

AN ARCHITECTURAL PSYCHOLOGY APPROACH TO THE DESIGN OF A NURSING HOME IN MEDAN

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Abstract (English)

Indonesia is currently experiencing an ageing population, with older adults accounting for more than 10% of the total population since 2020. In North Sumatra, the elderly population continues to increase annually, creating a growing demand for facilities that adequately support their physical, psychological, and social well-being. Many older adults experience declining functional abilities, dependency, loneliness, and depression, while existing nursing homes are often associated with negative public perceptions due to limited consideration of residents' psychological needs and inadequate recreational facilities. This design project aims to apply an architectural psychology approach to the design of a nursing home in Medan by examining the principles of architectural psychology in elderly care environments, developing spatial programs and spatial organization that accommodate the needs of both independent and dependent older adults, and creating a built environment that enhances psychological comfort and quality of life. A qualitative research method was employed through the collection and analysis of relevant literature, design standards, precedent studies, and supporting data to formulate appropriate design strategies. The proposed design integrates architectural psychology principles with public recreational functions, including green open spaces, communal areas, sports facilities, and other supporting amenities, to promote physical and psychological well-being while encouraging interaction between residents and the surrounding community. By emphasizing recreational function and psychologically responsive design, the proposed nursing home seeks to reduce the negative stigma associated with institutional elderly care, foster social engagement, minimize feelings of isolation and depression, enhance self-confidence and happiness among older adults, and ultimately create a supportive, inclusive, and therapeutic environment that improves their overall quality of life.

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Architectural Psychology, Nursing Home, Older Adults, Active Ageing, Therapeutic Environment, Recreational Facilities.

Abstrak (Indonesia)

Indonesia saat ini sedang mengalami fenomena ageing population, yang ditandai dengan jumlah penduduk lanjut usia yang telah melebihi 10% dari total populasi sejak tahun 2020. Di Provinsi Sumatera Utara, jumlah penduduk lanjut usia terus mengalami peningkatan setiap tahunnya sehingga mendorong kebutuhan akan fasilitas yang mampu mendukung kesejahteraan fisik, psikologis, dan sosial mereka secara optimal. Di sisi lain, banyak lanjut usia mengalami penurunan kemampuan fungsional, ketergantungan, kesepian, dan depresi, sementara panti jompo yang ada masih sering dipandang negatif oleh masyarakat karena belum sepenuhnya memperhatikan kebutuhan psikologis penghuninya serta minimnya penyediaan fasilitas rekreasi. Perancangan ini bertujuan menerapkan pendekatan psikologi arsitektur pada perancangan bangunan panti jompo di Kota Medan melalui kajian terhadap prinsip-prinsip psikologi arsitektur pada lingkungan hunian lanjut usia, penyusunan program dan organisasi ruang yang mampu mengakomodasi kebutuhan lanjut usia yang mandiri maupun yang bergantung pada bantuan orang lain, serta perancangan lingkungan binaan yang mendukung kenyamanan psikologis dan peningkatan kualitas hidup penghuninya. Metode yang digunakan adalah metode kualitatif melalui pengumpulan dan analisis literatur, standar perancangan, studi preseden, serta data pendukung lainnya untuk merumuskan strategi perancangan yang sesuai. Hasil perancangan mengintegrasikan prinsip psikologi arsitektur dengan fungsi rekreasi publik, seperti ruang terbuka hijau, ruang komunal, fasilitas olahraga, dan berbagai

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fasilitas pendukung lainnya guna meningkatkan kesejahteraan fisik dan psikologis lanjut usia sekaligus mendorong interaksi antara penghuni dengan masyarakat sekitar. Melalui penekanan pada fungsi rekreasi dan penerapan desain yang responsif terhadap aspek psikologis, panti jompo yang dirancang diharapkan mampu mengurangi stigma negatif terhadap panti jompo, meningkatkan interaksi sosial, mengurangi perasaan terisolasi dan risiko depresi, meningkatkan rasa percaya diri serta kebahagiaan lanjut usia, dan pada akhirnya mewujudkan lingkungan yang suportif, inklusif, dan terapeutik untuk meningkatkan kualitas hidup lanjut usia.

INTRODUCTION

Indonesia has entered an ageing population phase, marked by the proportion of older adults exceeding 10% of the total population in 2020 (BPS, 2021). This demographic transition has significant implications for the provision of age-friendly environments capable of supporting the physical, psychological, and social well-being of older adults. In North Sumatra Province, the ageing trend has become increasingly evident, with the proportion of older adults rising from 9.00% in 2017 to 10.82% in 2021, and continuing to increase according to projections by Statistics Indonesia (BPS). This demographic shift indicates an urgent need to develop residential environments and care facilities that are responsive to the changing needs of the elderly population (BPS, 2021).

In addition to the growing number of older adults, Indonesia is also experiencing an increase in the proportion of elderly people living alone. Statistics Indonesia (2021) reported that 9.99% of older adults live independently, while the proportion of older adults with disabilities is 3.78% higher than those without disabilities. This condition reflects the declining functional capacity commonly associated with ageing, which consequently increases dependency on caregivers. The old-age dependency ratio in Indonesia has likewise increased from 14.02% in 2017 to 16.76% in 2021 (BPS, 2021), indicating a growing demand for supportive environments that can accommodate varying levels of physical and cognitive abilities among older adults.

Beyond physical limitations, ageing is frequently accompanied by psychological challenges that substantially affect quality of life. Previous studies have identified depression, loneliness, social isolation, cognitive decline, dementia, impaired self-concept, abuse, poverty, and neglect as major issues experienced by older adults (Tamher & Noorkasiani, 2008 as cited in Annisa & Ifdil, 2016). These psychological conditions are closely related to both deteriorating physical health and the inability to adapt to developmental changes in later life (Annisa & Ifdil, 2016). Consequently, providing environments that support psychological well-being is equally as important as addressing physical needs.

Nursing homes are expected to play a central role in fulfilling these needs by providing comprehensive services that enhance the quality of life of older adults. According to the Regulation of the Minister of Social Affairs of the Republic of Indonesia Number 19 of 2012, nursing homes are responsible for delivering services that promote well-being while meeting the basic needs of elderly residents. Recreational activities represent one important component of these services because they encourage meaningful use of leisure time and contribute positively to residents' physical, psychological, and social health (Tristanto, 2020). However, despite their importance, recreational facilities remain insufficiently integrated into many nursing homes in Indonesia. The absence of such facilities not only limits opportunities for active ageing but also reinforces the negative public perception that nursing homes merely function as places of institutional care rather than environments that promote healthy and meaningful living (Tristanto, 2020).

The quality of nursing home environments is also influenced by architectural design. Existing facilities often emphasize functional accommodation while paying limited attention to users' psychological experiences. In many cases, essential accessibility features, including handrails along circulation routes and pedestrian pathways, remain inadequate, thereby reducing safety and comfort for elderly residents. More importantly, spatial organization rarely considers the behavioural and emotional responses of older adults, even though architectural environments significantly influence human perception, behaviour, and well-being.

Architectural psychology provides a theoretical framework for understanding the reciprocal relationship between humans and the built environment. Rather than merely fulfilling functional requirements, architectural design can influence users' emotions, behaviour, and environmental perception through spatial organization, sensory stimulation, and environmental quality (Ibrahim, 2016). By integrating architectural psychology principles into nursing home design, spaces can be created that encourage independence, reduce stress, facilitate social interaction, and improve the overall quality of life of older adults.

Previous studies on elderly-care facilities have predominantly focused on accessibility standards, healthcare services, universal design, and physical ergonomics. While these studies provide important design guidelines, relatively little attention has been given to how spatial configuration can systematically respond to the psychological characteristics of older adults. Furthermore, studies integrating recreational functions with architectural psychology in the context of nursing home design remain scarce, particularly within the Indonesian context. Consequently, there is still a lack of comprehensive design frameworks that simultaneously address functional requirements, psychological well-being, and recreational needs in elderly-care facilities.

This research addresses this gap by proposing a nursing home design that integrates recreational facilities with architectural psychology principles. Unlike previous studies that primarily emphasize physical accessibility or institutional functions, this study investigates how spatial organization, environmental behaviour, and psychological considerations can be incorporated into architectural design to improve the quality of life of older adults. The novelty of this research lies in the integration of architectural psychology as the primary design approach while simultaneously positioning recreational spaces as an essential component of elderly care rather than merely complementary facilities.

Medan, as the capital of North Sumatra Province and one of Indonesia's largest metropolitan areas, provides an appropriate context for this study due to its growing elderly population, strategic regional accessibility, and well-developed infrastructure. The findings of this research are expected to contribute not only to architectural design practice but also to the development of evidence-based guidelines for designing age-friendly nursing homes that prioritize psychological well-being alongside physical care.

Therefore, this study aims to: (1) analyse the application of architectural psychology principles in elderly-care environments; (2) formulate spatial programmes and spatial organizations that accommodate varying physical and cognitive capacities of older adults; and (3) develop a nursing home design in Medan that integrates recreational facilities and architectural psychology to support the psychological well-being and quality of life of older adults.

METHOD

This study employed a qualitative research approach to develop an architectural design proposal for a nursing home in Medan using the Architectural Psychology approach. Qualitative research was considered appropriate because the study aimed to explore the relationship between users' psychological characteristics, environmental behaviour, and spatial

configuration rather than to measure variables quantitatively. The research process consisted of four main stages: site selection, data collection, data analysis, and architectural concept development.

Site Selection

The selection of the project site was conducted purposively based on criteria relevant to the functional and psychological requirements of a nursing home. Three principal criteria were considered: (1) proximity to residential neighbourhoods to reduce social isolation among older adults; (2) accessibility through adequate transportation networks; and (3) the availability of supporting infrastructure and public facilities surrounding the site. These criteria ensured that the selected location could accommodate both the operational requirements of the nursing home and the psychological well-being of its residents.

Data Collection

The study utilised both primary and secondary data.

Primary data were obtained through direct field observation and documentation. Observation was conducted to examine the physical characteristics of the proposed site, including site boundaries, existing land use, accessibility, environmental conditions, surrounding buildings, and natural features. In accordance with Hasan (2002), observation enabled systematic recording of environmental conditions relevant to the architectural design process. Documentation, primarily in the form of photographs, was used to support and verify the observational findings.

Secondary data were collected through literature reviews, precedent studies, and institutional documents. The literature review covered theories related to ageing, nursing homes, environmental behaviour, and architectural psychology. Precedent studies examined comparable nursing home projects and buildings employing similar architectural concepts to identify best practices and design strategies. Additional supporting information, including spatial planning regulations, maps, and planning documents, was obtained from relevant government agencies and other authoritative sources.

Data Analysis

The collected data were analysed using descriptive qualitative analysis. The analysis focused on understanding the relationship between users, activities, spatial requirements, and environmental characteristics to formulate an appropriate architectural design concept.

The analytical process included evaluations of land use, accessibility, topography, building regulations, architectural context, vegetation, climate, visual orientation, circulation, interior spatial relationships, structural systems, utility systems, and environmental conditions surrounding the project site. The results of these analyses were synthesised to determine the site's development potential, identify design opportunities and constraints, and establish planning criteria for the proposed nursing home.

Architectural Design Development

The architectural design process adopted Architectural Psychology as the primary conceptual framework. This approach emphasises the interaction between users and the built environment by integrating psychological well-being into spatial planning and architectural form.

Based on the findings of the site and environmental analyses, the design development was conducted through several stages. First, behavioural characteristics and psychological needs of older adults were translated into spatial requirements. Second, activity systems and

space programmes were formulated using information obtained from precedent studies and literature. Third, site planning, outdoor spaces, interior spatial organisation, building massing, façade design, structural systems, and utility systems were developed through the synthesis of analytical findings with Architectural Psychology principles.

The final architectural proposal was generated through an iterative design process in which each design decision was evaluated against the research objectives, users' psychological needs, functional requirements, and characteristics of the selected site. This process ensured that the proposed nursing home design not only fulfilled technical and functional standards but also promoted comfort, independence, social interaction, and psychological well-being among older adults.

RESULTS AND DISCUSSION

Site Suitability for a Psychologically Responsive Nursing Home

The site selected for the proposed nursing home is located at the intersection of Jalan Jati and Jalan Perkebunan in Medan Timur District, Medan City. The site occupies approximately 2.2 hectares and satisfies the principal criteria established during the site selection stage, namely proximity to residential neighbourhoods, accessibility, and the availability of supporting public facilities. In addition, the site is situated along secondary roads directly connected to the primary arterial road of Jalan Krakatau Ujung, providing convenient regional accessibility while maintaining a relatively quiet environment appropriate for older adults.



Figure 1. Site Location Map
Source: Personal Data

Methodist Pelita Kasih Private
Preschool and Elementary School
The school's proximity offers the
nursing home opportunities to organize
intergenerational activities and
facilitates the use of reminiscence
therapy for the elderly.



VACANT LAND DESIGNATED
AS AN URBAN PARK (OPEN
GREEN SPACE)
Offers the potential to provide
the nursing home with greater
proximity to nature.



EKKLESIA ORPHANAGE
Has the potential to
facilitate the presence of
children at the nursing
home.



SD Negeri 064015
The proximity of the site to the school
offers the nursing home opportunities
to organize intergenerational activities
and facilitates the use of reminiscence
therapy for the elderly.



Musholla Al-Ridho
has the potential to
serve as a religious
facility for the project
site.



Cemara Hijau Residential Complex
The residential function has the
potential to alleviate feelings of
isolation among elderly residents
of nursing homes.

Figure 2. Surrounding Site Opportunities

Analysis of the surrounding land use demonstrates that the proposed site is predominantly surrounded by residential neighbourhoods, educational facilities, an orphanage, places of worship, and green open spaces. This environmental context offers advantages beyond physical accessibility. Rather than creating an isolated institutional environment, the location enables continuous interaction between nursing home residents and the surrounding community. Such interaction is particularly valuable because social participation is recognised as an important determinant of healthy ageing.

One of the most significant findings concerns the presence of an orphanage and several schools adjacent to the site. These facilities provide opportunities for intergenerational activities that may support reminiscence therapy. Susanto et al. (2020) reported that reminiscence therapy contributes to successful ageing by encouraging older adults to recall meaningful life experiences while strengthening emotional well-being. Therefore, locating communal gardens and recreational spaces near areas accessible to children represents an architectural strategy that supports psychological health rather than merely fulfilling functional requirements.

Another important environmental characteristic is the site's proximity to green open space. Previous studies have shown that greater exposure to natural environments reduces the likelihood of mental disorders among older adults (Wu et al., 2015). Consequently, the surrounding landscape was interpreted not simply as an environmental asset but as a therapeutic component that directly informed the spatial organisation of the proposed nursing home.

Nevertheless, one limitation identified during the analysis is the relatively long distance to the nearest hospital. This finding indicates the necessity of integrating comprehensive healthcare facilities within the nursing home to ensure continuity of medical care.

3.2. Functional Programming Based on Architectural Psychology

Table 1. Analysis of Spatial Requirements

User Group	Activities	Spatial Requirements	Psychological Rationale
Older Adults		- Lobby and Parking Area - Foyer (connecting the residential and public zones) - Resident Rooms - Bathrooms - Communal Space and/or Visitor Lounge - Dining Room (Restaurant) - Activity Rooms and Multipurpose Room - Healthcare Facility (Clinic) - Therapeutic Gardens - Hall	- Greater exposure to green spaces and gardens within the local environment is associated with a lower likelihood of developing common mental disorders later in life, even after adjusting for individual sociodemographic characteristics and comorbidity measures (Wu et al., 2015). - Older members of the community should not be expected to withdraw from society or live in social isolation (Mumford, 1956, as cited in Simpson, 2010).
Staff		- Lobby and Parking Area - Nurses' Residence: - Nurses' Bedrooms - Nurses' Bathrooms - Communal Room - Security Staff Residence: - Security Staff Bedrooms - Security Staff Bathrooms - Communal Room - Staff Residence: - Staff Bedrooms - Staff Bathrooms - Communal Room - Office and Pantry - Healthcare Facility (Clinic) - Service Areas - Security Post - Therapeutic Gardens	To address the physical, psychological, and social needs of older adults, nursing homes should implement programs that enhance social functioning through retraining interventions, including cognitive retraining, motor retraining, and emotional retraining (Syamsuddin, 2018). Emotional retraining is particularly important for supporting the emotional well-being of nurses and other staff members who maintain close relationships with older adult residents.
Visitors		- Parking Area and Lobby - Hall - Visitor Lounge and Residential Communal Space - Guest Accommodation (Bedroom and Bathroom) - Dining Room (Restaurant) - Therapeutic Gardens	Reminiscence therapy is associated with successful aging, a condition in which older adults experience life satisfaction in terms of their physical, psychological, cognitive, social, and financial well-being, thereby contributing positively to those around them (Khairat, 2000). Wong and Watt (1991) found that reminiscence therapy helps older adults reconcile past experiences, strengthen self-esteem, and resolve personal conflicts, enabling them to adapt more successfully to later life and achieve successful aging.

Source: Personal data

The functional programme was developed by translating users' behavioural characteristics into spatial requirements. Three principal user groups were identified: older adults, staff, and visitors. Unlike conventional nursing home planning, which primarily emphasises operational efficiency, the proposed programme incorporates psychological considerations into every major functional space. Therapeutic gardens, communal spaces, visitor lounges, multipurpose rooms, healthcare facilities, and dining areas were identified as essential components because each contributes to social interaction, emotional comfort, and environmental stimulation.

The spatial programme also demonstrates that psychological needs differ across user groups. For older adults, communal spaces and therapeutic gardens encourage social participation while reducing loneliness. Staff facilities incorporate communal areas that support emotional resilience, recognising that caregiving quality is influenced by staff well-being (Syamsuddin, 2018). Visitor facilities, meanwhile, facilitate family interaction and reminiscence activities, which have been associated with improved self-esteem, psychological adaptation, and successful ageing (Khairat, 2000; Wong & Watt, 1991).

Rather than functioning independently, these spaces were organised as an integrated behavioural system. The resulting spatial relationships encourage continuous movement between private, semi-private, and public areas while avoiding institutional segregation. This spatial configuration reflects the principles of Architectural Psychology by promoting environmental experiences that support autonomy, familiarity, and social connectedness.

3.3. Accessibility as a Determinant of Psychological Well-being





Figure 4. Pedestrian Circulation Analysis

Accessibility analysis indicates that Jalan Jati provides the most suitable location for the primary entrance because of its direct connection to the city's arterial road network. Both Jalan Jati and Jalan Perkebunan possess adequate roadway widths for private vehicles, service vehicles, and emergency transportation. However, field observations also revealed an important environmental deficiency: the absence of dedicated pedestrian facilities surrounding the site.

From an architectural perspective, this limitation extends beyond transportation issues. Older adults experience declining mobility, reduced balance, and greater vulnerability to falls. Consequently, accessibility should be understood as a psychological requirement as well as a physical necessity. The proposed design therefore incorporates universal accessibility principles, including continuous pedestrian pathways, wheelchair-accessible circulation, handrails, resting areas, and distributed parking facilities. These interventions reduce environmental stress while encouraging independent movement throughout the nursing home.

Furthermore, pedestrian circulation was conceptualised as social space rather than merely transitional space. Seating areas, shaded pathways, and therapeutic gardens are integrated along circulation routes to facilitate spontaneous interaction among residents, visitors, and staff. This design strategy aligns with Dewi et al. (2021), who emphasised that older adults require opportunities for biological, psychological, and social engagement within everyday environments.

3.4. Architectural Design Implications

The synthesis of site analysis, functional programming, and accessibility evaluation demonstrates that Architectural Psychology provides a comprehensive framework for nursing home design. Rather than treating architecture solely as physical infrastructure, the proposed design positions the built environment as an active contributor to psychological well-being.

Four major design implications emerged from the analysis.

First, integration with surrounding residential communities reduces institutional isolation and encourages social participation. Second, therapeutic landscapes and green open

spaces function as restorative environments that promote emotional well-being. Third, intergenerational interaction becomes a deliberate architectural strategy through the provision of communal gardens and recreational facilities that accommodate children and older adults simultaneously. Finally, spatial organisation based on behavioural patterns enhances autonomy, environmental legibility, and users' sense of belonging.

Collectively, these findings indicate that the Architectural Psychology approach extends beyond aesthetic considerations. It establishes a design framework in which spatial organisation, environmental behaviour, and psychological health are addressed simultaneously. Consequently, the proposed nursing home is expected to function not only as a residential care facility but also as a therapeutic environment that supports healthy ageing, social inclusion, and improved quality of life for older adults.

DISCUSSION

The findings demonstrate that the suitability of a nursing home is influenced not only by technical site characteristics but also by environmental attributes that support the psychological well-being of older adults. Unlike conventional architectural planning, which frequently prioritises land availability, accessibility, and regulatory compliance, this study indicates that neighbourhood context and opportunities for social interaction should be considered equally important design parameters. The selected site satisfies these requirements because it is integrated within an established residential community and is surrounded by educational facilities, an orphanage, and green open spaces. These environmental characteristics create opportunities for regular social engagement, which has consistently been identified as an important determinant of healthy ageing.

This finding is consistent with the principles of environmental psychology, which argue that the built environment influences human behaviour by shaping opportunities for interaction, attachment, and emotional experience (Ibrahim, 2016). It also supports the argument of Mumford (1956, as cited in Simpson, 2010), who suggested that older adults should remain integrated within society rather than being separated into socially isolated institutions. Therefore, the proposed nursing home moves beyond the traditional institutional model by functioning as a community-based living environment.

Another important finding concerns the integration of therapeutic landscapes into the spatial organisation of the nursing home. Previous research has demonstrated that exposure to natural environments contributes to reduced psychological distress, lower risks of common mental disorders, and improved emotional well-being among older adults (Wu et al., 2015). Rather than treating gardens merely as landscape elements, this study positions therapeutic gardens as essential components of the healing environment. Their placement within the circulation network allows residents to experience continuous visual and physical contact with vegetation during daily activities, thereby strengthening restorative environmental experiences.

A distinctive contribution of this study is the incorporation of intergenerational interaction into the architectural design strategy. The proximity of schools and an orphanage creates opportunities for structured and informal encounters between children and older adults. These interactions support reminiscence therapy by stimulating autobiographical memory and encouraging meaningful social communication. Susanto et al. (2020) demonstrated that reminiscence therapy contributes positively to successful ageing by enhancing psychological adaptation and emotional well-being. Similarly, Wong and Watt (1991) reported that reminiscence activities improve self-esteem and facilitate psychological adjustment in later life. Consequently, this study extends previous findings by demonstrating that architecture itself can become a facilitator of reminiscence therapy through the deliberate arrangement of communal spaces, gardens, and activity areas.

The functional programming developed in this study further illustrates the value of applying Architectural Psychology to nursing home planning. Conventional nursing home layouts generally organise spaces according to operational efficiency, resulting in clear separations between residential, healthcare, and service functions. While operational efficiency remains important, the present findings suggest that behavioural relationships between users should also guide spatial organisation. Therapeutic gardens, communal lounges, multipurpose activity rooms, and visitor spaces were therefore positioned to maximise opportunities for spontaneous social interaction without compromising residents' privacy. Such spatial organisation reflects behavioural architecture principles, whereby physical environments encourage desirable behavioural patterns rather than merely accommodating activities.

Accessibility represents another significant finding. Existing accessibility standards commonly emphasise technical requirements, including ramp gradients, corridor widths, and wheelchair manoeuvring spaces. Although these standards remain essential, the present study demonstrates that accessibility should also be interpreted from a psychological perspective. Safe pedestrian pathways, distributed resting areas, continuous handrails, intuitive wayfinding, and visual connectivity reduce environmental stress while encouraging independent movement among older adults. This finding supports Dewi et al. (2021), who argued that environments for older adults should simultaneously address biological, psychological, and social dimensions of well-being.

Despite these contributions, several limitations should be acknowledged. The proposed design was developed based on qualitative environmental analysis and precedent studies rather than post-occupancy evaluation of a completed nursing home. Consequently, the psychological benefits proposed in this study remain conceptual and require empirical verification after implementation. Future research should therefore evaluate residents' behavioural responses, psychological outcomes, and quality of life following occupancy to validate the effectiveness of the Architectural Psychology approach. Quantitative methods, including behavioural mapping, post-occupancy evaluation (POE), and environmental satisfaction surveys, could further strengthen the evidence supporting psychologically responsive nursing home design.

Overall, this study contributes to architectural design knowledge by demonstrating that Architectural Psychology provides a comprehensive framework for integrating physical accessibility, therapeutic landscapes, environmental behaviour, and social interaction into nursing home planning. Rather than functioning solely as residential accommodation, the proposed nursing home is conceptualised as a therapeutic living environment that actively supports healthy ageing, psychological well-being, and community engagement.

CONCLUSION

This study demonstrates that the application of Architectural Psychology provides an effective framework for designing nursing homes that respond not only to the functional requirements of elderly care but also to the psychological and social needs of older adults. Through qualitative site analysis, functional programming, and environmental evaluation, the proposed design integrates therapeutic landscapes, community-oriented spaces, universal accessibility, and psychologically responsive spatial organization into a comprehensive nursing home design.

The findings indicate that the selected site in Medan possesses favourable characteristics for elderly care because of its accessibility, integration with surrounding residential neighbourhoods, proximity to educational facilities, and availability of green open spaces. These environmental characteristics create opportunities for social participation and intergenerational interaction, both of which contribute to healthy ageing and psychological well-being. In addition, the incorporation of therapeutic gardens, communal spaces, and

accessible circulation demonstrates how architectural design can actively support independence, reduce social isolation, and improve the quality of life of older adults.

The principal contribution of this research lies in integrating Architectural Psychology with recreational and community-based design strategies. Rather than viewing nursing homes solely as residential care institutions, this study proposes a design model that positions them as therapeutic environments supporting physical, psychological, and social well-being simultaneously. The proposed framework may therefore serve as a reference for future nursing home planning, particularly in rapidly ageing urban areas in Indonesia.

Nevertheless, this research is limited to the architectural design stage and has not yet been validated through post-occupancy evaluation or behavioural assessment of residents. Future studies should examine users' behavioural responses, environmental satisfaction, and psychological outcomes after implementation to evaluate the effectiveness of the proposed design. Quantitative approaches, including behavioural mapping, post-occupancy evaluation, and user satisfaction surveys, are recommended to strengthen the empirical evidence for psychologically responsive nursing home design.

REFERENCES

- Annisa, D. F., & Ifdil, I. (2016). *Konsep Kecemasan (Anxiety) pada Lanjut Usia (Lansia)*. Konselor, 5(2), 93.
- BPS-Statistics Indonesia. (2021). *Statistical Yearbook of Indonesia 2021*.
- Dewi, J., Prakoso, S., & Heindri, N. (2021). *Integrated elderly park model with social interaction qualities*. IOP Conference Series: Earth and Environmental Science, 764(1).
- Hasan, M. I. (2002). *Pokok-pokok Materi Metodologi Penelitian dan Aplikasinya*.
- Ibrahim, A. (2016). *Architectural Design Process Based on Spatial Human Behavior Parameters through Computational Methodology*.
- Khairat, M. (2000). *Successful Aging: Anak Yang Berhasil dan Berbakti*.
- Meena, G., A., K., R., C., & R., K. (2020). *Physical and Psychological Problems of the Elderly at an Aged Care Center*. Gerontology & Geriatric Research, 9(2).
- Simpson, P. (2010). *(citation containing Mumford, 1956 on older adults and community integration)*.
- Susanto, T. I., Soetjningsih, C. H., & Samiyono, D. (2020). *Reminiscence Therapy: Empowering the Elderly to Achieve Successful Aging*. Buletin Psikologi, 28(1), 72–84.
- Syamsuddin. (2018). *Peningkatan Keberfungsian Sosial Lanjut Usia Melalui Program Pelatihan Kembali*. Sosio Informa, 4(2), 437–447.
- Tristanto, A. (2020). *Dukungan Kesehatan Jiwa dan Psikososial (DKJPS) dalam Pelayanan Sosial Lanjut Usia pada Masa Pandemi COVID-19*. Sosio Informa, 6(2), 205–222.
- Wong, P., & Watt, L. (1991). *What Types of Reminiscence Are Associated with Successful Ageing?* Psychology and Aging, 6(2), 272–279.
- Wu, Y. T., Prina, A. M., Jones, A., Matthews, F. E., & Brayne, C. (2015). *Older People, the Natural Environment and Common Mental Disorders*. BMJ Open, 5(9).