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Scoping Review Protocol: Bridging Generations Through Nature

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We use this protocol and it's working

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Abstract

As the global ageing population grows and societal structures evolve, the need for meaningful intergenerational connections becomes increasingly important. Intergenerational practice (IGP) bridges this gap by fostering mutually beneficial interactions between generations.

Nature-based IGP is an emerging approach, promoting connections not only between generations but also with nature. This scoping review systematically maps existing knowledge on non-familial nature-based IGP. A comprehensive search of English and Spanish peer-reviewed articles and grey literature identified 30 sources. Findings were categorised into four research streams: IGP, Environmental Education, Dual Approaches, and Design and Implementation. Results highlight the potential of nature-based IGP to address both social and environmental challenges through bi-directional learning, storytelling, and shared experiences. Small-scale, structured experiential learning also emerged as key to effective implementation. Significant knowledge gaps remain, however, and call for methodologically robust research exploring the synergistic effects of intergenerational nature engagement. Future studies should examine diverse cultural contexts and informal initiatives.

1. Introduction

1 Definitions

- 1.1 Intergenerational practice (IGP) is a broad concept encompassing various programs, environments, and policies that facilitate meaningful exchanges between younger and older generations
- 1.2 Intergenerational programs typically refer to structured interventions designed to foster intergenerational engagement.
- 1.3 Non-familial intergenerational practice refers to interactions between individuals from different generational groups who do not share direct family relationships (e.g., grandparent-grandchild or parent-child). Instead, these connections occur within community, educational, or organisational settings.
- 1.4 Nature refers to natural elements such as trees, rivers, flowers, and sand.
- 1.5 The environment includes interactions between living beings and both biotic (flora, fauna) and abiotic (air, water, climate) components
- 1.6 These terms are used interchangeably to accommodate diverse definitions across studies.
- 1.7 Nature-based experiences involve interactions with natural settings that offer psychological and cognitive benefits. These experiences typically occur in forests, community gardens, urban parks, and blue-green spaces.

2 Objectives

- 2.1 The research focuses on intergenerational practice (IGP) involving nature and the environment. The goal is to understand how these practices benefit both older and younger generations and to explore potential synergies between intergenerational interactions and engagement with nature.
 - Identify existing research and evidence on intergenerational practice involving nature and the environment.
 - Understand how these experiences can be used in IGP.

2.2 Key Questions

1. What knowledge exists on opportunities for intergenerational practice and nature and the environment?
2. How can these experiences be used in IGP?

2.3 For conceptual papers, the review will address the following questions:

- What knowledge exists on opportunities for intergenerational practice involving nature and the environment?
- How can these experiences be used in IGP?

2.4 For empirical studies, the review will explore:

- How was the intervention delivered?
- Where was it implemented?
- What activities were involved, and what was their duration?
- What were the outcomes of the intervention?
- How were different generations involved in the research or design process related to intergenerational practice and nature play?
- How are these projects considered sustainable?

3 **Need for the Review**

3.1 Given both the continuing separation and connection between generations, particularly non-familial intergenerational groups (*Jiménez-Roger & Sánchez, 2023; Sánchez & Díaz, 2019*), and the decline in environmental health, there is an urgent need to examine factors that motivate and promote environmental consciousness and connection across non-familial generations.

3.2 The rationale for this review lies in recognising the shared goals and underlying mechanisms of both intergenerational interactions and engagement with nature. By examining their intersection, this review seeks to uncover potential synergies and cumulative effects.

4 **Eligibility Criteria**

4.1 *Population:* Studies must focus on intergenerational settings involving individuals from different generational groups

4.2 *Concept:* The review will identify and map the evidence on intergenerational practice and its relationship to nature and the environment.

4.3 *Context:*

- Research must provide insights into:

- Existing literature and documented outcomes.
- Delivery of interventions, including setting, duration, participants, and activities.
- Generational involvement in the research or design process.

2. Sample search strategy

5 Preliminary Searches

- 5.1 Initial research identified nature and the environment as key components of connectivity and intergenerativity (*George et al., 2011*)
- 5.2 Several studies explored familial intergenerational connections in greenspaces, particularly between grandparents and grandchildren and Indigenous families engaging with nature and cultural traditions.
- 5.3 Preliminary searches did not find any targeted reviews on intergenerational practice and the use of nature or natural elements, highlighting a gap in the literature
- 5.4 A limited number of intergenerational programs were found to explicitly use nature as their intervention, reinforcing the need for a systematic review of the existing literature.
- 5.5 Test searches in databases using keyword syntaxes have yielded large result sets. A librarian has been contacted to refine search terms for more precise data retrieval.

6 *Inclusion Criteria*

- 6.1 Describes intergenerational practice, activities, approaches, or ideas that involve nature, natural elements, the environment, or outdoor locations
- 6.2 Describes an actual or potential **mutually** beneficial engagement between two different generational groups
- 6.3 Peer-reviewed articles and grey literature
- 6.4 English and Spanish language publications

6.5 Human subjects

7 *Exclusion Criteria*

7.1 Studies that involve familial participants (e.g., grandparent/grandchild).

7.2 Studies that only include one generation group

7.3 Animal studies.

4. Explanation Search Approach

8 The search approach will aim to identify relevant literature by combining intergenerational and nature-related concepts. The initial search will be conducted in the following databases:

- MEDLINE (PubMed or Ovid)
- CINAHL

However, further databases will be added.

8.1 Preliminary search results will be analysed by examining:

- Title and abstract text words
- Index terms assigned to retrieved articles
- Word frequency analysis using the SR Accelerator tool

9 Step 1: Initial Database Search

9.1 A broad search using key intergenerational and nature-related terms was conducted, revealing large result sets. To refine the search for greater specificity, the librarian was consulted, leading to a refined keyword strategy.

Initial Search Terms

A combination of intergenerational practice and nature-based concepts were used:

Intergenerational
Terms:

Intergenerational OR *"Intergenerational practice"* OR *"Intergenerational program"* OR *"Intergenerational approach"* OR *"Intergenerational activit"* OR *"Intergenerational relation"* OR *"intergenerational learning"* OR *"Multigenerational approach"* OR *"communit"* OR *"generational connection"*

Nature-Based

Terms: *Nature* OR *Environment* OR *Outdoor* OR *Ecological* OR *"Natural environment"* OR *Green* OR *Garden* OR *Forest* OR *Wetland* OR *Wilderness* OR *Playground* OR *"Unstructured activit"* OR *"Explorative activit"*

Population Terms (Children & Older Adults):

Children OR *Adolescent* OR *Teen* OR *Pre-adolescen* OR *"Middle childhood"* OR *"Early adolescence"* OR *Older* OR *"Older adults"* OR *Geriatric* OR *Senior* OR *"Senior citizens"* OR *"Aging population"* OR *"Elder"* OR *"Retirement"* OR *"Gerontology"* OR *"Age-friendly communities"*

10 Step 2: Secondary Search Expansion

A second search identified keywords and index terms across additional databases. This will ensure comprehensive coverage of relevant studies.

Using SR accelerator – word frequency

10.1

	word	unique	title	abstract	keywords	points
	older	3	3	13	1	17
	urban	2	2	8	3	13
	intergenerational	6	6	5	1	12
	adults	2	1	9	0	10
	older adults	2	1	8	0	9
	nature	4	4	3	1	8
	health	2	1	5	2	8
	spaces	2	1	7	0	8



	children	1	1	5	1	7
	practitioners	1	1	4	1	6
	nursery school	1	1	3	2	6
	school	1	1	3	2	6
	nursery	1	1	3	2	6
	play	2	6	0	0	6
	justice	1	1	4	1	6
	social	2	1	5	0	6
	green	2	2	4	0	6
	environmental	2	2	3	0	5
	socio	1	1	4	0	5
	ecosystem services	1	1	3	1	5
	services	1	1	3	1	5
	ecosystem	1	1	3	1	5
	urban green	1	1	4	0	5
	programs	2	1	3	0	4
	intergenerational practice	1	0	3	1	4
	practice	1	0	3	1	4
	school practitioners	1	1	2	1	4



	young	2	2	1	1	4
	based	2	1	3	0	4
	findings	2	0	4	0	4
	patterns	2	0	4	0	4
	park	3	2	2	0	4
	environmental justice	1	1	3	0	4
	socio environmental	1	1	3	0	4
	green spaces	1	1	3	0	4
	aged	1	0	0	3	3
	current	1	0	3	0	3
	nature based	1	1	2	0	3
	benefits	2	0	3	0	3
	using	3	1	2	0	3
	between	1	0	3	0	3
	study	2	0	3	0	3
	activities	2	1	1	1	3
	young children	1	1	1	1	3
	meaningful interactions	1	1	2	0	3
	interactions	1	1	2	0	3

	meaningful	1	1	2	0	3
	planning	1	0	2	1	3
	physical	2	0	2	1	3
	older people	2	0	2	1	3
	people	2	0	2	1	3
	urban ecosystem	1	1	1	1	3
	integrated	1	1	2	0	3
	being	2	2	1	0	3
	interaction	2	1	2	0	3

11 Step 3: Refined Search Terms (After Librarian Consultation)

Based on search analysis, the terms were revised to ensure precise and relevant retrieval of literature. The population group was removed. The updated search terms are:

*Intergeneration OR Multigeneration OR "Generational connection****

AND

Nature OR "Natural environment" OR Environment OR Outdoor OR Ecological OR Green* OR "Green space" OR Park* OR Garden* OR Forest* OR Wetland* OR Wilderness OR Playground***

12 Step 4: Grey Literature Search

To capture policy documents, reports, and theses, grey literature searches will be conducted using the same keywords. The strategy includes:

- Google Searches: Identifying relevant intergenerational organisations, websites, conference proceedings, and policy documents.
- Hand-Searching: Reviewing reference lists of included studies and relevant reviews to locate additional sources.
- Author Searches: Identifying key contributors frequently cited in multiple articles to ensure a comprehensive understanding of the field.



All grey literature must explicitly discuss nature-based activities while excluding familial interactions (e.g., grandparent-grandchild relationships).

3. Study Selection Process

13 Selection Process

- 13.1 - Covidence software will be used for managing the screening and selection process.
- 13.2 - A second reviewer (PhD candidate KV) will be recruited and briefed on the topic and eligibility criteria.
- 13.3 - Regular meetings will be scheduled to ensure consistency and resolve any discrepancies.
- 13.4 - Each reviewer will independently screen studies based on title and abstract.
- 13.5 - Disagreements will be resolved through consensus meetings, with a third reviewer consulted if needed.
- 13.6 - Full-text articles will be assessed against eligibility criteria by one reviewer (NRB)

4. Data Extraction Process

- 14 Using Covidence, the following subheadings will be used for data extraction. All included literature will be uploaded into an Excel sheet for further analysis:
 - 14.1 - Author
 - 14.2 - Year
 - 14.3 - Country



- 14.4 - Type of Literature (e.g., peer-reviewed article, report, thesis, conference paper)
- 14.5 - Research Method (e.g., qualitative, quantitative, mixed methods)
- 14.6 - Primary Focus (Nature/Environmental Education or Intergenerational Practice)
- 14.7 - Aims/Purpose (State research objective or question)
- 14.8 - Population and Sample where applicable (Participant details, including age groups and sample size)
- 14.9 - Nature in Intergenerational Practice (Describe how nature is integrated)
- 14.10 - Intervention (if applicable) (Describe the program or activity; state N/A if not applicable)
- 14.11 - Outcomes and Details (Summarise main results and contributions)
- 14.12 - Key Findings (Highlight significant insights)
- 14.13 - Opportunities or Challenges (Issues identified and potential solutions)
- 14.14 - Curriculum/Education Framework (Mention any theoretical models or frameworks used)
- 14.15 - Other Notes (Any additional relevant information)

5. How results will be presented

- 15 Inductive coding will be used to map themes and patterns in the literature.



Data will be summarised:

- 15.1 - To highlight key findings in the literature.
- 15.2 - Using tables to present trends in study characteristics.
- 15.3 - To identify gaps in nature-based IGP research.

6. Bibliography

- 16 - Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil, H. Chapter 10: Scoping Reviews (2024 edition). In: Aromataris E, Lockwood C, Porritt K, Pilla B, Jordan Z (Editors). JBI Manual for Evidence Synthesis, JBI, 2024. Available from <https://synthesismanual.jbi.global>.
 - Peters, M. D. J., Godfrey, C., McInerney, P., Khalil, H., Larsen, P., Marnie, C., Pollock, D., Tricco, A. C., & Munn, Z. (2021). JBI Evidence Synthesis. <https://doi.org/10.11124/jbies-21-00242>'**PRISMA**
 - **Extension for Scoping Reviews (PRISMA-ScR): checklist and explanation'** (Tricco et al. 2018)