

Research Paper



Healing landscape: the restorative power of nature

Ar. Kamakshi Vaidya^{1*}, Kanika Borade²

^{1*}Professor, Bharati Vidyapeeth College of Architecture, Navi Mumbai, India.

²B. Arch Student, Bharati Vidyapeeth College of Architecture, Navi Mumbai, India.

Article Info

Article History:

Received: 21 January 2023

Revised: 01 April 2023

Accepted: 07 April 2023

Published: 24 May 2023

Keywords:

Healing

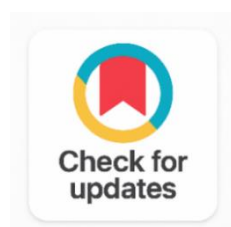
Healing Landscape

Nature

Therapeutic Advantages

Well-Being

Restorative



ABSTRACT

Background: Growing evidence shows that environmental conditions can significantly influence physical and mental health. In this context, the concept of “healing landscapes” has gained increasing attention as an approach to promoting well-being. These landscapes are intentionally designed environments that integrate natural elements with human-centered design to support relaxation, recovery, psychological restoration, and reconnection with nature.

Objective: This paper aims to examine the concept of healing landscapes and explore how the thoughtful integration of nature and design can contribute to healing and overall well-being. It further considers the theoretical foundations, key principles, research evidence, and practical approaches involved in developing therapeutic environments.

Method: A conceptual and literature-based approach was adopted. Relevant studies addressing environmental design, natural components, human health, and psychological well-being were reviewed and synthesized. The available evidence was examined to develop a broader understanding of how healing landscapes function and how their design can influence human experiences and health outcomes.

Results: The findings indicate that healing landscapes represent an important intersection between nature and environmental design and can provide meaningful physical and psychological benefits. Important design principles include convenient access to natural elements, spaces that encourage rest and reflection, and purposeful sensory experiences. These characteristics can contribute to stress reduction, emotional restoration, and improved overall well-being.

Conclusion: Healing landscapes provide a valuable response to growing recognition of the relationship between environment and health. By combining natural features with thoughtful design, they can support recovery, reduce stress, and strengthen connections with nature. Their integration into contemporary health and environmental planning may therefore contribute significantly to holistic approaches to human well-being.

Corresponding Author:

Ar. Kamakshi Vaidya

Professor, Bharati Vidyapeeth College of Architecture, Navi Mumbai, India.
Email: kamakshi.vaidya@bharatividyaapeeth.edu

Copyright © 2023 The Author(s). This is an open access article distributed under the Creative Commons Attribution License, (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. INTRODUCTION

Healing landscapes represent intentionally crafted outdoor spaces designed to promote physical, mental, and emotional well-being. These environments leverage elements of nature, incorporating features such as greenery, water, and thoughtful design to create spaces that contribute to relaxation, stress reduction, and overall healing. Whether found in healthcare settings or public spaces, healing landscapes aim to harness the therapeutic power of nature to enhance the quality of life for individuals and communities. These landscapes are created with the understanding that spending time in natural settings can have profound positive effects on human health as well as general quality of life.

2. RELATED WORK

2.1 "Restorative Gardens: The Healing Landscape" By

In their 2014 article, [1] explore the role of healing landscapes. The authors emphasize that these specially designed spaces offer significant therapeutic benefits to individuals facing various challenges. The article highlights the idea that healing gardens are intentionally created environments, carefully crafted to promote mental and emotional well-being. These spaces are characterized by elements such as lush vegetation, soothing water features, sensory-rich plantings, and comfortable seating, all of which combine to create an atmosphere of tranquillity and rejuvenation.

[2] Delve into the science behind the healing effects of healing gardens, drawing upon research that underscores how exposure to nature can reduce stress, improve concentration, and enhance overall health. They emphasize the importance of sensory engagement within these spaces, from the visual appeal of natural elements to the tactile sensations of plants and water.

In summary, this article underscores the profound impact of healing gardens as healing landscapes. It emphasizes their role in promoting well-being, reducing stress, and expediting recovery.



Figure 1. Walking Paths and Benches for Rest

2.2 The Role of Nature in Coping with Psycho-Physiological Stress

In their 2014 article, the paper delves into the concept of "restorativeness," which refers to the ability of natural environments to alleviate psycho-physiological stress and promote mental restoration

[3]. The review highlights numerous studies and findings that emphasize the restorative power of nature. Exposure to natural environments, such as parks, forests, or green urban spaces, has been consistently linked to reduced stress levels, improved mood, and enhanced cognitive functioning.



Figure 2. Connection with Nature and Sunlight

2.3 Case Study- The Alnarp Rehabilitation Garden, Sweden



Figure 3. Alnarp Rehabilitation Garden

Location: Alnarp, near Malmo, Sweden

Year Completed: 2011

The Alnarp Rehabilitation Garden is designed as a therapeutic environment for patients recovering from physical and psychological health conditions. The garden incorporates a variety of zones, each catering to different therapeutic needs, including sensory gardens, walking paths, and contemplative spaces [4].

2.4 Plant Selection and Diversity

The garden features a diverse selection of plant species, including native and non-native plants, creating a rich tapestry of colors, scents, and textures. Edible plants and herbs are integrated into the garden.



Figure 4. The Alnarp Rehabilitation Garden Plants

2.5 Accessible Design

The garden is designed to be fully accessible, Paved walkways, handrails, and wheelchair-friendly paths enhance accessibility.

2.6 Therapeutic Features

The garden includes therapeutic features such as fountains, water features, and areas for relaxation and meditation. These elements promote stress reduction and mental well-being [5].



Figure 5. The Alnarp Rehabilitation Garden Water Features

2.7 Health and Healing Benefits

1. **Rehabilitation and Recovery:** The garden is used as an extension of healthcare facilities, providing patients with a serene environment for rehabilitation and recovery.
2. **Stress Reduction:** Patients can engage with the natural environment, which contributes to stress reduction and mental relaxation.
3. **Physical Therapy:** The garden supports physical therapy, offering exercise equipment and open spaces for mobility and strength-building exercises.
4. **Social Interaction:** Person can engage with each other and healthcare professionals, promoting social support and a sense of community.

2.8 Elements of Healing Water

The element of water for its psychological and spiritual effects. The soothing sound of moving water calms and soothes us, reducing stress. Fountains and waterfalls are both excellent options for features in a healing landscape or for the courtyard.



Figure 6. Element of Water in Healing Landscape

2.9 Art

The integration of art to enhance the overall mood/spirit of the garden. Art can provide a sense of beauty, inspiration, and emotional release, which can all contribute to improved well-being.



Figure 7. Element of Art in Healing Landscape

2.10 Landscape

Adding elements of the outdoors to healing environments can significantly improve their therapeutic effects. These features enhance people's connection to nature, encourage relaxation, and enhance their sense of wellbeing.

- Healing areas and gardens
- Seating designs that permit large group gatherings.
- Physically contained areas that promote conversation and conservation.
- A variety of walking paths.



Figure 8. Outdoor Interactive Spaces

2.11 Color

A creative application of colors and lighting to inspire fascination, comfort and emotion.



Figure 9. Element of Color in Healing Landscape

2.12 Natural Features

Integrating wood, rocks, trellises, screens, wind, and sound as examples of natural elements that serve as anchors. Using natural materials, such as wood, stone, and gravel, in the construction of pathways, seating areas, and other structures creates a harmonious and welcoming atmosphere in healing landscapes. These materials blend seamlessly with the natural surroundings, providing a sense of authenticity and connection to the environment [6].



Figure 10. Element of Natural Features in Healing Landscape

2.13 Characteristics of Healing Landscape Vegetation

A well-designed landscape plan includes hardscape walkways and courtyards, with vegetation taking center stage. It should have opulent covered landscapes with flowerbeds, bushes, and shade trees at various heights. Plant life that contributes to a healing environment by providing shade, seclusion, and beauty.



Figure 11. Hardscape Walkways and Courtyards

2.14 Water Features

Water features, such as ponds, streams, or fountains, are commonly incorporated into healing landscapes. The sound and sight of water can have a calming effect and promote relaxation.

2.15 Wildlife Presence

Native plants require little maintenance and grow well. They additionally attract fauna and flora, which is another way that they promote healing. Hummingbirds, butterflies, and other birds will begin to flutter about, bringing joy to the laborers and women who had waited outside for some respite.



Figure 12. Butterflies Attract Flora

2.16 Healing Plants

These plants are wonderful additions to healing landscaping [7], as they have been associated with healing for centuries. Roses, tulsi, lavender, and rosemary are a few of them.

2.17 Design Considerations

1. Provide clear pathways and level surfaces to accommodate visitors with limited mobility.
2. Ensure adequate lighting for safe movement throughout the day and night.
3. Consider using natural materials such as wood, stone, and gravel for walkways and seating areas.

4. Incorporate comfortable seating areas with shade protection.
5. Provide secluded areas for quiet contemplation and reflection.
6. Design spaces that offer views of natural beauty, such as gardens, ponds, or woodlands.
7. Incorporate design elements that resonate with the cultural values and traditions of the community.
8. Select plants and materials that are native to the region or have symbolic significance to the community.
9. Design spaces that are inclusive and welcoming to people of all backgrounds.

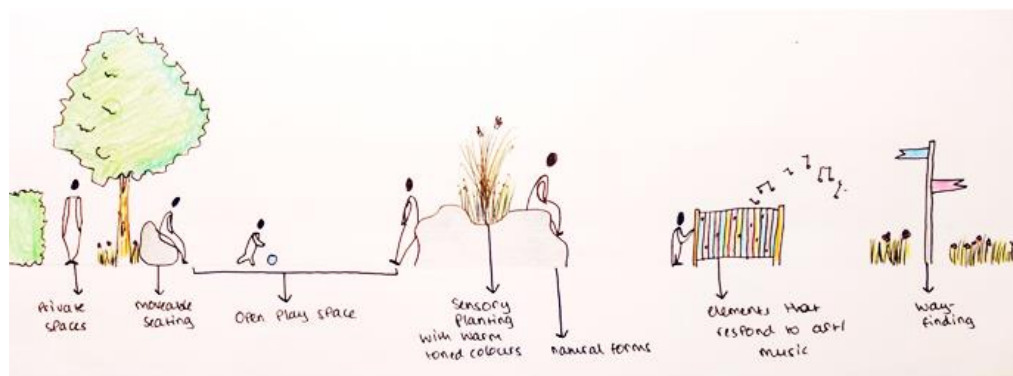


Figure 13. Successful Design Elements for Healing Landscape

3. CONCLUSION

Healing landscapes represent a profound and transformative approach to promoting human well-being. These intentionally designed and thoughtfully curated environments harness the therapeutic power of nature to heal, rejuvenate, and inspire individuals mentally, and emotionally. Through an array of elements, from lush vegetation and calming water features and symbolic art installations, healing landscapes create spaces where people can reconnect with the natural world and, in doing so, rediscover their own inner balance. Spending time in healing landscapes reduces stress, enhances cognitive function, and contributes to improved mental health. These spaces offer solace, peace, and opportunities for reflection, fostering a sense of calm and serenity in an otherwise fast-paced and demanding world. Healing landscapes are not confined by boundaries or limitations. They extend to healthcare settings, urban planning, educational institutions, and community spaces, making their therapeutic benefits accessible to all. In these landscapes, we find spaces for healing, for growth, for empowerment, and for forging connections with others and with ourselves.

Acknowledgments

The authors have no specific acknowledgments to make for this research.

Funding Information

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Author Contributions Statement

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Ar. Kamakshi Vaidya	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Kanika Borade	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

C : Conceptualization

M : Methodology

So : Software

I : Investigation

R : Resources

D : Data Curation

Vi : Visualization

Su : Supervision

P : Project administration

Va : **Validation**
Fo : **Formal analysis**

O : **Writing - Original Draft**
E : **Writing - Review & Editing**

Fu : **Funding acquisition**

Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Informed Consent

All participants were informed about the purpose of the study, and their voluntary consent was obtained prior to data collection.

Ethical Approval

Not Applicable.

Data Availability

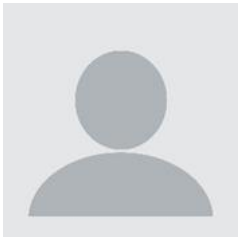
The data that support the findings of this study are available from the corresponding author upon reasonable request.

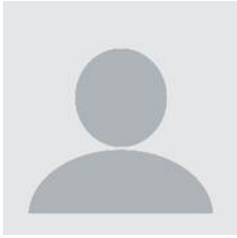
REFERENCES

- [1] C. Cooper Marcus and N. A. Sachs, *Restorative Gardens: The Healing Landscape*. Hoboken, NJ, USA: John Wiley & Sons, 2014.
- [2] T. Hartig, R. Mitchell, S. de Vries, and H. Frumkin, 'Nature and health', *Annu. Rev. Public Health*, vol. 35, no. 1, pp. 207-228, Jan. 2014. doi.org/10.1146/annurev-publhealth-032013-182443
- [3] Meade Mitchell, "Healing garden," *SlideShare*, <https://pt.slideshare.net/meademitchell/healing-garden>
- [4] "Healing landscape," *Levego.hu*, <https://www.levego.hu/sites/default/files/kapcsolodo/healinglandscape-en.pdf>
- [5] "Successful healing garden design elements," *ResearchGate*, fig. 2, https://www.researchgate.net/figure/Successful-healing-garden-design-elements_fig2_370300817
- [6] C. T. Ivarsson and P. Grahn, 'Patients' experiences and use of a therapeutic garden: from a designer's perspective | Patients' experiences and use of a therapeutic garden: from a designer's perspective', *Schweiz. Z. Forstwes.*, vol. 161, no. 3, pp. 104-113, Mar. 2010. doi.org/10.3188/szf.2010.0104
- [7] "Landscaping hospitals: Six things to consider for healing landscape design," *Level Green Landscaping*, <https://www.levelgreenlandscaping.com/blog/landscaping-hospitals-six-things-to-consider-for-healing-landscape-design>

How to Cite: Ar. Kamakshi Vaidya, Kanika Borade. (2023). Healing landscape: the restorative power of nature. *Journal of Nursing Research, Patient Safety and Practise (JNRPS)*, 3(1), 108–117. <https://doi.org/10.55529/jnrps.33.30.38>

BIOGRAPHIES OF AUTHORS

	Ar. Kamakshi Vaidya , is a Professor at Bharati Vidyapeeth College of Architecture, Navi Mumbai, India. She is actively involved in architectural education, design, and academic research. Her professional interests include contemporary architectural practices, design development, and built-environment studies. Through teaching and research, she contributes to developing innovative, context-sensitive, and sustainable approaches to architecture. Her academic experience supports students in exploring design
---	--

	thinking, creativity, and professional architectural practice. Email: kamakshi.vaidya@bharativedyapeeth.edu
	Kanika Borade , is a Bachelor of Architecture student at Bharati Vidyapeeth College of Architecture, Navi Mumbai, India. She is developing her academic and professional interests through architectural design studies, research, and practical learning. Her areas of interest include contemporary architecture, sustainable design, and the relationship between built environments and their social contexts. Through her academic work, she aims to strengthen her understanding of architectural design and contribute to meaningful and responsive built environments. Email: boradekanika@gmail.com