



Designing for the Mind: Architecture, Emotion and Everyday Well-Being

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Abstract. The review shows the presence of certain patterns in environments that emphasize the importance of natural light, the human scale, tactile materials, and connections with the environment or nature. These environments are more approachable and emotionally nurturing, often without clinical connotations in favour of more informal and socially supportive environments. The research aims to contribute to the understanding of architecture as an environmental support system that can include mental well-being in daily experience rather than confining it to clinical spaces, particularly in culturally sensitive contexts such as India. Through the integration of the key understanding of architectural guidelines, the research makes an important contribution to the design of inclusive, non-stigmatizing environments that are emotionally responsive.

Keywords: mental health; architectural well-being; healing architecture; everyday spaces

1 Introduction

The issue of mental health is quite significant in modern society because of various factors such as rapid urbanization, changing family dynamics, academic pressures, professional pressures, and the highly fragmented society that we live in today. In the case of India, the number of people who are dealing with the issues of mental health is quite high. The issue is only being talked about in the context of critical situations rather than being a part of the general conversation on the subject (World Health Organization, 2022; Ministry of Health and Family Welfare, 2017). The solution for the issues of mental health has traditionally been within the domain of the hospital. While the solution to mental health issues lies within the domain of hospitals from a medical perspective, the environment within hospitals is often intimidating, unfamiliar, and distant from reality. This is the reason why many people feel apprehensive about seeking help within such environments. This situation further emphasizes the fact that mental health issues should be kept isolated (Ministry of Health and Family Welfare, 2017). Consequently, the preventive and community-based aspects of mental health care within the built environment are still in their infancy. Nevertheless, various disciplines' research works have started to identify the strong relationship that exists between environmental factors and human psychology. Research works on healing architecture and environmental psychology indicate that spatial design factors can have a positive influence on emotional and

psychological well-being (Sternberg, 2009). However, the existing literature is mainly limited to the field of healthcare facilities and is not usually transferred to the broader field of architecture. This is a challenge that requires the exploration of the possibilities that the spatial principles for well-being can offer for environments that do not fall within the healthcare sector.

1.1 Research Questions

In order to provide guidance for the research, the study seeks to answer the following research questions:

1. How can the principles of healing architecture inform environments that promote emotional well-being in day-to-day life?
2. What design strategies in architecture have the most significant impact on psychological comfort and stress reduction?
3. How can the concepts of salutogenic design and neuroarchitecture be integrated into an architectural framework to promote preventive mental health

2 Background and Context

Mental health disorders have become an emerging health issue in the Indian context. According to the World Health Organization, mental health disorders result in the loss of 2,443 Disability-Adjusted Life Years (DALYs) per 100,000 population. This is an alarmingly high loss of life years due to disability and early death. The Global Burden of Disease study was conducted in 2017 and revealed that 197.3 million people suffer from mental health disorders in India. The percentage is as high as 14.3% of the Indian population. The list of mental health disorders was dominated by depressive and anxiety disorders. The contribution of mental health disorders to total Disability-Adjusted Life Years was nearly double from 1990 to 2017. The percentage increased from 2.5% to 4.7% during this period. The rising percentage is an alarm that mental health disorders are increasing in the country. Interestingly, 99.9% of Disability-Adjusted Life Years was due to years lived with disability. The years lived with disability indicate the long duration of mental health disorders in the country. The age-adjusted rate of suicide is 21.1 cases per 100,000 population in India.

The economic loss associated with mental health issues cannot be ignored. The economic loss associated with mental health issues from 2012 to 2030 has been estimated to be a staggering figure of \$1.03 trillion in terms of loss of productivity, health expenditures, and premature deaths (World Health Organization, 2022). On the flip side, the trend of rapid urbanisation, environmental factors, social alienation, academic and professional pressures, and the stigmatisation of mental health issues have led to an increase in vulnerability. The current infrastructure for addressing

mental health issues in the population of India has focused on hospitals and treatment, but not on creating an environment that can be preventive in nature. Therefore, the role of the built environment comes to prominence as an unexplored factor for cognitive restoration. Architectural design can be used for not only therapeutic interventions but also for preventive interventions.

3 Literature Review

The relationship between the built environment and well-being is well researched, as supported by different theoretical approaches in environmental psychology, neuroscience, public health, and architecture. The early days of healthcare design focused on operational and infection efficiency. However, recent studies in healthcare design are increasingly recognizing that space is an active contributor to well-being. (Ulrich, 1984; Ulrich, et al., 2008)

The first study in healing space was conducted by Ulrich (1984), who proved that patients who recovered from surgery in rooms with access to natural landscapes had better recovery times and needed fewer analgesics than those in rooms with blank walls. The study was conducted in a hospital setting, and it was the first study to measure the impact of access to nature views on patient outcomes. The study was extended by other researchers. Ulrich, et al. (2008) undertook an interdisciplinary study to prove that patients who were exposed to natural daylight, vegetation, low noise levels, and clear space organization had reduced stress and better emotional outcomes. The study was used as a foundation for healing architecture as a way of designing space with the specific intent of reducing stress in patients and changing the built environment.

In parallel with the developments in the design of healthcare facilities, Antonovsky's salutogenesis focused on health promotion and not disease causation. Antonovsky proposed that "environments that offer a 'sense of coherence' in terms of comprehensibility, manageability and meaningfulness are conducive to the development of psychological resilience." The legibility of spaces and autonomy in space navigation and the opportunity to have meaningful interactions are architecturally significant in this context. Environments that are disorienting and socially alienating are conducive to the absence of coherence, while environments that are easy to navigate are conducive to the development of coherence.

Furthermore, the theory of biophilic design took the discourse a step further. Wilson (1984) introduced the theory that the human race possesses an innate affinity for natural systems. This theory was proved to be correct. According to the theory introduced by Kaplan and Kaplan (1989), the Attention Restoration Theory, natural environments help to restore depleted cognitive resources through the use of involuntary attention. This theory was proved correct when it was discovered that exposure to greenery and natural lighting decreases the cortisol level and improves the mood state (Ulrich et al., 1991; Bratman et al., 2015). In the case of densely populated cities, the exposure to natural environments is scarce.

Most recently, there has been the development of a new discipline that is called neuroarchitecture, which is the integration of neuroscience and spatial design research. Sternberg (2009) conducted a study that focused on the role of environmental inputs on neural pathways in terms of stress, the immune system, and emotion. There is evidence that suggests that spatial proportions, the height of the ceilings, enclosure, acoustic properties, and texture play an important role in cognitive processing and the modulation of stress (Sternberg, 2009; Eberhard, 2009). Too much input from the environment can cause cortisol levels to increase, resulting in anxiety, whereas the right amount of environmental input can stimulate parasympathetic nervous system responses, resulting in relaxation, calmness, and increased focus. In terms of the design of environments for the provision of mental healthcare, there are trauma-informed approaches that are focused on the provision of safety, predictability, and control. There is research evidence that suggests that environments that do not provide privacy, lighting, and way-finding can cause agitation in users, particularly vulnerable populations (Shepley & Pasha, 2017). Gradated privacy zones and transparent way-finding are becoming integral components of the design of environments for the provision of mental healthcare.

However, there is little research that translates these principles into daily typologies such as schools, offices, and health clubs, especially in rapidly urbanizing nations like India. Additionally, little research has been conducted on individual environmental influences like light, acoustics, and colour in terms of hierarchical spatial relationships. Mental health discourse in the Indian context has focused on service accessibility, workforce, and stigma (Patel et al., 2018). Mental health disorders contribute to a high percentage of years lived with disability (YLDs), as mentioned by the India State-Level Disease Burden Initiative Mental Disorders Collaborators (2020). This calls for preventive measures. However, architectural determinants of daily stress in the Indian context are not well explored. The urban landscape in nations like India, characterized by high population density, congestion, noise pollution, and the absence of open spaces, is known to cause chronic stress among inhabitants (World Health Organization, 2016). However, little has been done in terms of prevention. While interdisciplinary research has been conducted to establish the relationship between architecture and mental health, little has been done in terms of synthesis in the Indian context. This calls for the integration of healing architecture, salutogenic design, and neuroarchitecture into a systematic framework.

4 Theoretical Framework

This research situates architecture not just as physical space but as a psychosocial mediator that has the potential to affect emotional regulation, cognitive clarity, and behavioural response (Evans, 2003 & Ulrich et al., 2008). The theoretical framework is informed by an amalgamation of three distinct but complementary knowledge domains: healing architecture, salutogenic design, and neuroarchitectural studies. This integrated knowledge domain offers an organized framework to explore the potential of spatial environments as preventive mental health infrastructure (Dilani, 2006 & Sternberg, 2009).

4.1 Healing Architecture

Healing architecture is the concept of design strategies that are intentionally conducive for physiological and psychological healing through environmental modulation (Ulrich, 1984 & Ulrich et al., 2008). Healing architecture was developed from healthcare-related research in the second half of the twentieth century. The framework focuses on reducing stress, the balance of the senses, and the humanistic organization of space. Research has proved that exposure to natural light, ventilation, views of green spaces, acoustic comfort, and wayfinding can reduce stress and enhance emotional stability (Ulrich, 1984; Kaplan & Kaplan, 1989 & Ulrich et al., 2008). Healing architecture was traditionally restricted to hospital environments; however, the present study expands the concept into non-clinical environments. If spatial variables can positively influence stress in clinical environments, the same might apply in non-clinical environments where environmental stress builds up (Evans, 2003). Healing architecture is therefore applied in the present study from the preventative rather than the therapeutic perspective.

4.2 Salutogenic Design

The salutogenesis concept was first introduced by Antonovsky (1979), who focused on the positive factors that promote human health rather than the factors that cause disease. The salutogenesis concept has three essential components: comprehensibility, manageability, and meaningfulness, which are often referred to as the "sense of coherence." If these three components are applied to the field of architecture, comprehensibility refers to the legibility of the environment, manageability refers to the level of autonomy that users are allowed, and meaningfulness refers to the level of engagement that users are able to have (Dilani, 2006). An environment that is too complex or too controlling can cause increased stress for users (Antonovsky, 1979; Evans, 2003). On the other hand, environments that are easily understood and allow users the freedom of choice are likely to promote feelings of safety and control (Dilani, 2006; Shepley & Pasha, 2017). In the Indian context, salutogenesis is particularly relevant in the context of the overstimulated environments that are characteristic of the rapidly urbanizing Indian environment (Patel et al., 2018).

4.3 Neuroarchitecture and Sensory Modulation

Neuroarchitecture is the study of the impact of the physical environment on brain activity linked to stress, memory, attention, and emotional responses (Eberhard, 2009; Sternberg, 2009). According to the research compiled by Esther Sternberg (2009), spatial dimensions, enclosure ratios, lighting conditions, texture, and acoustics all directly influence brain activity. For instance, high noise levels increase cortisol levels (Evans & Johnson, 2000); insufficient natural lighting affects the human circadian rhythm (Boyce, 2014); and disorienting spatial layouts increase cognitive load (Passini, 1992). On the other hand, environments that provide a balanced input for the five senses trigger parasympathetic responses, which are linked to states of relaxation

and calmness (Sternberg, 2009). This model posits that the role of architecture is to provide a constant sensory experience that affects the human psyche unconsciously.

4.4 Toward a Hierarchy of Spatial Impact

Although various studies have identified numerous environmental factors that affect mental health, these factors were investigated individually (Ulrich et al., 2008; Shepley & Pasha, 2017). This paper proposes that architectural elements can be hierarchized based on the degree of their mental health influences. At the macro level, the organization of space, zoning, density, and availability of nature create basic emotional foundations such as safety and belonging (Kaplan & Kaplan, 1989; Bratman et al., 2015). At the meso level, circulation patterns, gradients of enclosure, and thresholds of transition affect autonomy and cognitive clarity (Passini, 1992; Shepley & Pasha, 2017). At the micro level, materials, colors, textures, and lighting affect moods and sensory well-being (Sternberg, 2009; Eberhard, 2009). This hierarchy of spatial elements based on their relative mental health influences transcends descriptive environmental studies to create an organized design tool. This hierarchy allows architects to design spaces that maximize mental health benefits. This paper, by incorporating the concepts of healing architecture, salutogenesis, and neuroarchitecture, creates the conceptual basis that guides the analysis of case studies and design strategies that can be used in Indian contexts. This research synthesises healing architecture, salutogenic design, and neuroarchitecture into a unified framework applicable to everyday architectural environments. The proposed hierarchical framework is illustrated in Fig 1.

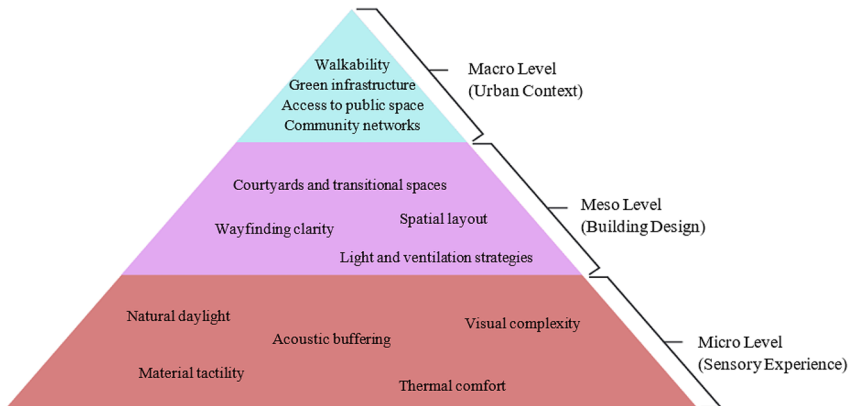


Fig. 1. Hierarchical Framework of Architectural Impact on Mental Well-Being

5 Methodology

This study adopts a qualitative research approach combining a review of existing literature and comparative case study analysis. A thorough review of literature from

the fields of healing architecture, environmental psychology, salutogenic design, and neuroarchitecture was undertaken to identify environmental factors that influence psychological well-being. Key themes emerging from the literature include access to nature, natural light, spatial legibility, privacy, sensory regulation, and opportunities for social interaction.

To examine how these principles are applied in real-world settings, four case studies were selected: Art of Living International Centre and Pyramid Valley International in India, Orygen Youth Health in Australia, and Maggie's Centres in the United Kingdom. These cases were chosen because they represent diverse cultural and institutional approaches to mental well-being while demonstrating a strong emphasis on emotionally supportive environments. The selection also enables comparison between community-based, healthcare-oriented, and spiritually oriented models of well-being.

A comparative framework was developed using six environmental determinants identified in the literature review. Integration of nature and landscape, access to natural light, privacy and user control, spatial sequence and transition, sensory and acoustic comfort, and social interaction and community engagement. Each case study was examined using these parameters to identify recurring design strategies and spatial patterns.

The findings were then synthesised to develop a hierarchical framework of architectural impact on mental well-being. Rather than evaluating clinical or post-occupancy outcomes, the study focuses on identifying spatial characteristics that consistently support psychological comfort across different cultural and institutional contexts. Through this approach, the research proposes a practical design framework for integrating mental well-being into everyday architectural environments, particularly within the Indian context.

6 Mental Health and its Link to Architecture

Though the role of biological and psychological factors cannot be ignored, the spatial environment has a significant impact on the experience, processing, and regulating of stress (Evans, 2003). In the rapidly developing Indian cities, the spatial environment is not only not helping in the mitigation of psychological pressures; rather, the density of the built environment, noise pollution, traffic congestion, lack of green spaces, and longer travel times are creating sensory overload for the people of these cities (World Health Organization, 2016; Evans & Cohen, 1987). At the same time, the pressure of studies and work is creating emotional stress for the people of these countries, especially the youth and working class (Patel et al., 2018). Research in environmental psychology reveals that spatial aspects affect stress mechanisms, cognitive fatigue, and emotional hardiness (Evans, 2003 & Ulrich et al., 2008). Natural light is known to affect circadian rhythms and stability of mood (Boyce, 2014). The availability of vegetation has an impact on cortisol levels and attention restoration (Ulrich, 1984 & Kaplan & Kaplan, 1989). Spatial legibility eases cognitive fatigue, and over-enclosure

and disorienting spaces result in increased levels of anxiety (Passini, 1992 & Sternberg, 2009). With regard to the Indian context, the built spaces are highly stimulated visually and auditorily, have limited transition spaces between public and private realms, and have limited integration of biophilic elements and solitude spaces within highly dense living conditions. While this may not “cause” mental health conditions, this could result in the accumulation of stress levels over time (Evans, 2003). As suggested by the report by India State-Level Disease Burden Initiative Mental Disorders Collaborators (2020), most of the mental health DALYs in India arise from years lived with disability, not years of life lost. If mental illness is, in fact, largely an experience of long-term psychological distress, then environments that facilitate daily emotional regulation may mitigate long-term burden. Architecture affects mental health in a variety of ways.

6.1 Regulation of Sensory Input

Built environments constantly vary in terms of light, sound, temperature, texture, and visual complexity (Sternberg, 2009). Overstimulating built environments can lead to increased stress responses (Evans & Johnson, 2000), whereas balanced built environments can lead to parasympathetic responses, resulting in emotional relaxation (Ulrich, 1984). The relationship between environmental stimuli and its effects on human psychology is presented in Fig 2



Fig. 2. Relationship Between Environmental Design Variables and Psychological Outcomes
(Source: Author)

6.2 Perception of Safety and Control

A sense of safety is one of the fundamental requisites of psychological well-being (Antonovsky, 1979). The spatial organization, circulation routes, and layout can contribute to reducing uncertainty and anxiety (Passini, 1992). The gradations of privacy, progressing from public space to semi-private space to private space, allow individuals to choose levels of interaction, promoting autonomy and dignity (Shepley & Pasha, 2017). Environments without gradations of privacy can evoke a sense of vulnerability or exposure (Evans, 2003).

6.3 Social Connection and Isolation

Spatial arrangement is also seen to play a role in interaction. The availability of a courtyard, shared semi-open spaces, and community nodes facilitates social interaction in a non-obtrusive manner (Gehl, 2011). Spaces that are overly congested or overly fragmented could even exacerbate loneliness (Evans, 2003). Where urbanisation as well as the nuclear family is seen to contribute to loneliness (Patel et al., 2018), social connection in a spatial manner is seen to be relevant.

6.4 Restoration and Cognitive Recovery

According to the Attention Restoration Theory, natural environments have the capacity for cognitive resource restoration (Kaplan & Kaplan, 1989). To residents living in the midst of the city who are constantly exposed to an overwhelming amount of information and sensory input, the restorative features of the architecture such as the presence of plants, water, open spaces, and depth can provide the necessary counterbalance (Ulrich, 1984; Bratman et al., 2015).

6.5 Architectural Impact on Mental Well-being

Although various spatial factors contribute to psychological states, they do not have an equivalent effect (Ulrich et al., 2008). This study hypothesizes that architectural features can be grouped based on the scale and intensity of their contribution to mental health outcomes. At the first level, macro-spatial factors include planning of the site, availability of nature, spatial density, and environmental character (Kaplan & Kaplan, 1989; Bratman et al., 2015). These elements offer a base for basic mental health conditions of security, openness, and feelings of belonging. At the second level, circulation, gradients of enclosure, thresholding, and sequencing of space are included. This level is based on the work of Passini (1992) and Shepley & Pasha (2017). This level is associated with autonomy, wayfinding, and feelings of control. At the third level, materials, colours, texture, and lighting play important roles in influencing moods at the micro-level. This level is based on the work of Sternberg (2009) and Eberhard (2009). This hierarchy of design elements enables designers to design spaces that offer the highest potential within budgetary, climatic, and contextual constraints. Instead of viewing healing spaces as mere aesthetics, this framework presents environmental stress reduction as an essential design parameter from the very beginning.

7 Case Studies and Analysis

In order to assess the effectiveness of the strategies in the design of emotional stability in different socio-cultural backgrounds, this study will look at the following case studies: the Art of Living Foundation in India, Pyramid Valley International in India, Orygen Youth Health in Australia, and various branches of Maggie's Centres in the United Kingdom. Although they have different socio-cultural backgrounds ranging

from spiritual retreats to youth mental health services, they show a similarity in the strategies they employ.

7.1 Biophilia and Landscape Integration

One of the most consistent design decisions across all case studies is the incorporation of landscape as an essential therapeutic component. The design at the Art of Living campus in Bengaluru includes large open grounds and water bodies that provide a spatial condition characterized by openness and immersion in the natural environment. The large-scale placement of the design away from the urban built environment minimizes acoustic and visual overloads (Evans, 2003). This is essentially creating a condition of calmness even before the therapeutic intervention begins. At Pyramid Valley International, the meditation pyramid is located in a landscape-dominant condition with natural terrain and long-distance views. The spatial separation from urban over-concentration is known to heighten contemplative focus and minimize stress stimuli from the external environment (Kaplan & Kaplan, 1989). The act of walking into the structure from the open landscape is itself a psychological transition from external chaos to inner calm. Conversely, Maggie's Centres, usually built near hospitals, incorporate smaller yet thoughtfully designed gardens in small urban plots. Studies of Maggie's Centres show that small-scale gardens and visible nature scenes reduce anxiety levels and facilitate social interactions among individuals (Jencks, 2015 & Ulrich et al., 2008). Although space is limited, access to nature visually remains a key aspect. Biophilic design, irrespective of scale or location, is a high-impact factor in determining mental perception. Whether it is a large landscape or a small-scale garden, access to nature is seen to play a role in emotional regulation and anxiety reduction (Ulrich, 1984 & Bratman et al., 2015).

7.2 Domestic Scale and De-Institutionalisation

The second strategy that is commonly employed is the avoidance of institutional aesthetic qualities. For example, the Maggie Centre facilities have been designed specifically to avoid the aesthetic qualities of traditional medical environments. For instance, the kitchens have been designed as the focal point of the space, and the materials have been chosen for their warmth and tactile qualities. This design strategy makes the environment less intimidating and allows the user to engage earlier with the facilities and services (Jencks, 2015). Another example of this is the Orygen Youth Health facilities in Australia. For example, the transparent cladding, controlled but vibrant material palettes, and informal seating arrangements help to avoid the stigma associated with psychiatric facilities (Shepley & Pasha, 2017). This design strategy prioritizes the autonomy and comfort of the user because they will already be in a highly vulnerable state. Healthcare design has demonstrated that environments that avoid institutional aesthetic qualities help the user feel less anxious and have a greater sense of dignity (Ulrich et al., 2008). When the environment does not have aesthetic qualities that signal "illness" and "confinement," the user will feel a greater sense of safety and belonging.

7.3 Thresholds and Psychological Transition

Spatial sequencing is also important in preparing the user emotionally. For instance, at Pyramid Valley, there is a spatial rhythm of compression and release in progressing towards the meditation hall. This is in line with environmental legibility and psychological orientation (Passini, 1992). Some of the Maggie's Centres use a series of entry spaces, including a public area, a semi-private garden, a lounge area, and finally private rooms. The use of graded entry spaces reduces shock in environmental change, hence supporting salutogenic design elements of manageability and coherence (Antonovsky, 1979; Dilani, 2006). The use of verandas, walkways, and semi-open spaces at The Art of Living campus mediates space between interior and exterior. Transitional spaces act as shock absorbers, hence helping in emotional recalibration (Evans, 2003).

7.4 Light as Psychological Regulator

Natural light is an essential consideration in each of the four case studies. Maggie's Centres often include skylights, clerestory windows, and glazed garden facades that provide diffused natural light for therapy rooms. Diffused natural light is essential for visual comfort and circadian rhythm regulation (Boyce, 2014). The Orygen buildings provide extensive glazed facades, carefully controlling acoustic and thermal performance. Research proves that exposure to natural light positively impacts mood and minimizes depression symptoms (Ulrich et al., 2008 & Boyce, 2014). The Pyramid Valley meditation pyramid benefits from its large size, providing an enhanced light environment. The combination of size and light maximizes the symbolic and parasympathetic effects associated with calmness (Sternberg, 2009). In each of the case studies, light is not simply an aesthetic or functional tool but an essential component for regulating the human mind.

7.5 Community Integration and Stigma Reduction

The cultural approach to mental health services differs substantially among India, Australia, and the UK. Yet, what can be noted among the four cases is the attempt to normalize mental health engagement by spatial openness. The Maggie's Centres can be entered freely without an appointment, emphasizing the aspect of inclusiveness (Jencks, 2015). The openness of the Orygen Centres, where spaces for youth activities and counselling rooms are combined, also promotes this aspect. The spatial approach of the Art of Living campus and Pyramid Valley, where environmental stress reduction is part of a larger spatial setting of spirituality and communal engagement, also promotes a similar approach. The attempt to normalize mental health engagement by spatial openness can be noted among the four cases. Although the cultural narratives differ among the three countries—spirituality in India, youth mental health in Australia, and cancer-related mental health in the UK—the spatial approaches to mental health engagement share a common feature: openness, accessibility, non-hierarchical organization, and integration with daily life.

7.6 Comparative Analysis

When viewed from the proposed framework, the case studies have shown that there is an emphasis on the macro-level determinants such as biophilia, natural light, and spatial openness over other determinants such as aesthetic considerations. The micro-level determinants such as the palette of colours and materials are supportive but not determinative. This further supports the idea that the primary level of psychological impact is from the foundational level of environmental determinants and not from the level of aesthetic determinants. The level of consistency in the mechanisms of spatial support for mental health across different cultures and nations in the discourse surrounding mental health is remarkable. The level of consistency across different case studies from around the world further supports the idea that architecture could play an important role in the prevention of mental health issues if there is prioritization in the design of the built environment. The recurrence of these strategies across culturally distinct contexts suggests that certain spatial mechanisms supporting psychological well-being may possess broader applicability beyond specific institutional settings. The patterns identified in Table 1 inform the discussion and practice-oriented implications presented in the following section.

Table 1. Comparative Analysis of Spatial Strategies Across Selected Case Studies

Case Study	Macro Strategy	Meso Strategy	Micro Strategy	Key Lesson for Future Design
Art of Living Pyramid Valley	Open landscape	Spiritual pathways	Natural materials	Landscape as therapy
	Large-scale terrain	Processional entry	Simple interiors	Geometry & openness
Orygen Youth	Urban integration	Youth-friendly circulation	Domestic scale	De-institutionalization
Maggie's Centers	Garden integration	Home-like planning	Warm materials	Emotional safety through familiarity

8 Discussion

The comparative analysis of the selected case studies indicates a substantial degree of similarity in spatial strategies despite the cultural, geographical, and institutional variations. Be it in the spiritual retreat of India, the youth mental health environment of Australia, or the cancer-support environment of the United Kingdom, the architectural responses share a similar focus on the calmness of the environment, spatial clarity, and the human scale. Such cross-contextual similarity of the architectural responses indicates that despite the socially constructed variations in the concept of mental health, the mechanisms of the environment are similar.

8.1 Key Findings

8.1.1 Macro-Environmental Determinants Have the Strongest Psychological Influence

Across all the case studies, it was evident that large-scale environmental decisions, such as landscape integration and natural light access, were a foundational component in the determination of the user experience. The projects focused on direct ecological adjacency through courtyards, open paths of circulation, and the use of framed views to the outdoors. This supports the hierarchical model that was suggested previously, reinforcing the notion that the psychological impact of biophilia integration and natural light access is greater than the overall aesthetic impact. In urban environments with spatial constraints, access to gardens was considered a given.

8.1.2 De-Institutionalisation Reduces Psychological Barriers

All of these precedents intentionally avoided hospitalistic spatial terminology. Instead, materials used in domestic settings, open kitchens, informal seating arrangements, and open façades were preferred over strict corridors and clinical finishes. The impact of this spatial design is tremendous in altering the way in which users perceive these environments. The study suggests that environments that promote mental health must be perceived as familiar and welcoming, as opposed to being perceived as surveilled or controlling. Spaces that reflect comfort in domestic settings encourage voluntary participation and early engagement with support systems. The lack of clinical symbolism eliminates many of the psychological impediments to mental health engagement.

8.1.3 Transitional Spaces Enhance Emotional Readiness

Layered thresholds such as verandas, gardens, semi-private lounges, and shaded walkways consistently mediated access into therapeutic spaces. These transition gradients allow users to adjust their emotional state before entering more private or intimate spaces. Sudden transition from public to private spaces was not encountered. Again, this supports the idea that spatial sequencing is used as a regulatory technique. The use of transition architecture is highly coherent and manages complexity well and is consistent with salutogenic theory. The transition spaces are not merely used as circulation spaces but as psychological preparation spaces.

8.1.4 Sensory Regulation Is Critical in Urban Conditions

Acoustic buffers, diffused daylight, tactile materials, and specific colour schemes are some aspects that have been observed in all projects. Especially in projects located in urban adjacent sites, there was an emphasis on mitigating external noise and visual congestion. These design strategies have more significance as physiological balancers than as stylistic choices. The role of architecture is best understood as an

uninterrupted sensory field that influences our perceptions at both conscious and subconscious levels. When sensory inputs are not overwhelming, the space enables parasymphathetic activation and minimizes cumulative stress.

8.1.5 Cultural Narratives Differ, Spatial Mechanisms Converge

Whereas the Indian cases focus on the spiritual dimension of psychological comfort in terms of communal participation, the Australian and UK cases focus on the clinical/public health dimension, the strategies still follow the same set of principles of openness, accessibility of nature, autonomy, legibility, and non-hierarchical organization. This indicates that although cultural narratives about mental health vary, the physical environment that promotes psychological safety is consistent across cultures. It is suggested that the built environment affects emotional well-being through universal human perception rather than cultural symbolism.

8.2 Implications for Indian Urban Contexts

The results suggest that architectural interventions in mental health in India must move beyond crisis-oriented clinical spaces to include preventive spaces that are embedded in the fabric of daily life. As the majority of mental health issues in India result from prolonged disability rather than early death, spaces that help in the regulation of daily life might help reduce overall mental health stress. Spaces in dense metropolitan environments might work as an ecological regulator rather than an ornament. Wellness spaces that are integrated into the community, inclusive in terms of cultural sensitivity, and free of institutional connotations might help in redefining mental health spaces as part of the larger community rather than as isolated spaces. The success of spaces in international contexts suggests that spaces that help in mental health do not need to include excesses of technology or style. Instead, it might require the strategic prioritization of basic elements in the environment that match our perceptual and emotional capabilities.

8.3 Validation of the Hierarchical Framework

The recurring theme of landscape, daylight, and openness in space within all case studies offers a practical corroboration of the proposed hierarchical model of architectural influence. Macro determinants of high weighting within the model have consistently functioned as the primary design drivers, while micro-level considerations of colour schemes, details, and material choices have acted as supportive considerations but not defining features. Such congruity between the theoretical model and the results of the comparative analysis serves to corroborate the assertion that mental wellbeing in architecture is embedded at a structural level. Psychological comfort seems to be derived from basic environmental conditions and not from aesthetic considerations. Apart from providing justification for prioritisation, the comparative analysis suggests the existence of a temporal dimension of the effect of architecture. The chosen case studies have been providing environments that are

not episodic in nature for the process of healing. Instead, they provide environments that continuously exist and affect the emotional states of occupants in a subtle way. This is particularly significant in the context of the Indian scenario, where mental health issues tend to be chronic in nature and stress-related. In such environments, architecture is not providing a singular intervention in the process of healing but providing a daily environmental moderator. Moreover, the presence of landscape, day-lighting, and legible space sequencing in the various case studies suggests that psychological restoration is derived from the experience of supportive environmental conditions. Hence, the intervention of architecture in the process of mental health and well-being has to be considered in a cumulative and preventive way.

9 Implications for Practice

The results of the current study imply that mental well-being should be considered a primary design parameter instead of a secondary design parameter. For the field of architecture, this entails a move from considering mental health facilities solely from a clinical perspective to a preventive perspective.

9.1 Prioritizing High-Impact Environmental Strategies

The structured impact model that was developed in the research indicates that the most psychological benefits will arise from large-scale environmental factors such as biophilic integration, daylight optimisation, and spatial openness. It is the responsibility of the architect to design site planning strategies that will allow for the maximisation of vegetation, shaded open spaces, and visual access to greenery. The integration of landscaped courtyards, tree-lined walkways, and transitional open spaces will assist in the mitigation of sensory overload in densely populated urban areas. Strategies that will allow for the maximisation of natural lighting penetration must also be integrated from the early stages. Accurate building orientation will assist in the regulation of natural lighting, thus reducing the need for artificial lighting. In addition, the integration of landscape buffers such as green edges, berms, and setbacks will assist in the mitigation of urban noise and pollution, thus providing a sense of environmental relief. This does not imply the need for technology but rather strategic spatial planning decisions that must be made from the conceptual stage.

9.2 Designing for De-Institutionalisation

Mental health facilities in India often follow spatial typologies based on hospitals that may create more stigmatising and apprehensive environments for the patients. However, the case studies that have been analysed in this research indicate that the use of the scale of homes, the application of tactile materials, and the incorporation of spaces for informal gatherings can greatly help in reducing the level of psychological inhibitions for the patients. Thus, the design practice for mental health facilities should shift from the use of linear corridors and instead focus more on the application of clustered or courtyard-based spatial typologies. Shared spaces like kitchens,

lounges, shaded verandas, or spaces for general gatherings can be used as spatial anchors for creating more incidental interactions without any inhibitions. The application of tactile materials can further enhance the level of familiarity and cultural appropriateness of the spaces, which may help in reducing the perception of institutional remoteness.

9.3 Embedding Transitional and Layered Privacy Gradients

There was an overall positive correlation between gradual transitions from public to private spaces in terms of space planning. Sudden transitions from public spaces to private spaces of consultation can create feelings of vulnerability. It is therefore important to include transitional spaces like verandas, semi-open courts, shaded spaces, and waiting areas that help in recalibrating the mind before entering therapy spaces. Layered privacy is achieved by using acoustic screening, visual screening, and partitioning. This not only gives people autonomy but also creates feelings of safety. This is in line with salutogenic principles. It is also relevant in terms of cultural sensitivity in relation to mental health issues in India.

9.4 Integrating Mental Health into Everyday Urban Typologies

A major implication of the present research is that architectural principles of restoration do not have to be limited to special facilities. Rather, preventive forms of mental health interventions can be integrated into schools, workspaces, community spaces, and housing environments through effective modulation of the built environment. For example, shaded pathways and accessible green spaces can be effective in creating opportunities for decompression in educational and work environments. Sensory-balanced spaces that are defined by specific colour schemes, diffuse lighting, acoustic controls, and ventilation can help in mitigating cognitive overload in high-stress environments. Effective navigation and circulation can help in reducing stress levels by eliminating confusion and cognitive overload.

9.5 Cultural Responsiveness and Community Integration

In the Indian context, the concept of mental health stigma is an essential factor that affects the treatment-seeking behaviour of individuals. Architectural permeability can play an important role in the normalization of engagement by reducing the perception of exclusiveness. The design of gardens, multi-purpose spaces, workshops, and public-facing cafes can play an important role in developing an image of wellness spaces that are not exclusive but rather inclusive. The use of regional materials, cultural traditions, shaded spaces, and climate-responsive design can play an important role in developing an image of cultural resonance and a sense of ownership. Spaces that exhibit cultural familiarity in terms of spatial language can play an important role in developing an image that is welcoming rather than alien. This is a culturally responsive approach that takes into account the fact that mental health is not just the outcome of environmental psychology but is also socially constructed.

9.6 Policy and Interdisciplinary Collaboration

Moreover, the integration of mental well-being into the practice of architecture must also involve the systemic integration of policies and regulations. At present, the regulations and policies for buildings and developments in India are mainly focused on the structural safety of buildings, fire safety, and environmental sustainability. The incorporation of measurable well-being indicators such as the minimum ratio of daylight penetration, availability of shaded open spaces, acoustic requirements, and spatial legibility could provide the scope for the integration of mental well-being into the policies and regulations that govern the construction of buildings. Moreover, the integration of the findings of environmental psychology into the practice of architecture must involve the collaborative effort of architects, urban planners, public health experts, and behavioral scientists. The incorporation of preventive mental health infrastructure must not be restricted to the construction of hospitals but must also involve the development of educational institutions, housing schemes, transit-oriented developments, and community centers. The integration of mental well-being into the practice of urban planning policy rather than specialized practice could provide the scope for the proactive role of architecture in reducing the stress burden on society.

9.7 Limitations and Future Directions

However, it is important to note that, despite the fact that this study aims to integrate interdisciplinary research and comparative case studies to create an environmental framework, there are certain limitations that need to be considered. First of all, it is important to note that, despite the fact that the qualitative research methodology is used in this study, it is based on secondary research materials. Although it is important to note that the case studies that were chosen for this research provided valuable insights into certain strategies that could be effective in terms of mental well-being, it is also important to note that there is no primary post-occupancy evaluation in these contexts. Therefore, it is based on secondary evidence and interpretation. Secondly, it must be recognized that, even though there is a certain degree of cross-cultural similarity in healing environments in Australia, India, and the United Kingdom, there is also a possibility that certain aspects of healing environments, such as those of privacy, community interaction, and spiritual interaction, may vary significantly across different socio-economic groups in India. The framework that is presented in this study is therefore intended as a structure, albeit one that is subject to adaptation in different contexts. Third, the impact of architecture on mental health is part of an ecosystem with other biological, psychological, and socio-economic determinants. The built environment is not expected to provide definitive solutions to problems such as stigma, policy, workforce, and financial issues. The area could be further developed with quantitative research into the measurement of environmental and psychological aspects in Indian urban spaces. Post-occupancy evaluation studies measuring stress indicators, behavioural responses, and satisfaction levels in various built spaces such as educational institutions, work spaces, and wellness centres could provide quantitative validation of the impact of architecture on mental health. Integration with

sensors measuring daylight levels, sound levels, and air quality could provide further validation with stress markers. Furthermore, the extension of research into the small towns and rural areas will provide a more varied understanding that is not limited to the urban experience. In fact, a large percentage of the Indian population lives outside the urban areas, where the traditional climate-resilient vernacular architecture already includes shaded courtyards, thick walls, and transition zones. The exploration of the traditional spatial systems' congruence with the modern neuroarchitectural understanding could provide a cultural basis for the design of preventive mental health care. Thus, the resolution of these issues and the extension of the research will enable the progression of the role of architecture from the intuitive enabler to the evidence-based contributor to mental health care. The establishment of quantified environmental guidelines that are relevant to the Indian urban experience will solidify the position of spatial design as a preventive measure rather than a decorative feature.

10 Conclusion

The aim of this research has been to explore the potential of the principles of healing architecture, salutogenesis, and neuroarchitecture research in the practice of architecture in the Indian context. The results of the research have shown that spatial environments have a significant impact on emotional well-being, cognitive clarity, and safety perceptions. Architectural spaces are not just environments for the execution of actions; they are continuous fields of sensory experience that impact the behaviour and psychology of the inhabitants. The integration of the literature and case studies has shown that the determinants of the environment are not all equally effective in producing impact. Large-scale spatial decisions in the integration of the landscape, the presence of natural light, and the openness of the spatial planning create the fundamental emotional conditions. Secondary spatial strategies in the creation of transitional thresholds, the clarity of movement, and the presence of privacy create the conditions of autonomy and manageability. In the urbanising cities of rapidly changing India, in which mental distress is frequently protracted and poorly managed, architecture offers an opportunity for preventive engagement. The creation of restorative spatial conditions in schools, workplaces, community facilities, and residential environments offers opportunities for mental well-being to be integrated into daily life, as opposed to being contained in institutional settings. The apparent convergence of findings in these culturally distinct case studies offers evidence of a degree of cross-contextual consistency in environmental mechanisms of psychological balance, in spite of differences in narrative. Architecture is not a replacement for treatment or social change. Nevertheless, it has the potential to diminish environmental stressors, boost feelings of dignity, and foster emotional resilience through well-designed space. This research not only builds on existing knowledge by synthesising existing literature but also proposes a hierarchical structure that organises various architectural elements in relation to their relative psychological significance. This distinction between macro-environmental factors, spatial organisational techniques, and micro-environmental sensory aspects provides an instrumental tool by which designers can apply knowledge to create the greatest mental health benefit. This structured application of knowledge is an important addition to the ongoing

discourse on healing architecture by providing an interdisciplinary understanding in an instrumental form. Mental well-being as a design parameter is not an afterthought but an integral component of the design process. As such, preventive mental health architecture is not simply a style but an expansion of the overall responsibility of architecture.

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