



Enhancing Holistic Health through Healing Architecture: A Literature Review

¹Adewale James Afolami, ²Babatunde Oluseyi Owolabi and ³Abimbola Oluwasina Ajayi

Abstract

The environment have long been recognized to usually have health effects on occupants. The aim of this study was to undergo a thematic analysis of existing literature towards providing a more coherent understanding of the concept of healing architecture. As humans are physically, mentally and emotionally connected to the built up environment through employment, retirement, education and play. This connection fosters a dynamic life in which individuals should flourish in all spheres and actively engage in fostering their relationship with the natural world. The research method entails literature search in Google scholar online engine using “healing architecture” and “holistic health” as themes. The study concludes that the major sub-themes of healing architecture are access to view of nature, use of soft landscape in the environment, improved sound and light levels, bioclimatic design and using the building envelope for environmental control.

Keywords

Therapeutic, Environment, Occupants, Building

Article History

Received 05 June. 2025

Accepted Dec. 2025

Published online Dec 31, 2025

Contact

Adewale James Afolami

jaafolami@futa.edu.ng

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

1. Introduction

Health as established by World Health Organization is described as “a state of total physical, mental and social well-being, not merely the absence of disease or infirmity” (WHO 2025). Another closely related definition, understands health as a multifaceted concept of a sound body, mind and spirit living in a balanced environment (Wilcock and Hocking, 2024). Given the recent global health challenges, demonstrated by the history of complex and constantly occurring diseases such as Covid19, diabetes and cancer, the traditional medical model is usually concerned with diagnosis using standardized assessments and observed little inputs from the patient receiving care (Texas Health and Human Services, 2024). Holistic health encompasses the traditional medical model and adds other wellbeing principles including Ayurveda, traditional Chinese medicine, lifestyle management and spirituality of the concerned individual, seeking an encompassing way in seeking for healing to illness and suggesting a natural adjustment to life (Verma et al., 2024).

Healing architecture often implies the consideration of nature when designing buildings (Ghazaly et al., 2022). Some of the principles adapted from related concepts such as green buildings, sustainable architecture, bioclimatic architecture and climate responsive buildings are the

use of landscape to reduce heat in buildings, access to view of nature, daylight exposure, personal control of the indoor environment. Others include the use of indoor art and colour for healing. The aim of the paper is to undergo a thematic analysis of existing literature towards providing a more coherent understanding of the concept of healing architecture.

2. Literature Review

2.1 Holistic Health

Prior to the use of penicillin or X-rays, healers in many cultures understood the significance of mental and emotional health in achieving wholeness of health. There seems to be some documented old practices of holistic health customs, Ayurveda from India (Gupta et al. 2025), the traditional Chinese medicine (Gaur, 2025) and some based in Africa (Zemedede et al., 2024). Many of these have improved over time the diagnostic and therapeutic capabilities of each practice. The Chinese practice analysis the body like it's a miniature circle of interrelated structure that contains subtle matter and energy elements like “qi” also known as life force or “shen” also known as mind. Ayurveda and some of the African indigenous healing practice developed from the efficacy of plants with cultural and spiritual meaning for healing (Didwana & Sharma, 2025).

^{1,3}Department of Architecture, Federal University of Technology, Akure, Nigeria

²Department of Urban and Regional Planning, Federal University of Technology, Akure, Nigeria

Modern healthcare facilities offer an extensive variety of functional units and treatments. They encompass hospitality services like maintenance and catering, basic medical care or bedside duties, clinic, laboratory, diagnostic imaging, emergency rooms and surgery. The scope, guidelines and supervision that govern the construction and management of healthcare facilities reflect these distinctions. Each of the extensive and continually advancing hospital operations such as the extremely intricate electric, mechanical and communications networks, call for specific training and experience. Professional healthcare facility planning and design heavily relies on experts. An excellent healthcare plan balances practical necessities with the emotional needs of its patients. The National Health Service of the United Kingdom is a well revered and comprehensive health system (National Health Service, NHS, 2025).

Holistic health draws strength from the understanding that healing occurs not only on a physical level, but also on a mental, emotional and spiritual level. Patients who engage in this process can achieve true healing and transformation. According to Maslow (McHugh et al., 2024), it is ideal to focus on the positive attributes of the person. The theory of the hierarchy of needs emphasizes the importance of fulfilling one's talent. The path to self-actualization is rather a journey of self-discovery, leading to what Maslow called the ideal qualities of strength, freedom, creativity, connection, acceptance, tolerance, trust, peace, integrity, joy and unconditional love. These qualities have the potential to ameliorate population health and enhance care experience for patients and care givers. Spirituality and religion have been identified as essential to the healing process and coping for resilience in several illness such as mental disorders, endocrine system failure and cancer, it may also have effect on longevity (Britt et al., 2025) and coping from illnesses generally (Nagy et al., 2024).

2.2 Healing Architecture

Healing Architecture can be described as a human-centred built environment discipline that identifies and supports ways of combining spatial elements that promotes well-being of building occupants (Ghazaly et al. 2022). In another premise, it is a physical setting, especially in medical practice that helps the patient and family deal with stress arising from illness, hospitalization, medical visits and

bereavement. The idea of healing architecture is a recent concept that is often related to health based buildings (Khallil et al., 2021, Yan & Geng, 2024). On the other hand, (Simonson et al., 2022) argues that there are no agreed definition of healing architecture yet, also the practical implications of the design approach is also yet to be clarified. Albeit, some specification for healing architecture within healthcare facilities were described as access to views of nature and outdoors, increased preference for a maximum of 3-bed ward, the preference for traditional industrial-like furniture in the hospital environment and home-like furniture in the lounge area. In other to support recovery, healing architecture looks at providing patients with some alternative spaces such as quiet waiting areas, distinguishing private areas from social areas, balancing light levels, affecting mood using music, promoting communal activities through provision of room accommodations for visitors or families, providing group privacy areas and providing enough space for chairs in patient rooms where needed.

2.3 Principles of Healing Architecture

2.3.1 Bioclimatic Design

The goal of a building's bioclimatic design is to minimize energy consumption, optimize thermal and visual comfort and make occupants have a comfortable indoor environment (Bera & Nag, 2025). The concept of bioclimatic design was made popular by Victor Olygay in 1963, with the publication of a book focusing on bioclimatic approach within different climatic regions of the world. The building form, orientation of the building and microclimatic measures often determine how best to design context specific buildings (Olygay et al., 2015; Pontes et al, 2022).

2.3.2 Building Envelopes

The outer shell of a building serves as an environmental control, often shielding occupants from excessive wind, cold and heat. A simple building envelope is expected to contain the openings and the load bearing wall. The external walls in the tropics are expected to have high thermal mass properties, examples include concrete blocks, clay and rammed earth. This walling materials slow down the temperature swing in the environment (Brophy & Lewis, 2011). It can also serve as sound buffers and air filter (Ibrahim et al., 2025). For

example in the tropics, it is common to install fly nets on the windows and doors, this practice filters the incoming air. In Giuffrida et al. (2025) study of three different earth walling techniques, it was discovered that light earth walling systems performed better than the conventional clay block system in Italy. The light earth walling system used far less water per square, because of the larger amount of straw used for the system. In the Nigerian construction space, compacted, hollow sandcrete blocks is a very popular choice.

2.3.3 Access to Soft Landscape

Generally, there are two major forms of landscape enrichment items, soft and hard. The hard landscape encompasses the vehicular access and walkways, while the soft landscape means the vegetation grasses, flowers, trees and shrubs. Some of the popular masters of architecture, especially Frank Lloyd Wright and Frederick Law Olmstead (Adedeji, 2023) were very much concerned about fresh air indoors and the therapeutic nature of natural landscape features like local vegetation, coastlines, streams and peaks. The importance of the integration of a balanced landscape design with urban planning generally has the potential to link communities socially, physically and ecologically (Seguel Medina et al., 2025).

2.3.4 Access to Natural Light

Natural lighting reduces stress on the eyes and is important for the circadian rhythm of the body (National Institute of General Medical Sciences, NIGMS, 2025). Natural light should gently enter the space throughout the day, creating different intensities and colours that can enliven the occupants' mood, which seems to be very important to many building occupants, especially in health-based buildings (Simonson et al., 2022). The application of the natural lighting concept is also quite useful in notable cathedral buildings, for example natural lighting forms interesting patterns of solid and void in the Holy Cross Cathedral, Lagos (Ejiga et al., 2015), adding to the special nature of the building.

2.3.5 Colour and art as influence for mood and behaviour

Human response to colour can be explained as “internal unconscious mental forces” usually deep inside the person, but influencing to a great deal the

reactions of the perceiver. This psychodynamic analysis approach to the explanation of behaviour was introduced by Sigmund Freud in the early 20th century (Albatroso & Jones, 2023), further explanations according to Fordham & Fordham (2025) on extrovert and introvert behaviour was also carried out by Carl Gustav Jung (1875-1961). Historically, colour and art are also quite useful for therapy according to Basharuddin & Suleiman (2025), this practice extends to leisure activity for the young and the elderly and general wellbeing, with practical implications for architecture, town planning, fashion designing, tourism, psychology, health and wellness (McKimm, 2017).

3. Research Methodology

The search engine used for the thematic search was Google Scholar. Two main themes were imputed in the search engine “holistic health” and “healing architecture”. Top cited papers and other relevant papers from each theme was selected for the review. Relevant concepts and ideas were adopted for the synthesis of the review.

4. Discussion of Key Findings

All the break-away principles of healing architecture (see Figure 1), bioclimatic architecture (Pontes et al., 2022), the building envelope (Giuffrida et al., 2025), access to soft landscape (Seguel Medina et al., 2025), access to natural lighting (Simonson et al., 2022) and use of colour in buildings (McKimm, 2017), are all geared to improve the well-being of building. Adherence to these principles is expected to provide holistic health, not only in healthcare settings, but in buildings generally.

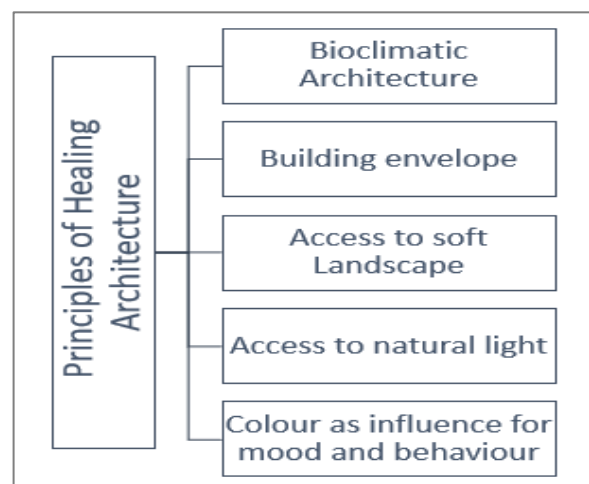


Figure 1: Principles of healing architecture (modified from Ghazaly et al., 2022)

5. Conclusion and Recommendations

The need to provide a space where people can meet for the renewal of their mind and body through exercising, recreational activities, massages, steam baths and interacting with other people is expected to provide a good standard of living. This includes creating environments for yoga, fitness, spa and counselling. Additionally, maximize the use of natural light to create a calming and inviting atmosphere using necessary size of windows and

skylights, providing comfortable seating in waiting areas and relaxation spaces along with soothing colours and décor. Also, incorporating indoor plants and natural elements like water features to enhance the sense of tranquillity. To close it, ensuring accessibility for building occupants with mobility challenges, including ramps and elevators are top priority features for healing architecture.

References

- Adedeji, J. A. (2023). Introduction: Ecosystem services in Yoruba cities-Towards a conceptual framework. In: Ecological urbanism of Yoruba cities in Nigeria. *Cities and Nature*. Springer, Cham.
- Albatrossov, N. & Jones (2023). *Psychodynamic approach in psychology: Definitions and examples*. A web page information, retrieved from <https://study.com>
- Basharuddin, J. & Suleiman, S. (2025). Colour in illustrations for art therapy among higher education students in UITM Perak. *Ideology Journal*, 10(1). Retrieved from <https://ideologyjournal.com>
- Bera, M. & Nag, P. K. (2025). An overview of bioclimatic design strategies of the built environment. *Environmental, engineering & built environment journal (EEMJ)*, 24(4), 89. Retrieved from www.ebscohost.com
- Britt, K. C., Boateng, A. C. O. & Doolittle, B. R. (2025). Advancing the effectiveness of holistic care in the United States: Integrating religion and spirituality. *Journal of integrative and complementary medicine*, 31(1), 100-104. Retrieved from www.liebertpub.com
- Brophy, V. & Lewis, J. O. (2011). *A green Vitruvius: Principles and practice of sustainable architectural design*. London: Earthscan.
- Didwana, R. S. & Sharma, N. (2025). Traditional Ayurvedic remedies and modern pharmacology: A review of Indian ethno-medicinal plants. *International journal of pharmacy research & technology*, 15(1), 595-601. Retrieved from www.ijprt.org
- Ejiga, O., Igwe, J. M., & Kashim, Y. (2015). The architecture of the Holy Cross Cathedral, Lagos. *Lagos Journal of Architecture*. 1, 51-62. Retrieved from <https://ir.unilag.edu.ng>
- Fordham, M. S. M., & Fordham, F. (2025). *Carl Jung*. An online article. Retrieved from www.britannica.com
- Gaur, R. (2024). A brief history: traditional Chinese medicinal system. *Pharmacological research-Modern Chinese medicine*, 10,100387.
- Ghazaly, M., Badokhon, D., Alyamani, N. & Alnumani, S. (2022). Healing architecture. *Civil Engineering and Architecture*, 10(3), 108-117.
- Giuffrida, G., Dipasquale, L., Pulselli, R. M. & Caponetto, R. (2024). Compared environmental life cycle performances of earth based walls to drive building envelope design. *Sustainability*, 16(4), 1367.
- Gupta, A., Singh, V. & Chandra, R. (2025). Towards standardization of Prakriti evaluation: A scoping review of modern assessment tools and their psychometric properties in Ayurvedic medicine. *Journal of Ayurveda and integrative medicine*, 16(4), 101157. Retrieved from www.sciencedirect.com
- Ibrahim, A. J., Zangana, D. D., Liu, S., Samuelson, H., & Yang, L. (2025). Impact of climate change on energy-saving sensitivity of residential building envelope design parameters in three hot-dry cities. *Journal of building engineering*, 99, 111481. Retrieved from www.sciencedirect.com.
- McHugh, A., Miller, C. & Stewart, C. (2024). Maslow's hierarchy of needs: Achieving outcomes, improving value and work environment-lessons learned from the pandemic. *Critical care nursing clinics of North America*, 36(3), 451-467. Retrieved from www.europepmc.org
- McKimm, R. (2017). Colour, health and wellbeing through the lens of colour analytical psychology. In: *Colour Design, theories and applications (2nd ed.)*. Retrieved from sciencedirect.com
- Nagy, D. S., Isaic, A., Motofelea, A. C. & Popovici, D. I. (2024). The role of spirituality and religion in improving quality of life and coping mechanisms in cancer patients. *Healthcare*, 12(23), 2349. Retrieved from www.pmc.ncbi.nlm.nih.gov
- National Institute of General Medical Sciences, NIGMS, (2025). *Front page information*. Retrieved from www.nigms.org
- Olygay, V., Olygay, A., Lyndon, D., Reynolds, J. & Yeang, K. (2015). *Design with climate: Bioclimatic approach to architectural regionalism (New and expanded edition)*. Princeton, US: Princeton University Press.
- Pontes, R. H., Najjar, M. K., Hammad, A. W. A., Vazquez, E. & Haddad, A. (2022). Adapting the Olygay bioclimatic chart to assess local thermal comfort levels in urban regions. *Clean technologies and environmental policy*, 24, 661-667.
- Seguel-Medina, C., Nijhuis, S., & Sepulveda-Carmona, D. A. (2025). Towards a landscape-based approach for planning and design in complex urban geomorphologies: A case study of Valparaiso, Chile. *Landscape, Architecture and Sustainability*, 1, 100003. Retrieved from www.keaipublishing.com
- Simonsen, T., Sturge, J. & Duff, C. (2022). Healing architecture in healthcare: A scoping review. *Health Environment Research & Design, HERD Journal*, 15(3), 315-328.
- Texas Health and Human Services (2024). *Front page information*. Retrieved from www.hhs.texas.gov
- Verma, S. K., Pandey, M., Sharma, A. & Singh, D. (2024). Exploring Ayurveda: principles and application in

- modern medicine. *Bulletin of the National Research Centre*, 48(1), 77. Retrieved from www.springer.com
- Wilcock, A. A. & Hocking, C. (2015). *An occupational perspective of health*. New York: Routledge.
- World Health Organization (WHO, 2025). World health organization home page information, *Constitution*. Retrieved from www.who.int
- Yan, X. & Geng, T. (2024). Healing spaces improve the well-being of older adults: A systematic analysis. *Buildings*, 14, 2701.
- Zemedet, J., Mekuria, T., Ochieng, C. O. & Onialalaina, G. E. (2024). Ethnobotanical study of traditional medicinal plants used by the local Gamo people in Boreda Abaya District, Gamo zone, southern Ethiopia. *Journal of ethnobiology and ethnomedicine*, 20(1), 28. Retrieved from www.springer.com