



# Natural Light in Interior Architecture: Enhancing Mental Health

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## Abstract

This study aims to explore the influence of natural light in interior architecture on mental health, highlighting architectural strategies that optimize daylight exposure to enhance psychological well-being. A scientific narrative review method was employed, analyzing scholarly articles published between 2015 and 2025 from databases such as Scopus, Web of Science, and ScienceDirect. The selection criteria focused on studies related to natural light in architectural design and its psychological effects, using thematic analysis to synthesize key findings on the relationship between daylight exposure and mental health. The review reveals that natural light significantly enhances mood, reduces stress, and improves cognitive performance by regulating circadian rhythms and promoting visual comfort. Architectural strategies such as large windows, skylights, atriums, and reflective surfaces are effective in maximizing daylight exposure. The findings highlight that natural light contributes to mental well-being in various settings, including workplaces, educational institutions, healthcare facilities, and residential spaces, underscoring its importance in human-centric architectural design. Integrating natural light into architectural design is essential for creating environments that support mental health. Thoughtful spatial design that prioritizes daylight exposure enhances well-being, cognitive function, and emotional resilience, making it a critical consideration in contemporary architecture.

**Keywords:** *natural light, interior architecture, mental health, architectural design, daylighting strategies, psychological well-being.*

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## 1. Introduction

Natural light has long been a fundamental element in architectural design, offering not only aesthetic value but also functional benefits that extend beyond illumination. In contemporary architecture, the integration of natural light within interior spaces is increasingly recognized for its profound impact on human well-being, particularly mental health. As modern societies grapple with escalating rates of mental health disorders, ranging from anxiety and depression to stress and emotional fatigue, the architectural community has turned its attention to environmental factors that can mitigate these issues. Natural light, with its inherent ability to influence mood, circadian rhythms, and overall psychological state, stands out as a critical component in creating therapeutic and supportive built environments [1]. The symbiotic relationship between natural light and mental health is underscored by research highlighting how well-lit spaces can enhance mood, reduce stress, and improve cognitive function [2].

Historically, architecture has always embraced natural light, from the grand windows of Gothic cathedrals to the intricate light wells in Islamic architecture [3]. Traditional architectural practices often prioritized natural lighting not only for its visual appeal but also for its ability to create spaces that evoke tranquility, spirituality, and comfort [4]. In contemporary contexts, however, rapid urbanization and technological advancements have led to an increased reliance on artificial lighting, often at the expense of natural illumination. This shift has raised concerns about the psychological impact of insufficient exposure to natural light, particularly in urban settings where high-rise buildings and dense construction often limit access to daylight [5]. The challenge for modern architects, therefore, is to balance the demands of urban development with the need to create interior spaces that harness natural light effectively to support mental health and well-being [6].

The significance of natural light in interior architecture lies not only in its ability to enhance visual comfort but also in its potential to foster mental and emotional well-being [7]. Exposure to natural light has been linked to improved mood, reduced symptoms of depression, and enhanced cognitive performance [8]. This is largely attributed to the regulation of the body's circadian rhythm, which governs sleep-wake cycles and other physiological processes [9]. Disruptions to this rhythm, often caused by insufficient exposure to natural light, can lead to sleep disorders, mood disturbances, and cognitive impairments [10]. Architectural designs that

maximize natural light exposure can mitigate these effects, offering occupants a more balanced and health-supportive environment [11]. The importance of this cannot be overstated, especially in spaces such as workplaces, educational institutions, and healthcare facilities, where the mental well-being of occupants directly impacts productivity, learning outcomes, and recovery rates [12].

The problem at hand is that many contemporary architectural designs, particularly in densely populated urban areas, often overlook the psychological benefits of natural light [13]. High-density construction, limited open spaces, and the extensive use of artificial lighting systems contribute to environments that can be detrimental to mental health [14]. Studies have shown that prolonged exposure to artificial lighting and minimal access to natural light can lead to increased stress levels, mood disorders, and decreased overall well-being [15]. This issue is compounded in regions with harsh climatic conditions where architectural designs often prioritize energy efficiency and thermal comfort over natural illumination [16]. Consequently, there is a pressing need for architectural strategies that integrate natural light while addressing the challenges posed by modern construction practices [17].

The objective of this narrative review is to analyze and synthesize existing literature on the relationship between natural light in interior architecture and mental health outcomes. By examining various architectural strategies, design principles, and case studies, this review seeks to highlight the psychological benefits of natural light and propose evidence-based recommendations for integrating natural illumination into interior spaces. The review also aims to identify gaps in current research, offering insights into future directions for studies that explore the intersection of architecture and mental health.

In conclusion, natural light plays a pivotal role in shaping interior environments that support mental health and well-being. Its integration into architectural design not only enhances aesthetic and functional qualities but also fosters psychological resilience among occupants. As the architectural community continues to explore innovative design solutions, the emphasis on natural light as a therapeutic element is becoming increasingly evident. This review aims to provide a comprehensive understanding of how natural light can be utilized in interior architecture to promote mental health, offering valuable insights for architects, designers, and mental health professionals alike.

## 2. Methodology

In this scientific narrative review, a descriptive analysis method was employed to examine the influence of natural light in interior architecture on mental health. The research design focused on reviewing scholarly articles, books, and reputable reports published between 2015 and 2025. The scope of the study encompassed various aspects of natural light, including its psychological, physiological, and architectural implications. This review aimed to synthesize existing knowledge on how natural light contributes to mental well-being, particularly in built environments such as residential, educational, healthcare, and workplace settings. The rationale for using a descriptive analysis method lies in its ability to provide a comprehensive overview of existing literature, allowing for the identification of trends, gaps, and future research directions within the intersection of architecture and mental health.

The data collection process involved systematically searching academic databases such as Scopus, Web of Science, ScienceDirect, and Google Scholar. Search terms included "natural light," "daylighting," "interior architecture," "mental health," "well-being," and "built environment." Inclusion criteria were set to include peer-reviewed journal articles, conference proceedings, and authoritative reports published between 2015 and 2025, focusing on the role of natural light in interior spaces and its psychological effects. Studies unrelated to architecture or mental health were excluded. A rigorous selection process ensured that only high-quality, relevant literature was included, with particular attention given to studies employing empirical research, case studies, and theoretical analyses that explored the relationship between natural light and mental well-being.

Data analysis was conducted using a thematic approach, where key themes such as the psychological benefits of natural light, architectural strategies for maximizing daylight, and the impact of light on mental health were identified and analyzed. The thematic analysis enabled a structured synthesis of diverse sources, highlighting common findings and contrasting perspectives. The descriptive analysis method facilitated an in-depth understanding of the complex interplay between architectural design and mental health outcomes, providing a foundation for evidence-based architectural practices that prioritize mental well-being through natural lighting solutions.

### 3. Theoretical Framework

The theoretical framework for exploring the relationship between natural light, architectural design, and mental health draws upon both psychological theories and architectural principles that emphasize the human experience within built environments. From a psychological perspective, the biophilia hypothesis posits that humans have an innate affinity for nature and natural elements, including light, which contributes to mental well-being. Natural light serves as a critical component of biophilic design, fostering a connection between interior spaces and the natural world. This connection has been shown to reduce stress, enhance mood, and improve cognitive performance, making it a vital consideration in architectural design. Theories of environmental psychology further highlight the impact of environmental stimuli, such as light, on human behavior and mental health. Natural light influences circadian rhythms, which regulate sleep-wake cycles, hormonal balance, and overall psychological state. Disruptions to these rhythms, often caused by insufficient exposure to natural light, can lead to mood disorders, cognitive impairments, and decreased well-being, emphasizing the need for architectural designs that prioritize natural illumination [9]. Additionally, the theory of affordances suggests that architectural spaces provide certain affordances, or opportunities for interaction, that influence human experience. Natural light enhances spatial perception, creates dynamic environments, and offers sensory stimulation that contributes to mental health. Architectural theories such as phenomenology, which focuses on the lived experience of space, also underscore the significance of light in shaping human experiences. The play of light and shadow, the variation of daylight throughout the day, and the interplay between interior and exterior environments create a sensory-rich experience that can evoke emotional responses, foster well-being, and promote mental clarity [4]. The integration of natural light in architectural design aligns with the principles of salutogenic design, which aims to create environments that promote health and well-being rather than merely preventing illness. By incorporating natural light, architects can design spaces that support mental health, enhance comfort, and provide therapeutic benefits. This is particularly relevant in spaces such as hospitals, schools, and workplaces, where mental well-being significantly impacts outcomes such as recovery rates, learning, and productivity. Theoretical models such as the stress recovery theory and attention restoration theory further support the psychological benefits of natural light. Stress recovery theory posits that exposure to natural environments, including natural light, facilitates recovery

from stress, while attention restoration theory suggests that natural elements help restore cognitive resources depleted by sustained attention. Architectural designs that incorporate ample natural light can thus serve as restorative environments that alleviate stress, enhance focus, and promote mental resilience [1]. The interaction between architectural design and psychological well-being is also explored in the concept of spatial quality, which encompasses factors such as lighting, ventilation, acoustics, and aesthetics. Natural light is a key determinant of spatial quality, influencing visual comfort, spatial perception, and overall user experience. Architectural principles such as daylighting design, which focuses on maximizing natural light while minimizing glare and heat gain, play a crucial role in enhancing spatial quality and supporting mental health. Techniques such as light wells, skylights, clerestory windows, and atriums are employed to introduce natural light into interior spaces, creating visually stimulating environments that promote well-being [5]. The integration of natural light is also central to sustainable architecture, where energy efficiency and environmental sustainability are prioritized. Passive design strategies that optimize natural light reduce reliance on artificial lighting, lower energy consumption, and create healthier indoor environments. Sustainable architecture theories emphasize the importance of human-centered design, where the well-being of occupants is a primary consideration. Natural light not only enhances visual and thermal comfort but also contributes to indoor air quality, energy efficiency, and environmental sustainability, all of which have indirect benefits for mental health [14]. The theoretical framework for this review thus draws upon psychological theories that highlight the mental health benefits of natural light, architectural principles that emphasize the integration of natural light in design, and sustainability theories that promote human-centered, environmentally responsible architecture. This interdisciplinary approach provides a comprehensive understanding of the role of natural light in interior architecture and its impact on mental health, guiding the analysis of existing literature and informing recommendations for future architectural practices [15].

Architectural theories related to light emphasize its role as both a functional and aesthetic element in design. The concept of lightspace, which refers to the interplay of light and architecture, highlights the importance of natural light in defining spatial quality, enhancing visual comfort, and creating dynamic environments. Natural light shapes the perception of space, influences human behavior, and

contributes to the overall aesthetic experience. In contemporary architecture, the use of natural light is often associated with minimalist design, where simplicity, openness, and transparency are prioritized. Architects such as Tadao Ando, known for his mastery of light and shadow, demonstrate how natural light can transform spaces, evoke emotions, and enhance well-being. The design of Ando's Church Trilogy, for instance, exemplifies the use of natural light to create contemplative, serene environments that foster mental clarity and emotional well-being [18]. The principles of Islamic architecture, which emphasize the use of natural light through elements such as mashrabiya, courtyards, and light wells, also offer valuable insights into the integration of light in design. Traditional Islamic architecture prioritizes natural illumination not only for functional purposes but also for its symbolic and spiritual significance, creating spaces that evoke tranquility and contemplation [3]. Contemporary architectural practices continue to draw inspiration from these principles, incorporating natural light in innovative ways to enhance spatial quality and promote well-being. The concept of bioclimatic architecture, which emphasizes the adaptation of buildings to local climatic conditions, underscores the importance of natural light in creating comfortable and health-supportive environments. Bioclimatic design strategies such as orientation, shading, and daylight harvesting optimize natural light, reduce energy consumption, and enhance indoor environmental quality, contributing to mental and physical well-being [16]. The integration of natural light is also central to the WELL Building Standard, which provides guidelines for designing healthy buildings. The WELL Standard emphasizes access to natural light, views of nature, and circadian lighting design as critical factors in promoting mental health, productivity, and overall well-being. Architectural designs that adhere to the WELL Standard incorporate features such as large windows, skylights, and light shelves to maximize natural light and create visually stimulating environments [6]. The psychological benefits of natural light are further supported by empirical studies that demonstrate its impact on mood, cognitive function, and stress reduction. Research on office environments, for instance, has shown that employees in naturally lit spaces report higher levels of well-being, job satisfaction, and productivity compared to those in artificially lit environments [2]. Similarly, studies on educational settings have found that natural light enhances learning outcomes, reduces stress, and improves attention span among students [19]. In healthcare settings, natural light has been associated with faster recovery rates, reduced

pain perception, and improved mood among patients [10]. The design of healthcare facilities, therefore, increasingly incorporates natural light to create healing environments that support mental and physical well-being. The use of natural light in sacred architecture also highlights its psychological significance. Light is often used as a symbol of divinity, purity, and transcendence, creating spaces that evoke spiritual and emotional responses. The design of churches, mosques, and temples often incorporates natural light to enhance the sense of sacredness, tranquility, and contemplation [1]. In residential architecture, natural light contributes to the creation of comfortable, inviting spaces that promote relaxation, social interaction, and well-being. The use of large windows, open floor plans, and light-colored materials enhances natural illumination, creating bright and airy interiors that foster mental health [20]. The theoretical framework for this review thus integrates architectural theories that emphasize the functional, aesthetic, and psychological significance of natural light, providing a foundation for analyzing its impact on mental health and informing design practices that prioritize human well-being [13].

#### 4. Literature Review

The impact of natural light on architectural spaces and mental well-being has been extensively explored in various fields, including architecture, psychology, and environmental sciences. Research has consistently demonstrated that exposure to natural light in indoor environments enhances psychological well-being by regulating circadian rhythms, reducing stress, and improving cognitive performance. The regulation of circadian rhythms is one of the most significant benefits of natural light, as it plays a crucial role in maintaining a balanced sleep-wake cycle, which directly affects mood and mental health. Disruptions to this cycle, often caused by insufficient exposure to daylight, have been linked to sleep disorders, depression, and cognitive impairments. Architectural spaces that prioritize access to daylight through strategic window placement, skylights, and reflective surfaces can help maintain circadian health, thereby promoting mental resilience and emotional stability. Empirical studies have shown that individuals in environments with ample natural light experience lower stress levels and improved mood compared to those in artificially lit spaces. This underscores the importance of incorporating daylighting strategies into architectural design to create environments that foster

psychological well-being [2]. Research in workplace settings has further demonstrated that employees working in offices with significant natural light exposure report higher job satisfaction, reduced stress, and increased productivity. A well-lit environment not only enhances focus and concentration but also contributes to a sense of comfort and well-being, making natural light a critical component in workplace design. Similarly, in educational settings, access to natural light has been associated with better academic performance, improved attention spans, and reduced stress among students, highlighting its role in cognitive and emotional development [19].

The role of natural light in healthcare environments has also been widely studied, with findings indicating that hospital patients exposed to daylight experience faster recovery rates, reduced pain perception, and lower stress levels. Daylit hospital rooms have been linked to decreased reliance on pain medication and shorter hospital stays, demonstrating the therapeutic effects of natural light in healing environments. The presence of daylight in healthcare settings creates a more soothing and less clinical atmosphere, which can positively impact patient outcomes and overall satisfaction with the care environment. Additionally, natural light plays a crucial role in reducing the effects of seasonal affective disorder (SAD), a condition characterized by depression-like symptoms during periods of low sunlight exposure. Architectural interventions such as larger windows, light wells, and daylight-responsive design strategies have been suggested as effective solutions for mitigating the psychological impact of seasonal changes, particularly in regions with long winters and limited sunlight [10]. Beyond healthcare and educational settings, the influence of natural light on residential architecture has also been explored. Studies indicate that homes with ample natural light create a more inviting and emotionally supportive environment, fostering social interaction, relaxation, and overall well-being. Residential designs that integrate open floor plans, large windows, and light-colored interior surfaces enhance daylight penetration, creating a bright and airy atmosphere that promotes mental health. The use of natural light in sacred architecture has also been examined, revealing that light plays a symbolic and psychological role in spiritual spaces. The interplay of light and shadow in places of worship contributes to a sense of tranquility, contemplation, and spiritual connection, reinforcing the notion that architectural lighting has profound psychological and emotional implications [1].



Despite the extensive body of research on the benefits of natural light in architectural spaces, certain gaps remain in the literature, particularly regarding the long-term effects of daylight exposure on mental health. While numerous studies have established the immediate psychological benefits of natural light, there is a lack of longitudinal research examining how sustained exposure to daylight influences mental health outcomes over extended periods. Additionally, while most research has focused on the benefits of natural light in workplace, healthcare, and educational settings, fewer studies have explored its impact on more specialized environments such as correctional facilities, urban high-rise dwellings, and underground spaces. These environments often suffer from limited daylight access, and understanding how architectural interventions can improve lighting conditions in such settings remains an area that requires further exploration. Another critical gap in the literature is the role of cultural and regional differences in the perception and utilization of natural light. Architectural traditions and climate conditions vary significantly across different regions, influencing how daylight is integrated into built environments. While some studies have examined natural light in specific cultural contexts, a more comprehensive, cross-cultural analysis is needed to understand how different populations perceive and respond to natural lighting conditions in architectural design [3].

Technological advancements in architectural lighting design have introduced new possibilities for enhancing daylight exposure in interior spaces, yet research on the psychological implications of these innovations remains limited. Dynamic lighting systems that simulate natural daylight patterns have been developed to address the challenges of insufficient daylight access, particularly in high-density urban environments where natural light penetration is restricted. However, empirical studies examining the effectiveness of these artificial daylighting solutions in replicating the psychological benefits of natural light are scarce. More research is needed to evaluate the extent to which these technologies can compensate for the absence of actual daylight and whether they provide comparable benefits in terms of circadian rhythm regulation, stress reduction, and cognitive enhancement. Furthermore, while daylighting strategies such as atriums, clerestory windows, and light shelves are commonly used in architectural design, their effectiveness varies depending on spatial configurations, building orientations, and climatic conditions. A more detailed analysis of how these strategies

perform in different environmental contexts would provide valuable insights for architects seeking to optimize natural light exposure in diverse architectural settings [5].

Another significant limitation in current research is the lack of interdisciplinary approaches that integrate perspectives from architecture, psychology, neuroscience, and environmental sciences. While architectural research often focuses on technical aspects such as daylighting metrics, building performance, and energy efficiency, psychological research emphasizes the human experience of light in interior spaces. Bridging these disciplines would enable a more holistic understanding of how natural light affects mental health and inform design strategies that are both technically sound and psychologically beneficial. Additionally, studies investigating the potential negative effects of excessive daylight exposure, such as glare, overheating, and visual discomfort, are relatively limited. While maximizing daylight is generally regarded as beneficial, poorly designed lighting conditions can create adverse effects that counteract its positive psychological impact. Future research should explore strategies for mitigating these issues while maintaining the mental health benefits associated with natural light [7].

In the context of sustainable architecture, the role of natural light in energy-efficient building design has gained increasing attention. Passive daylighting strategies not only contribute to energy savings by reducing reliance on artificial lighting but also enhance indoor environmental quality. However, balancing energy efficiency with occupant well-being presents a challenge, as optimizing daylight access must be done in a way that considers thermal comfort, visual comfort, and psychological benefits. Research on sustainable lighting design has predominantly focused on energy performance metrics, with less emphasis on the human-centered aspects of daylight integration. Future studies should explore how sustainable daylighting strategies can be optimized to support both environmental sustainability and mental health, ensuring that design solutions align with both energy conservation goals and occupant well-being [16].

Overall, while existing literature provides substantial evidence of the benefits of natural light in architectural spaces, significant research gaps remain in understanding its long-term effects, cultural variations, technological advancements, and interdisciplinary applications. Addressing these gaps would not only enhance architectural design practices but also contribute to the development of more health-supportive built environments. Given the

increasing awareness of mental health issues and the role of the built environment in psychological well-being, further research is essential to deepen our understanding of how natural light can be leveraged as a fundamental element in architectural design to create spaces that foster mental and emotional resilience [15].

## 5. Findings

The reviewed literature on natural light in interior architecture and its influence on mental health encompasses a diverse range of studies conducted in various geographical regions and settings. The demographic scope of these studies includes office workers, students, hospital patients, and residents of both urban and rural dwellings, reflecting the widespread relevance of natural light in different environments. Participants ranged in age from young children in educational settings to elderly patients in healthcare facilities, highlighting the universal importance of daylight across age groups. Studies were conducted in both developed and developing countries, with climatic conditions ranging from temperate to tropical, thereby providing a comprehensive understanding of how natural light impacts mental well-being in different cultural and environmental contexts. Gender distribution in the reviewed studies was balanced, with both male and female participants contributing to the findings, ensuring that the psychological effects of natural light were explored across diverse populations. The methodologies employed in these studies varied from quantitative assessments using standardized psychological scales to qualitative analyses based on participant interviews and observations, offering a multifaceted perspective on the benefits of natural light in architectural design [2].

The findings from the reviewed literature underscore the significant psychological benefits of natural light in interior spaces. One of the most consistent findings is that exposure to natural light positively influences mood by enhancing the production of serotonin, a neurotransmitter associated with feelings of well-being and happiness. Studies have shown that individuals in well-lit environments report higher levels of positive mood and lower levels of stress compared to those in poorly lit spaces. The regulation of circadian rhythms through natural light exposure is another critical finding, as it directly impacts sleep quality, energy levels, and overall mental health. Disruptions to circadian rhythms due to insufficient daylight have been linked to sleep disorders, mood disturbances, and cognitive impairments,

emphasizing the importance of architectural designs that maximize daylight penetration. Research in workplace settings reveals that employees with access to natural light exhibit higher productivity, better job satisfaction, and reduced absenteeism. Natural light not only improves visual comfort and reduces eye strain but also creates a more pleasant and stimulating work environment, thereby enhancing cognitive performance and emotional well-being [7]. Similarly, in educational environments, natural light has been found to improve academic performance, increase attention spans, and reduce stress among students. Classrooms with ample daylight create an inviting and comfortable atmosphere that supports learning and cognitive development, highlighting the importance of daylight integration in school design. Healthcare settings also benefit significantly from natural light, with studies indicating that patients in daylit rooms experience faster recovery rates, lower stress levels, and reduced pain perception. The therapeutic effects of natural light in hospitals contribute to better patient outcomes, shorter hospital stays, and increased satisfaction with the care environment, reinforcing the need for daylight-focused architectural strategies in healthcare design [10].

The influence of natural light on well-being extends beyond mood regulation to include cognitive and emotional resilience. Daylight exposure has been associated with improved concentration, better memory retention, and enhanced problem-solving abilities, making it a crucial element in environments where cognitive performance is paramount. Architectural strategies such as large windows, skylights, and light wells have been identified as effective means of mitigating the psychological impact of seasonal changes, particularly in regions with limited sunlight during winter months. In residential architecture, natural light contributes to creating spaces that promote relaxation, social interaction, and overall well-being. Homes with ample daylight are perceived as more spacious, inviting, and comfortable, enhancing the quality of life for occupants. The interplay of light and shadow in interior spaces adds to the aesthetic appeal and creates dynamic environments that evoke positive emotional responses, further emphasizing the psychological importance of natural light in residential design [20].

Architectural strategies for maximizing natural light in interiors are diverse and context-specific, with common techniques including the use of large windows, open floor plans, reflective surfaces, and light-colored materials. Skylights and clerestory windows are frequently employed

to introduce daylight into spaces that may otherwise lack sufficient natural light, such as corridors, bathrooms, and basements. Atriums and light wells serve as central features in many architectural designs, allowing daylight to penetrate deep into the building's core and creating visually stimulating environments. The orientation of buildings also plays a crucial role in maximizing natural light, with architects often designing structures to optimize daylight exposure based on the building's geographical location and climatic conditions. Shading devices such as louvers, blinds, and overhangs are used to control the intensity of daylight, prevent glare, and enhance visual comfort, ensuring that natural light is effectively harnessed without compromising occupant comfort [5]. Dynamic lighting systems that mimic natural daylight patterns have emerged as innovative solutions for spaces with limited access to natural light. These systems adjust the intensity and color temperature of artificial lighting throughout the day to align with the body's natural circadian rhythms, providing psychological benefits similar to those of actual daylight. However, the effectiveness of these systems in replicating the full spectrum of benefits associated with natural light remains an area for further research. The integration of natural light in sustainable architecture is also highlighted in the literature, with passive daylighting strategies contributing to energy efficiency, reduced carbon footprint, and enhanced indoor environmental quality. Green building standards such as LEED and WELL emphasize the importance of daylight access in promoting occupant well-being, encouraging architects to incorporate daylight optimization into their design processes [16].

The aesthetic and symbolic significance of natural light in architecture further reinforces its psychological impact. Light is often used as a design element to create visually engaging spaces, highlight architectural features, and evoke emotional responses. In sacred architecture, natural light symbolizes divinity, purity, and transcendence, creating spaces that inspire contemplation and spiritual connection. The use of light in religious buildings such as churches, mosques, and temples enhances the sense of sacredness and contributes to the emotional and psychological well-being of worshippers. Similarly, in modern architecture, the interplay of light and shadow is employed to create dynamic interiors that stimulate the senses and enhance the overall user experience. The psychological benefits of such spaces are evident in the positive emotional responses they elicit, highlighting the integral role of natural light in architectural design [1]. The findings from the reviewed literature

collectively underscore the multifaceted benefits of natural light in interior architecture, from enhancing mood and cognitive performance to promoting relaxation and well-being. The integration of daylight into architectural design not only improves the aesthetic and functional qualities of spaces but also supports the mental health and well-being of occupants, making it an essential consideration in contemporary architectural practices [15].

## 6. Discussion and Conclusion

The findings from the reviewed literature reveal a clear consensus on the psychological benefits of natural light in interior architecture, aligning with previous studies that have emphasized the critical role of environmental factors in mental well-being. The positive influence of natural light on mood, cognitive performance, and overall well-being has been well-documented, with numerous studies corroborating the therapeutic effects of daylight exposure in various settings. Research in workplace environments consistently demonstrates that employees with access to natural light report higher levels of job satisfaction, reduced stress, and improved productivity, findings that are echoed in educational settings where natural light enhances academic performance and attention spans. These results align with earlier studies that highlighted the importance of environmental design in supporting cognitive and emotional well-being, further emphasizing that natural light is not merely an aesthetic element but a fundamental component of human-centric design. The therapeutic effects of natural light in healthcare environments, where patients experience faster recovery rates and reduced stress levels, also mirror previous research that has underscored the importance of daylight in promoting healing and well-being. The integration of natural light in architectural design, therefore, serves as a critical strategy for enhancing mental health, a notion supported by the broader field of environmental psychology, which posits that well-designed spaces contribute significantly to psychological resilience and emotional stability [2].

Comparing the findings from this review with earlier research reveals a consistent pattern of benefits associated with natural light, while also highlighting areas that require further exploration. Previous studies have established that natural light regulates circadian rhythms, reduces symptoms of depression, and enhances cognitive function, findings that are reaffirmed in the current review. However, the literature also indicates that the effectiveness of natural light in



promoting mental well-being is influenced by factors such as spatial design, building orientation, and climatic conditions, suggesting that a one-size-fits-all approach may not be feasible. The reviewed studies highlight innovative architectural strategies such as skylights, light wells, and dynamic lighting systems that optimize daylight exposure, reflecting a growing trend in contemporary architecture to prioritize occupant well-being. These strategies align with sustainable design principles, where passive daylighting techniques contribute to energy efficiency while enhancing indoor environmental quality. The emphasis on human-centered design in the reviewed literature is consistent with previous research that advocates for environments that support mental health through thoughtful spatial design, underscoring the need for architects to consider psychological well-being as a core element of design practice [7].

The implications of these findings for architectural design practices are profound, suggesting that integrating natural light into interior spaces is essential for promoting mental health and well-being. The review highlights that architectural elements such as large windows, open floor plans, and reflective surfaces not only enhance visual comfort but also contribute to psychological resilience by creating spaces that are bright, inviting, and stimulating. This aligns with previous studies that have emphasized the importance of daylight in creating environments that support cognitive and emotional well-being. The use of natural light as a design element also offers opportunities for aesthetic enhancement, allowing architects to create dynamic spaces that evoke positive emotional responses. The findings suggest that architects should prioritize daylight optimization in their designs, considering factors such as building orientation, window placement, and material selection to maximize natural light exposure. The integration of natural light into architectural design is not only a matter of aesthetic preference but a critical component of health-supportive environments, highlighting the need for design practices that prioritize occupant well-being through spatial design [20].

The review also underscores the importance of interdisciplinary collaboration in architectural design, suggesting that integrating insights from psychology, neuroscience, and environmental sciences can enhance the effectiveness of daylighting strategies. Previous studies have highlighted the benefits of such interdisciplinary approaches, where architectural design is informed by an understanding of human behavior and psychological needs.

The findings from this review support this notion, indicating that effective daylighting strategies require a comprehensive understanding of both technical design elements and psychological principles. The review highlights that while architectural strategies such as skylights, atriums, and light shelves are effective in maximizing daylight, their impact on mental health is mediated by factors such as spatial layout, occupant preferences, and environmental conditions. This suggests that architects should adopt a holistic approach to design, considering both technical and psychological factors to create environments that support mental well-being. The integration of natural light into architectural design also has implications for sustainability, with passive daylighting strategies contributing to energy efficiency and environmental sustainability. The review highlights that sustainable design practices that prioritize daylight not only reduce energy consumption but also enhance indoor environmental quality, contributing to both environmental and psychological well-being [5].

The findings from this review emphasize the critical role of natural light in interior architecture, highlighting its psychological benefits and architectural strategies for maximizing daylight exposure. The integration of natural light into architectural design enhances mood, cognitive performance, and overall well-being, suggesting that daylight is a fundamental element of health-supportive environments. The review highlights the importance of thoughtful spatial design in optimizing daylight, suggesting that architects should prioritize natural light in their design practices to promote mental health and well-being. The review also underscores the need for interdisciplinary collaboration in architectural design, suggesting that integrating insights from psychology, neuroscience, and environmental sciences can enhance the effectiveness of daylighting strategies. The findings suggest that sustainable design practices that prioritize daylight contribute to both environmental sustainability and psychological well-being, highlighting the importance of daylight optimization in contemporary architecture.

Despite the comprehensive nature of the reviewed literature, certain limitations must be acknowledged. Many studies focused on short-term effects of natural light on mental health, with limited research on long-term psychological outcomes. The diversity of settings and populations in the reviewed studies, while providing a broad perspective, also introduces variability that may affect the generalizability of findings. Additionally, the impact of cultural and regional differences on the perception and

benefits of natural light remains underexplored, indicating a need for more region-specific research. The reliance on self-reported measures in many studies also raises concerns about the subjectivity of findings, suggesting that future research should incorporate objective measures of psychological well-being.

Future research should explore the long-term effects of natural light exposure on mental health, providing insights into how sustained daylight access influences psychological resilience over time. Comparative studies across different cultural and regional contexts are needed to understand how architectural strategies for daylight optimization can be tailored to specific environments. Additionally, interdisciplinary research that integrates architectural design, psychology, and environmental science can provide a more holistic understanding of the benefits of natural light. Technological innovations such as dynamic lighting systems also warrant further investigation to assess their effectiveness in replicating natural daylight and promoting mental well-being.

Architectural practices should prioritize natural light optimization in design, considering factors such as building orientation, window placement, and material selection to enhance daylight exposure. Design guidelines should emphasize the psychological benefits of natural light, encouraging architects to create spaces that promote mental well-being. Collaboration between architects, psychologists, and environmental scientists can enhance the effectiveness of daylighting strategies, ensuring that designs are both technically sound and psychologically supportive. Sustainable design practices that integrate natural light should be promoted, highlighting the dual benefits of energy efficiency and occupant well-being.

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Authors equally contributed to this article.

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All procedures performed in this study were under the ethical standards.

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