

Using Qualitative Photovoice Interviews to Discover the Role of Biophilia for Older Homeless Shelter Residents



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Background



In Canada, three out of every four people live in urban centres (Statistics Canada, 2022).

Living in an urban environment is associated with a lack of access to green space and noise pollution, which contributes to poor mental wellness, including depression and anxiety (Dayal, 2020).

Maintaining a relationship with nature while living in urban environments is a basic human need (Heerwagen et al., 2008). In 2016, the World Health Organization advanced the importance of human access to nature by recommending that urban residents have access to a public green space within a 5-to-10-minute walk from their home (Vabi, 2022).

However, access to green environments and nature is highly inequitable in urban environments, with newcomers, racialized and low-income populations having less access to green and blue spaces.



Aging in Place—Aging in the Right Place (AIRP)



Aging in place emphasizes older adults having the ability to age in a home and community in which they have a sense of meaning and connection to their physical environment (Beidler & Bourbonniere. 1999, Bigby, 2008).

Aging in the Right Place (AIRP) advances that older adults with diverse need to maintain their independence and autonomy in later life and continue to stay socially connected in the place where they live, feel competent and comfortable, and in control (Golant 2008; 2015).

We conducted a secondary data analysis of the AIRP project, which proposes that “secure and optimal housing should support an individual’s unique vulnerabilities and lifestyles” (Mahmood et al., 2022, p. 2), including older adults living in temporary supportive housing (Canham et al., 2022; Weldrick et al., 2022).

Biophilia, Aging, and Homelessness



Biophilia is the inherent human inclination to affiliate with nature that continues to be critical to people's physical and mental health and wellbeing (Kellert & Calabrese, 2015).

Relationships with animals in nature (Shoesmith et al., 2023) and companion animals positively contributed to the mental and/or physical health of older adults (Hughes et al., 2020).

Biophilic design recognizes human's inherent desire to affiliate with nature and seeks to create habitats that advance human wellbeing through relationships with nature (Kellert & Calabrese, 2015).

Housing with well-designed indoor and outdoor environments provide positive aging benefits for older residents (Yari et al., 2021).

Accessing outdoor green spaces is limited for many older persons living in temporary and supportive housing due to age-related mobility and health challenges and building on leftover land without considerations of proximity to green or blue spaces lack of nature in proximity (Yari et al., 2021).

Study Design: Recruitment

Twenty-five participants were recruited from three promising models of supportive housing: Site 1 emergency shelter for adults aged 55+ fleeing elder abuse; Site 2 housing for adults aged 18+ with a harm-reduction approach; Site 3 is a tiny-home village for veterans who have experienced homelessness. While Site 2 and 3 do not limit their service to older adults, most residents are 50+ years of age.

Participants ranged from 50 to 74 years; six women and 19 men. Most were white (21) identified as white, three Indigenous and one Asian. All participants identified as having either a physical or mental disability except for three who chose not to disclose this information. Seventeen (68%) highlighted biophilic elements as important aspects of shelter provision for older adults with experiences of homelessness.

Study Design: Data Collection and Analysis

In-depth photovoice interviews were conducted using a semi-structured interview guide.

Photovoice facilitates the recording and contemplation of individuals' experiences through photography, serving as a participatory action research approach that encourages critical dialogue concerning the photographers' perspectives (Hergenrather et al., 2009; Sanon et al., 2013).

Interviews were audio-recorded, transcribed verbatim, and anonymized transcriptions were then imported into NVivo 12 software (QSR International, 2018) to assist in managing the data analysis. The photovoice data (images and captions) were placed on a digital Miro (2023) board, a collaborative digital whiteboard for multi-modal forms of data to allow visualization of the data for thematic analysis.

We thematically analyzed and coded the textual interview data and image captions using Braun and Clarke's (2006) six-step process: data familiarity, initial coding, exploring themes, theme review, theme definition, and creating an analytical narrative.

Findings

Unprompted, participants provided insights into this relationship between biophilia and shelter design in four themes

- (a) nature as providing a sense of peace or restoration;
- (b) reciprocity in human relationships with nature;
- (c) biophilia is important to aging well; and
- (d) operational impediments to biophilia.

NATURE AS
PROVIDING A
SENSE OF
PEACE OR
RESTORATION



I think it just because that seems to be the area that where, I first felt welcome and it's still a place that I go. It doesn't matter if it's cold or hot. I still go back to that spot, get a breath here, sit down on the bench. Um, you know, um, just get some air. A place to relax or a place to think for a second. Get away. (S2-P3)

RECIPROCITY
IN HUMAN
RELATIONSHIPS
WITH NATURE



The special part about this area is I'm on the third floor at the corner and throwing out [to] feed all my little sparrows. I throw out a lot of breadcrumbs every morning around the picnic table, the blue picnic table and on the patio deck for the birds. Throw 'em right out my window. And I chirp at them to let them know that food breakfast is coming... It's nice to hear that in the mornings. (S2-P2)

BIOPHILIA IS IMPORTANT TO AGING WELL



Everybody that's walked into this place. It doesn't matter whether they work here or they're just visiting. They're going to get a hug and a kiss from him... We have a good time with him." (S1-P1) "He makes older people feel young. Yeah. They stay young at heart. Brings the joy. He makes everybody relaxed." (S2-P3)

OPERATIONAL IMPEDIMENTS TO BIOPHILIA



For me, they just make my heart melt and I've had animals all my life and now I don't know I won't have them. And so, I think for seniors, the important part is, just, petting and loving. They're so loving and seniors would just, they brighten up, and I just think that's really important to me.

(S1-P3)

DISCUSSION



Residents emphasized their need for biophilic relationships as part of AIRP.

Communing with nature provided restoration and was rooted in interdependent relationships.

Living with companion animals was emphasized as a specific need for older shelter residents to AIRP.

Biophilia is an important yet overlooked aspect support aspect for supportive housing design for older adults with experiences of homelessness.

Understanding the residents' perspectives and relationships with the nonhuman world through photography and story makes a powerful statement argument for change in shelter provision.

Denying shelter relationships with nature impedes the agency, well-being and can be considered an act of environmental injustice (Nesbitt et al., 2019).

IMPLICATIONS



As older adults with experiences of homelessness living in temporary housing have increased rates of trauma, disability, and health challenges compared to their housed age-cohort (Mahmood et al., 2020), biophilic supports within shelter environments are critical.

Specific biophilic design and operational guidelines for shelters housing this population need to be further researched, developed, and implemented.

General biophilic quality assessments could be applied and adapted to guide both changes to existing housing as well as new purpose-builds (e.g., Berto & Barbiero, 2017)

QUESTIONS



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References

- Beidler S M, & Bourbonniere M (1999). Aging in place: A proposal for rural community-based care for frail elders. *Nurse Practitioner Forum*, 10(1), 33–38. PMID: 10542579
- Berto, R., & Barbiero, G. (2017). The Biophilic Quality Index. A Tool to Improve a Building from “Green” to Restorative. *Visions for Sustainability*, (8).
- Bigby, C. (2008). Beseet by obstacles: A review of Australian policy development to support ageing in place for people with intellectual disability. *Journal of Intellectual & Developmental Disability*, 33(1), 76–86. doi: 10.1080/13668250701852433
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi: 10.1191/1478088706qp063oa
- Canham, S. L., Weldrick, R., Sussman, T., Walsh, C. A., & Mahmood, A. (2022). Aging in the right place: A conceptual framework of indicators for older persons experiencing homelessness. *The Gerontologist*, 62(9), 1251-1257.
- Dayal, D. (2020, November 19). Exploring the connection between urban planning and mental health — Sustainable Calgary. *Sustainable Calgary*. <http://www.sustainablecalgary.org/the-blog/2020/5/4/exploring-the-connection-between-urban-planning-and-mental-health#:~:text=There%20is%20now%20a%20recognized,a%20higher%20prevalence%20of%20schizophrenia>.
- Golant, S. M. (2008). Commentary: irrational exuberance for the aging in place of vulnerable low-income older homeowners. *J Aging Soc Policy*, 20, 379-397 <https://doi.org/10.1080/08959420802131437>
- Golant SM (2015) *Aging in the right place*. Health Professions Press, Baltimore
- Hergenrather, K. C., Rhodes, S. D., Cowan, C. A., Bardhoshi, G., & Pula, S. (2009). Photovoice as community-based participatory research: A qualitative review. *American Journal of Health Behavior*, 33(6), 686-698.
- Kellert, S. (2018). *Nature by Design: The Practice of Biophilic Design*. Yale University Press
- Nesbitt, L., Meitner, M. J., Girling, C., Sheppard, S. R. J., & Lu, Y. (2019). Who has access to urban vegetation? A spatial analysis of distributional green equity in 10 US cities. *Landscape and Urban Planning*, 181, 51-79.
- Shoesmith E, Shahab L, Kale D, Mills DS, Reeve C, Toner P, Santos de Assis L, Ratschen E. The Influence of Human-Animal Interactions on Mental and Physical Health during the First COVID-19 Lockdown Phase in the U.K.: A Qualitative Exploration. *Int J Environ Res Public Health*. 2021 Jan 22;18(3):976. doi: 10.3390/ijerph18030976. PMID: 33499354; PMCID: PMC7908431.
- Sanon, M. A., Evans-Agnew, R. A., & Boutain, D. M. (2014). An exploration of social justice intent in photovoice research studies from 2008 to 2013. *Nursing Inquiry*, 21(3), 212-226
- Statistics Canada. (2022, February 9). *The Daily — Canada’s large urban centres continue to grow and spread*. <https://www150.statcan.gc.ca/n1/daily-quotidien/220209/dq220209b-eng.htm>
- Vabi, V. (2022, March 18). *Urban Parks and Forests Are Missing in Racialized and Marginalized Neighbourhoods*. <https://naturecanada.ca/news/blog/parks-and-forests-are-missing-in-marginalized-neighbourhoods/>
- Weldrick, R., Canham, S. L., Sussman, T., Walsh, C. A., Mahmood, A., Nixon, L., & Burns, V. E. (2022). “A right place for everybody”: Supporting aging in the right place for older people experiencing homelessness. *Health & Social Care in the Community*, 30(6). <https://doi.org/10.1111/hsc.13871>
- Yari, M., Lee, K., Cassidy, J., & Chen, Z. (2021). Transforming space into place: A person-environment interchange approach for designing an assisted living facility courtyard. *Journal of Aging and Environment*, 35(2), 188–206. <https://doi.org/10.1080/26892618.2020.181592>