level, the findings point toward several concrete instruments: formal provision for outdoor learning time within school curricula; structured consultation mechanisms that ensure environmental decisions affecting young people are genuinely informed by their perspectives; and planning policy that treats equitable access to green space, regardless of socioeconomic background, as a matter of environmental as well as social justice.

5.2.5. Structural Considerations

Eco-social work emphasises the importance of addressing the interdependence between young people's well-being and the natural environment through practice, policy, and education. In practice, social workers can integrate nature into therapeutic and group work, support youth-led environmental initiatives, take young people's environmental concerns seriously, and advocate for environmental justice as a social justice issue. Such approaches recognise young people not just as service users but as ecological citizens with agency, whose well-being is shaped by both their environments and their opportunities to participate in shaping them.

Taken together, these implications reframe the practical question this study poses. The task facing practitioners, educators, and policymakers is not primarily how to make young people care more about nature; participants in this study already did. It is how to create the social, institutional, and physical conditions within which existing care can find expression, deepen through practice, and translate into meaningful participation in shaping environmental futures.

5.3. Recommendations

The recommendations below are informed by the literature review, focus group insights, and the research team's social work expertise, combining evidence, youth perspectives, and professional knowledge to ensure they are both research-informed and practical.

Systemic change is needed at both policy and educational levels to integrate environmental concerns into the structures that shape young people's lives. Governments should create meaningful opportunities for youth participation in environmental decision-making, provide access to hands-on and justice-oriented environmental education, and integrate environmental health into youth wellbeing strategies. Social work education should incorporate environmental content into core curricula, supported by placements, research partnerships, and workforce training in eco-social practice. These measures reflect eco-social work's commitment to resilience, justice, and transformative action amid ecological crises.

The study challenges assumptions about young people's capabilities, emphasising the need for adults, including social workers, policymakers, and parents, to listen to young people and involve them in environmental decision-making. The findings provide a

foundation for understanding young people's environmental relationships, while further research is needed to explore variation across contexts and the factors that support or constrain engagement.

Practically, this research suggests that these young people have a deep, meaningful connection with nature and are ready to contribute to solutions. Social work practice can support their well-being and development by fostering agency, environmental engagement, and ethical reflection. The key take-home message is that young people are capable, motivated, and insightful partners in addressing environmental challenges; what is needed is a willingness from adults and systems to listen, collaborate, and act alongside them.

5.4. Future Research Directions

Future research should expand the diversity and scope of studies on young people's experiences and relationships with nature. Longitudinal studies may also help in better understanding how children and young people's relationship to nature evolves throughout their lives, including the long-term impacts of nature-based programs on wellbeing and how environmental attitudes respond to major ecological events.

Furthermore, additional studies could investigate institutional and structural barriers that limit young people's environmental participation and identify strategies to overcome them. This includes exploring effective models for intergenerational collaboration, cross-sector approaches between education, health, and environmental systems, as well as policies that enable meaningful youth engagement. Such research requires long-term commitment, resources, and leadership from social work, education, and government sectors, ensuring that young people are included in decision-making and that diverse cultural and ecological perspectives are respected.

Recognising young people's knowledge, passion, and capacity for action reinforces the eco-social work principle that human wellbeing and environmental wellbeing are interconnected, and that social justice must incorporate environmental justice. Building on the findings of this study, future research should continue to adopt participatory, youth-centred approaches to deepen understanding of young people's environmental relationships across broader and more diverse populations.

In particular, there is significant value in expanding this work within Western Australia, given its unique environmental conditions, cultural diversity, and geographic isolation. Western Australian young people are likely to experience climate impacts in ways that are distinct from other regions, with implications for their mental health, wellbeing, and connection to nature. Including youth from varied cultural, socioeconomic, and geographic backgrounds across the state would provide a more nuanced understanding of how environmental factors intersect with identity, resilience, and place-based belonging. Such research would not only strengthen the empirical base but also inform more culturally responsive social work practices, environmental education strategies, and policy initiatives tailored to the lived realities of young people in this context. Ultimately, advancing this research agenda is essential for supporting youth wellbeing and fostering more inclusive, just, and sustainable environmental futures.

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