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Enhancing Social Adjustment of Elderly Residents in Non-Profit Nursing Homes: A Case Study of Waiwattananiwas Home for the Aged, Thailand

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ABSTRACT

This study explores how physical space and activity programming in common areas impact social adjustment among elderly residents in a non-profit nursing home in Thailand. It evaluates social adjustment levels, residents' opinions about the importance of common areas, and satisfaction with both spatial and activity aspects to assess how these environments support residents' adaptation and well-being in the nursing home. This quantitative study surveys 35 residents. Although the sample size is modest, it represents the entire population at the nursing home who are physically able to utilize these spaces, making it both contextually appropriate and representative. The survey assessed four domains: social adjustment; common area functionality (including social interaction, relationship building, activity socialization, and usage frequency); environmental satisfaction (covering spatial design, atmosphere, organized activities, and amenities); and demographic data. Descriptive statistics revealed that approximately half of the participants demonstrated a good level of social adjustment. Residents agreed on the importance of common areas in fostering interpersonal connection and engagement, though usage frequency remained moderate. Satisfaction with environmental elements was consistently high. The findings underscore the essential role of well-designed common areas in promoting social integration and emotional well-being. Design features such as layout flexibility, accessible pathways, and adaptable seating arrangements were identified as key contributors. The study offers valuable guidance for policymakers and architects in creating age-friendly environments that enhance the quality of life in the nursing home.

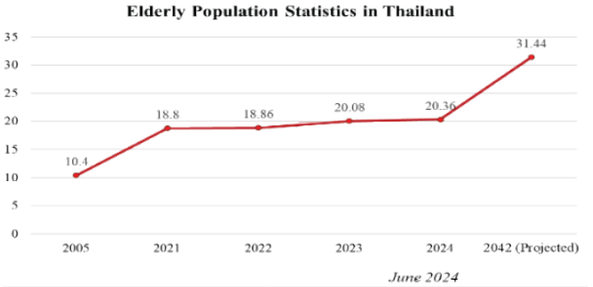
Keywords: Elderly; social adjustment; common areas; nursing home; social interaction

INTRODUCTION

Thailand has officially transitioned into a complete-aged society, marking a significant demographic shift as the proportion of elderly individuals continues to grow. As of June 2024, the elderly population accounts for 20.70% of the total population (Department of Older Persons, 2024), a figure that reflects both increasing life expectancy and declining birth rates, as shown in Figure 1. This demographic transformation presents new social and infrastructural challenges, particularly in ensuring adequate housing, healthcare, and social support for the aging population.

As individuals age, some actively choose or are compelled by circumstances to relocate from their private residences to not-for-profit nursing homes, which are specifically established to provide shelter, healthcare, and emotional support for those facing housing insecurity and social vulnerability. These facilities play a crucial role in preventing elderly homelessness, neglect, and social isolation, ensuring that aging individuals receive appropriate care and live with dignity (National Statistical Office, 2002). However, transitioning to institutional living

presents challenges, as it requires adjusting to unfamiliar environments, new routines, and a diverse community of residents. This process of psychological and social adjustment is fundamental for elderly individuals to maintain a sense of belonging and emotional well-being.



June 2024

Year	2005	2021	2022	2023	2024	2042 (Projected)
Percentage of Elderly Population (%)	10.4	18.8	18.86	20.08	20.70	31.44

FIGURE 1. A Line graph representing the growth of the elderly population in Thailand.

Recognizing the importance of social inclusion and well-being among aging populations, this research aligns with Thailand's 2nd National Plan on the Elderly (2002–2021). This policy prioritizes enhancing the quality of life for older adults through a comprehensive approach that integrates both family-based and institutional care. It further advocates for transforming nursing homes into multifunctional centers that provide healthcare, social services, and long-term care for individuals who can no longer live independently (National Plan on the Elderly 2002–2021).

Social adjustment is a crucial component of psychological well-being in elderly populations. When older individuals are unable to adapt socially within new residential settings, they are at greater risk of experiencing social isolation and loneliness—conditions that are associated with increased risks of depression, cognitive decline, and even premature mortality (World Health Organization 2021). Given these implications, assessing the degree to which elderly individuals integrate into communal living environments is essential for promoting healthy aging and overall quality of life. One of the most widely used tools for assessing social adjustment is the Social Adjustment Scale – Self-Report (SAS-SR), developed by Weissman and the MHS Staff (1999). It is a comprehensive 54-item self-report questionnaire that evaluates an individual's social functioning across six key role areas, based on behaviors and experiences during the two—week period immediately preceding the date of data collection (Weissman, Sholomskas & John 1981).

1. Work Role – Assesses functioning in one's primary occupation, whether as a paid employee, homemaker, or student.
2. Social and Leisure Activities – Evaluate engagement and satisfaction in social interactions and recreational pursuits.
3. Extended Family Relationships – Measures the quality and frequency of interactions with relatives beyond the immediate family.
4. Primary Relationship (Marital/Partner Role) – Examines the dynamics and satisfaction within a marital or equivalent partnership.
5. Parental Role – Assesses relationships and responsibilities toward one's children.
6. Family Unit – Evaluates overall family functioning, including economic well-being and household management.

The Social Adjustment Scale – Self-Report (SAS-SR) is a validated and reliable instrument widely used in clinical and research contexts to assess an individual's social functioning. It captures performance and emotional experience across multiple life roles, offering a comprehensive view of social adaptation. Suitable for individuals aged 17 and older, the SAS-SR has been translated into various languages and applied to evaluate intervention outcomes, monitor social functioning over time, and identify areas needing support. Its strong psychometric properties and multidimensional structure make it a valuable tool in mental health and social adjustment research (Rzepa & Weissman 2014).

Previous research highlights the importance of social adjustment and emotional stability as key psychological factors affecting elderly residents in institutional care. Jawairia, Malik, and Malik (2021) conducted a cross-sectional study with 150 elderly individuals aged 65 to 85 years residing in nursing homes. The study assessed social adjustment levels using the Social Adjustment Scale and emotional stability using the NEO-FFI scale. Findings revealed that social adjustment and emotional stability were significant predictors of hope and happiness, with regression analysis showing that social adjustment accounted for 13% of the variance in hope and 52% in happiness. These results underscore the interrelated nature of these four variables and affirm the value of studying social adjustment as a central focus for enhancing the well-being of elderly residents.

Zavotka and Teaford (1997) examined how environmental design influences the sense of control and social interaction among older adults residing in long-term care facilities. Their study highlighted the importance of

creating supportive physical environments that offer autonomy, safety, and opportunities for informal social interaction. The researchers emphasized that when residents perceive their environment as supportive and familiar, they are more likely to engage in interpersonal relationships and exhibit improved social adjustment. Particularly, shared spaces designed for comfort and visibility such as lounges, and common activity areas (Figure 2) were associated with increased social contact, reduced isolation, and greater emotional well-being among elderly residents. The design of shared social spaces in assisted living residences significantly impacts residents' psychosocial needs. Facilities that align communal spaces with residents' preferences and previous living experiences can enhance life satisfaction and social attachment.

FIGURE 2. Photograph of a common area used for dining on the left and for haircuts on the right

For elderly residents, this involves developing new social connections, participating in communal activities, and adapting to structured living environments. In Nursing homes, common areas function as key social hubs, facilitating interactions, group discussions, and recreational activities that contribute to a sense of community and emotional stability. Siette et al. (2022) conducted a multi-methods study to examine the impact of social interactions on the quality of life (QoL) among residents in aged care facilities. The study involved 39 residents across six facilities in New South Wales, Australia, with data collected over 300 hours. The findings revealed that residents' interpersonal communications most frequently occurred in common areas, accounting for 29.3% (95% CI: 22.9-35.7) of interactions. This underscores the pivotal role of communal spaces in facilitating social engagement. Moreover, the study confirmed a positive association between the frequency of social interactions and enhanced QoL among residents. The authors suggest that providing opportunities and activities that encourage residents to engage throughout the day in common facility areas can support their well-being. The role of social support and meaningful living arrangements in predicting life satisfaction among older adults has been well established in the literature. Lin et al. (2020) explored the relationship between living arrangements and life satisfaction through the mediating role of social support and meaning in life. Supportive surroundings may indeed improve mental well-being of older individuals and help them feel less lonely and more satisfied with life, their observations indicate. This highlights the importance for nursing homes to provide environments that promote social connection and community.

Common areas play a critical role in enriching the daily lives and social engagement of elderly residents. Tribbett (2024) examined how well-designed communal spaces such as lounges, dining areas, and activity zones can enhance emotional well-being, foster social interaction, and alleviate loneliness. Key design elements like natural lighting, accessible layouts, and multipurpose zones contribute not only to comfort and safety but also promote independence and meaningful social participation.

Similarly, Hall (2019) highlights the shift in senior living design, where common areas are evolving from passive spaces into vibrant, multifunctional hubs that support engagement, wellness, and community connection. Prioritizing flexibility, home-like aesthetics, and user-centered design helps create welcoming environments that reflect residents' lifestyles and encourage a strong sense of belonging.

Blackler, Craig, Brophy, and Kamali (2023) explore how design influences the sense of home in aged-care settings. Their studies reveal that many residents prefer to remain in their private rooms rather than use communal spaces, primarily due to issues of comfort, layout, cleanliness, and the impersonal atmosphere of common areas. Although communal areas are intended to foster social interaction, their hotel-like aesthetics, standardized layouts, and lack of personalization can discourage engagement and amplify social isolation. Residents often cited feeling more relaxed and autonomous in their personal rooms, highlighting a mismatch between the design intent, and the lived experience of communal spaces. This supports the rationale for the current study, which seeks to determine whether such a preference for private spaces over communal areas is evident among elderly residents in the Thai nursing home context, and to what extent design and programming factors influence their social adjustment.

Thus, this study conceptualizes the common area in nursing homes as comprising two essential dimensions: physical space and activity programming. These components jointly contribute to the emergence of social interaction among elderly residents. Through enhanced interpersonal relationships, residents are more likely to

experience positive social adjustment. Ultimately, the study evaluates satisfaction with common areas as an outcome measure to assess how the physical and social environment contributes to residents' overall adaptation and well-being in institutional settings (Figure 3).

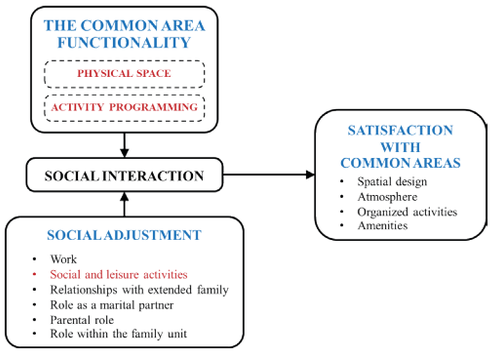


FIGURE 3. The conceptual framework

METHODOLOGY

This study is quantitative research that collects data through a survey method. The target population consists of elderly residents at Waiwattananiwas Home for the Aged, Samut Prakan, Thailand. This facility was chosen because it is a non-profit nursing home in the region, with a long-standing history of supporting socially vulnerable elderly individuals. Its environment features clearly defined common areas, making it a representative site for examining social adjustment in institutional settings.

The sample was purposively selected from residents who were physically able to access and utilize common areas and were not bedridden. Although the sample size was modest (n = 35), it represents the entire population within the facility who met the inclusion criteria, thereby ensuring contextual relevance and representativeness. The survey was conducted in February 2025.

The research instrument was a self-report questionnaire, which consisted of two A4 pages and was divided into four sections:

1. Social Adjustment– Assessed using the Social Adjustment Scale (SAS-SR), a 54-item self-report assessment covering six areas of functioning (Weissman and the MHS Staff, 1999). However, only the social and leisure activities domain was selected to align with the target group and research focus. This social adjustment assessment is designed to apply to the general population, including elderly individuals. Its structure comprehensively evaluates an individual's ability to adapt to social environments across different age groups (Zweig & Turkel, 2007). Item numbers 5, 6, 7, 8, 9 are reversed scored. The form is precoded and is scored on a five-point scale, from which role-area means and an overall score and/or factorially derived dimensions can be obtained.
2. Common area functionality– The impact of the environment on social adjustment is profound and far-reaching. Additionally, it is crucial to consider situational factors that influence adaptation, encompassing the life circumstances and external conditions individuals face at various stages of life (Powell, 1983). The physical environment shapes human relationships through seven key attributes: environmental conditions, sensory perception, spatial dimensions, orientation, symbolism, social interaction, and cultural integration. These factors are essential for designing spaces that align with human behavior and functionality (Horayangkoon et al. 2011). Among these, social interaction is particularly significant, as while the physical environment does not dictate social behavior, it can facilitate or hinder it. The level of interaction depends on spatial design and social factors, making well-planned environments crucial for fostering connections. Evaluating four key aspects: Social Interaction, Relationship Building, Activity Socialization, and Usage Frequency. Its 5-point response rating is 1=strongly disagree to 5=strongly agree.
3. Satisfaction with Common Areas– Assessing spatial design, atmosphere, organized activities, and amenities. It is a 5-point Likert scale ranging from 1= Strongly Dissatisfied to 5= Strongly satisfied. Satisfaction with the physical environment, particularly in communal areas, has been linked to increased levels of resident engagement and perceived quality of life in long-term care settings. Well-designed common areas featuring appropriate furniture layout, activities, and privacy considerations can foster greater comfort and encourage social interaction among elderly residents (Zavotka & Teaford 1997).
4. Demographic Information– Including gender, age, duration of stay in current residence, and common area usage frequency.

Due to visual impairments and limited reading abilities among the elderly participants, the researcher adopted an oral administration approach to ensure accurate and unbiased data collection. Each question was read aloud clearly, with clarifications offered only when requested,

and responses were selected directly by participants using standardized Likert-scale options. The researcher only recorded these choices without interpretation, minimizing potential interviewer bias.

Data collection took place at Waiwattananiwas Home for the Aged, in a controlled and structured environment to minimize disruptions. Each participant was given ample time to comprehend and respond to the questionnaire to ensure the accuracy and completeness of the collected data. Immediately upon completion, all responses were carefully recorded and verified, maintaining data integrity and consistency throughout the process.

CASE STUDY

WAIWATTANANIWAS HOME FOR THE AGED, SAMUT PRAKAN, THAILAND

Tangarinyachaiyakul (2009) compiled the memorial book Doing Good While Still Alive in honor of Ciu Chae-Tang. Ciu Chae-Tang founded Waiwattaniwas Home for the Aged, located at 999 Thai Ban, Mueang Samut Prakan District, Samut Prakan, to support elderly individuals, particularly overseas Chinese who faced hardships in Thailand. Witnessing the struggles of unemployed Chinese immigrants and elderly individuals with no support, he provided temporary shelter at a burial foundation he managed.

In 1970, when 57 elderly individuals from Thian Fah Hospital had no place to go, Chiu offered them a home at his foundation, marking the beginning of the elderly care facility. As word spread, the number of residents grew rapidly, reaching over 170 within a month. To accommodate the increasing demand, the facility expanded with support from philanthropic organizations, including the Poh Teck Tung Foundation.

The home welcomed elderly individuals of all backgrounds, regardless of nationality or financial status, including Chinese, Indians, and Japanese. It covered all living expenses, ensuring that residents had food, shelter, and care. Due to frequent flooding at the original site, the facility was later relocated to its current location, where it continues to serve elderly individuals in need. Chiu Chae-Tang's lifelong mission of selfless service laid the foundation for a long-standing institution dedicated to elderly welfare, ensuring dignity and care for those without support.

The following section discusses the spatial organization and functional zoning of Waiwattananiwas Home for the Aged, along with the activities conducted within its premises to support the well-being of elderly residents. In Figure 4, the facility layout illustrates the spatial organization and functional zoning of the residence. The facility consists of two separate residential buildings designed to accommodate male and female residents separately, providing comfort and privacy. The purple zone represents the male residential building, while the red zone is designated for female residents. The yellow zone represents the central area, which serves as a hub for social activities and interactions among residents. This space is designed to be flexible, allowing for a variety of uses such as gatherings, group exercises, or recreational activities that promote relationships among residents. Meanwhile, the green zone comprises the service areas, which include the kitchen, storage, laundry area, and other essential facilities.

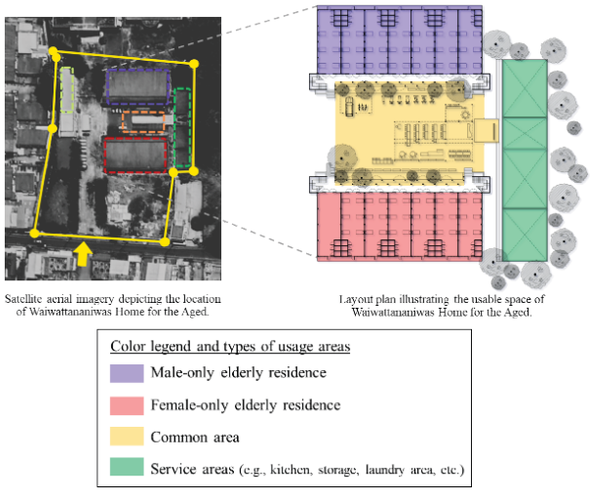


FIGURE 4. The facility layout illustrates the spatial arrangement and functional areas

The common area can be divided into four distinct zones, as depicted in Figure 5, each designed to serve specific functions:

1. Zone 1: The central courtyard situated between the male and female residential facilities, featuring a flexible seating arrangement that can be adapted for various activities.
2. Zone 2: A stage area designated for hosting various events and activities.
3. Zone 3: This zone is equipped with exercise equipment to encourage physical fitness among residents.
4. Zone 4: The balcony located in front of the residential buildings, providing a space for relaxation and social interaction.

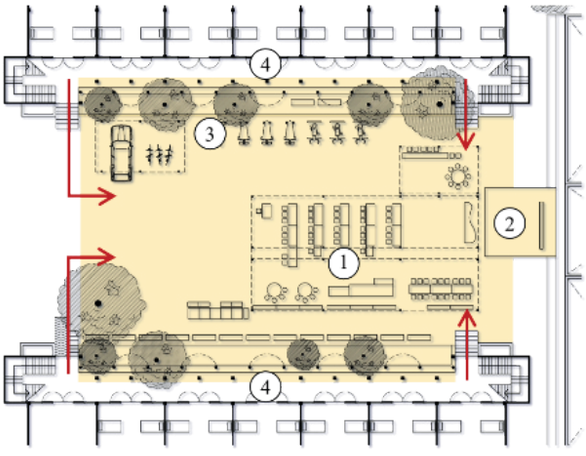


FIGURE 5. Plan showing the layout of the common areas in each zone

Each residential building features common areas located on the front balcony (zone 4), as shown in Figure 6. These spaces serve multiple purposes, including relaxation, socialization, and activity viewing for the residents. Additionally, they provide a convenient dining area for individuals with mobility impairments, such as those who require wheelchairs or have difficulties walking due to age-related conditions or medical issues. The design of these spaces allows residents to observe and engage with activities taking place in the central common area, ensuring inclusivity even for those who may not be able to participate actively. These features support a sense of belonging and interaction while ensuring accessibility for all (Figure 7).

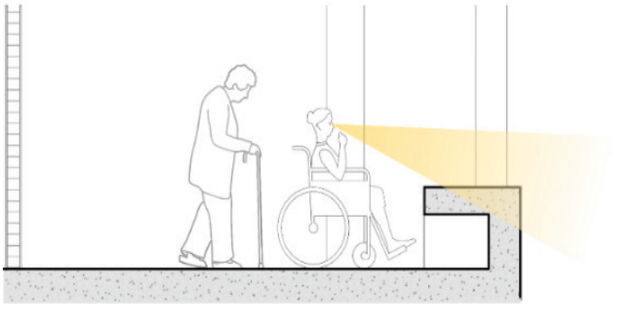


FIGURE 6. Cross-section showing the usage of the zone 4

FIGURE 7. Photographs of common areas in zone 4

The shared central common area (zone 1) serves as a versatile, multi-purpose space designed to facilitate daily communal interactions and structured activities. This area is equipped with flexible furniture, including movable and foldable tables and chairs, allowing the space to be adapted for various needs (Figure 8).

FIGURE 8. Photographs of flexible furniture in zone 1

One of its primary functions is to serve as the main dining area where residents gather for breakfast, lunch, and dinner, fostering a shared mealtime experience that enhances social engagement and community bonding. In addition to dining, this central space accommodates a range of group activities, such as singing, dancing, light exercise sessions, and performances by visiting volunteers who organize entertainment programs to keep residents engaged. The flexibility of the furniture setup allows the area to be easily reconfigured to suit different events, ensuring maximum usability and accessibility. The presence of a well-designed common area plays a crucial role in promoting social interaction, emotional well-being, and community engagement among elderly residents, as illustrated in Figure 9.

FIGURE 9. Photographs of common areas in zone 1

To enhance social activities and exercise opportunities within the common area, various facilities have been thoughtfully arranged to meet the needs of the residents. In Zone 2, there is a designated stage area for hosting different activities and events, such as performances or group gatherings (Figure 10). Additionally, Zone 3 features exercise equipment that residents can use at their leisure, promoting health and well-being as part of their daily routine (Figure 11).

FIGURE 10. Photographs of common areas in zone 2

FIGURE 11. Photographs of common areas in zone 3

This thoughtfully designed layout creates an inclusive living environment for residents to maintain social lives, engage in activities, and foster community, enhancing their well-being. The daily routine starts between 5:00 AM and 6:00 AM, with morning prayers and personal hygiene, followed by exercise and cleaning from 6:00 AM to 7:00 AM. Residents gather for breakfast from 7:00 AM to 8:00 AM, then participate in volunteer-led recreational activities until 11:00 AM, including light exercise, singing, dancing, and games. Lunch is served from 11:00 AM to 12:00 PM, after which residents have personal time until 3:00 PM for rest or leisure activities. Dinner is between 3:00 PM and 4:00 PM, and the evening (4:00 PM to 9:00 PM) is spent at leisure, including bathing, watching TV, and socializing. This structured schedule promotes stability, physical activity, and community participation, ensuring a fulfilling lifestyle for elderly residents.

RESULT AND DISCUSSION

The collected data was analyzed using statistical software to ensure accuracy and reliability in interpreting the results. Descriptive statistics were applied to provide a clear summary of the data, allowing for the identification of trends and patterns in social adjustment, the importance of common areas, and satisfaction with common areas. To present the findings in an organized manner, tables were used to illustrate key aspects such as social adjustment levels, residents' opinions about the importance of common areas, and satisfaction with both spatial and activity aspects, including spatial design, atmosphere, organized activities, and amenities. Additionally, demographic variables such as gender, age, duration of residence in the facility, and frequency of common area usage were analyzed using

frequency distribution and percentages, providing insights into the proportion of residents within different categories. Furthermore, minimum and maximum values were recorded to capture the range of responses, while the mean and standard deviation were calculated to determine central tendencies and variability within the dataset. These statistical measures allowed for a comprehensive interpretation of the data, enabling a better understanding of the relationship between common area utilization and social adjustment among elderly residents.

GENERAL DEMOGRAPHIC PROFILE

The demographic analysis of the sample revealed that most participants were male, with ages ranging from 61 to 88 years and an average age of 75 years (M = 75.17). Most residents had been living in the facility for more than three years and engaged in the daily use of common areas. These findings, as presented in Table 1 and Table 2, provide insights into the general characteristics of the study population and their patterns of engagement within the facility.

TABLE 1. Percentage and frequency of gender, duration of residence and frequency of use of common areas

Descriptive Statistics	M	SD	Min.	Max.
Average of Social Adjustment	3.81	.53	2.67	4.78

(n=35)

TABLE 2. Mean, standard deviation, minimum, and maximum of age

General information about the sample group	%	F
Gender		
Male	71	25
Female	29	10
Duration of Residence		
1 – 3 years	43	15
More than 3 years	26	9
Less than 6 months	17	6
6 months – 1 year	14	5
Frequency of use of common areas		
Every day	77	27
3-5 times per week	14	5
1-2 times per week	9	3
Less than 1 time per week	0	0

(n=35)

SOCIAL ADJUSTMENT

From Table 3, the Social Adjustment Scale results from 35 participants at Waiwattananiwas Home for the Aged indicate varying levels of social adaptation in terms of friendships, social participation, emotional well-being, and interpersonal conflict resolution.

Most participants reported having good social connections, with 40% rating the number of friends as 'Good' (M = 3.63, SD = 0.91). However, discussing personal feelings received the lowest rating (M = 2.23, SD = 1.09), with 34% selecting 'Very Poor'. This appears to reflect a personal preference, as many participants indicated they felt content and preferred not to dwell on emotional concerns. Participation in activities was rated highest, with 57% selecting 'Excellent' (M = 4.34, SD = 0.10), underscoring the role of organized programs in promoting engagement. A strong sense of community was also observed, with 49% rating 'Excellent' in feeling part of society (M = 4.31, SD = 0.80). Interpersonal harmony was evident, as 54% rated 'Excellent' in avoiding conflicts (M = 4.37, SD = 0.84). In terms of emotional resilience, 49% rated 'Excellent' in managing hurt feelings (M = 4.00, SD = 1.24). Moderate discomfort in social settings was reported (M = 3.94, SD = 0.10), suggesting the need for more inclusive environments. While 43% reported rarely feeling lonely (M = 3.89, SD = 1.18), and 29% reported low boredom levels (M = 3.66, SD = 1.14), occasional isolation and disengagement still existed.

TABLE 3. Mean, standard deviation, percentage, and frequency of social adjustment

Social Adjustment Scale							
Social Adjustment	Very Poor (1)	Poor (2)	Moderate (3)	Good (4)	Excellent (5)	M	SD
Number of friends	-	4 (11%)	11 (31%)	14 (40%)	6 (17%)	3.63	.91
Discussing personal feelings with friends	12 (34%)	8 (23%)	10 (29%)	5 (14%)	-	2.23	1.09
Participation in activities	1 (3%)	2 (6%)	1 (3%)	11 (31%)	20 (57%)	4.34	.10
Feeling part of the community	-	1 (3%)	4 (11%)	13 (37%)	17 (49%)	4.31	.80
Arguing with a friend	-	2 (6%)	2 (6%)	12 (34%)	19 (54%)	4.37	.84
Handling feelings of hurt or offense	2 (6%)	3 (8%)	5 (14%)	8 (23%)	17 (49%)	4.00	1.24
Shyness or discomfort in social situations	1 (3%)	-	12 (34%)	9 (26%)	13 (37%)	3.94	.10
Loneliness	-	7 (20%)	5 (14%)	8 (23%)	15 (43%)	3.89	1.18
Boredom	1 (2%)	5 (14%)	9 (26%)	10 (29%)	10 (29%)	3.66	1.14

From Table 4, the average social adjustment score was 3.82 (*SD* = 0.53), with values ranging from 2.67 to 4.78. This indicates that, on average, elderly residents demonstrate a good level of social adjustment, though some individuals experience greater difficulty in adapting.

TABLE 4. Mean, standard deviation, minimum, and maximum of social adjustment

General information of the sample group	M	SD	Min.	Max.
Age	75.17	7.5	61	88

(n=35)

COMMON AREA FUNCTIONALITY

As presented in Table 5, participants expressed strong agreement regarding the role of common areas in promoting social interaction, relationship building, and activity socialization. These findings indicate that residents perceive communal spaces as essential for fostering connections and engagement within the facility.

The results of this study align with previous research highlighting the significance of common areas in fostering social interaction and relationship building among elderly residents. For example, Siette et al. (2022) found that interpersonal communication most frequently occurred in communal spaces, emphasizing their role in promoting daily social engagement. Similarly, Tribbett (2024) and Hall (2019) reported that thoughtfully designed communal areas with accessible layouts and home-like features enhanced residents' participation and emotional well-being. However, as in this study, Blackler et al. (2023) observed that some residents chose to remain in their private rooms due to discomfort with the design or atmosphere of shared spaces, suggesting that physical availability alone does not ensure utilization. These findings collectively reinforce the conclusion that while common areas are essential for social adjustment, their effectiveness depends on both environmental quality and programming tailored to residents' needs and preferences.

TABLE 5. Mean, standard deviation, percentage, and frequency of Common area functionality

Levels of Satisfaction							
Environmental Satisfaction	(1)	(2)	(3)	(4)	(5)	M	SD
Spatial design	-	-	5 (14%)	17 (49%)	13 (37%)	4.23	.69
Atmosphere	-	-	3 (9%)	18 (51%)	14 (40%)	4.31	.63

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Organized activities	-	-	7 (20%)	17 (49%)	11 (31%)	4.11	.72
Amenities	-	-	3 (8%)	16 (46%)	16 (46%)	4.37	.65

(n=35)
Notation: 1= Strongly Disagree, 2= Disagree, 3= Moderately Agree, 4= Agree, 5= Strongly Agree

SATISFACTION WITH COMMON AREAS

As presented in Table 6, participants reported high levels of satisfaction with various aspects of the common areas, including spatial design, atmosphere, organized activities, and amenities. These results suggest that the physical environment and activity offerings are well-aligned with residents' expectations and needs. This finding supports prior research by Zavotka and Teaford (1997), which emphasized that environmental satisfaction contributes to improved emotional well-being and increased participation in communal life. Similarly, Tribbett (2024) and Hall (2019) highlighted that thoughtfully designed spaces with natural lighting, home-like aesthetics, and accessible layouts promote comfort and encourage social interaction. The consistently high satisfaction levels in this study reinforce the importance of integrating user-centered design principles and activity programming to create communal spaces that support both the functional and psychosocial needs of elderly residents in institutional settings.

TABLE 6. Mean, standard deviation, percentage, and frequency of satisfaction with common areas

	Levels of Opinion						
Common Areas Functionality	(1)	(2)	(3)	(4)	(5)	M	SD
The social interaction	-	4 (11%)	6 (18%)	21 (60%)	4 (11%)	3.71	.83
Relationship building	-	2 (6%)	11 (31%)	15 (43%)	7 (20%)	3.77	.84
Activity socialization	-	2 (6%)	9 (26%)	13 (37%)	11 (31%)	3.94	.91
Usage frequency	1 (3%)	8 (23%)	16 (46%)	9 (25%)	1 (3%)	3.03	.86

(n=35)
Notation: 1= Strongly Disagree, 2= Disagree, 3= Moderately Agree, 4= Agree, 5= Strongly Agree

RELATIONSHIP BETWEEN COMMON AREA FUNCTIONALITY PERCEPTIONS AND ELDERLY SOCIAL ADJUSTMENT

An analysis was conducted on the perception levels of common area functionality across four dimensions:

1. Social interaction,
2. Relationship building,
3. Activity socialization
4. Usage Frequency

The social adjustment of elderly residents. The data was collected from 35 participants. The findings, summarized are as follows:

1. Social interaction: The average perception level was Agree (M = 3.71, SD = 0.83, n = 35).
2. Relationship building: The average perception level was Agree (M = 3.77, SD = 0.84, n = 35).
3. Activity socialization: The average perception level was Agree (M = 3.94, SD = 0.91, n = 35).
4. Usage frequency: The average perception level was Moderate Agreement (M = 3.03, SD = 0.86, n = 35).
5. Social adjustment of the Elderly: The average level was Good (M = 3.82, SD = 0.53, n = 35).
6. Correlation analysis findings, according to the correlation analysis results in Table 7.

TABLE 7. Correlation of common area functionality, social adjustment, and satisfaction with common areas

	Correlation Spatial design		Social adjustment Atmosphere	Satisfaction with common areas			
				Organized activities	Amenities		
Common area functionality	The social interaction	Pearson Correlation	.37*	.066	-1.05	.106	.205
		Sig. (2-tailed)	.029	.704	.549	.543	.237
		n	35	35	35	35	35
	Relationship building	Pearson Correlation	.255	.244	.194	.336*	.431**
		Sig. (2-tailed)	.140	.157	.264	.049	.010
		n	35	35	35	35	35
	Activity socialization	Pearson Correlation	.391*	.069	.032	.282	.239
		Sig. (2-tailed)	.020	.695	.854	.101	.168
		n	35	35	35	35	35
	Usage frequency	Pearson Correlation	.033	.188	.255	.09	.140
		Sig. (2-tailed)	.85	.28	.14	.607	.423
		n	35	35	35	35	35

*. Correlation is significant at the 0.05 level (2-tailed).

SOCIAL INTERACTION AND SOCIAL ADJUSTMENT

There was a moderate, positive, and statistically significant correlation between the perception of social interaction in common areas and elderly social adjustment (r = .370*, ρ= .029).

As illustrated in Figure 12, elderly residents who strongly agreed with the social interaction aspect of common areas tended to adapt better socially, while those with lower agreement levels exhibited weaker social adjustment. These findings support earlier research by Siette et al. (2022), who reported that interpersonal communication most frequently occurred in common areas, accounting for 29.3% of total interactions, and emphasized that providing structured opportunities in shared spaces could enhance resident well-being.

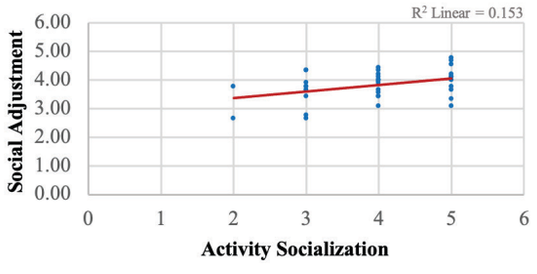

FIGURE 12. Line graph of the relationship between social interaction and social adjustment

RELATIONSHIP BUILDING AND SOCIAL ADJUSTMENT

No significant correlation was found between relationship building and social adjustment (r = .255, $\boldsymbol{\rho}$ = .14). This indicates that the perception of relationship building in common areas did not influence the social adjustment of elderly residents. This resonates with Abbott et al. (2018), who observed that many resident interactions were initiated by staff and often lacked depth, suggesting the need for better-structured environments to foster deeper peer connections.

ACTIVITY SOCIALIZATION AND SOCIAL ADJUSTMENT

A moderate, positive, and statistically significant correlation was observed between activity socialization and social adjustment (r = .391*, $\boldsymbol{\rho}$ = .020). As shown in Figure 13, elderly individuals who strongly agreed with the activity socialization function of common areas exhibited better social adjustment, while those with lower agreement levels faced greater challenges in social adjustment. The significant relationship between activity socialization and social adjustment also aligns with Mauldin et al. (2021) and Gardiner, Geldenhuys, and Gott (2018), who highlighted that structured social facilitation and shared experiences are vital in creating opportunities for elderly residents to form meaningful connections, especially for those with physical limitations.

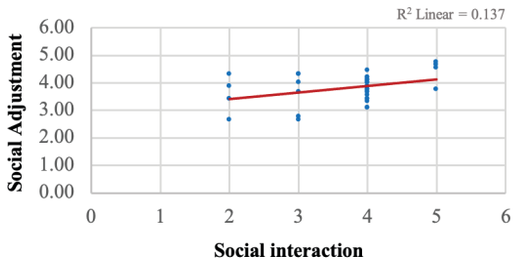

FIGURE 13. Line graph of the relationship between activity socialization and social adjustment

USAGE FREQUENCY AND SOCIAL ADJUSTMENT

No significant correlation was found between usage frequency and social adjustment (r = .033, ρ = .85). This suggests that the frequency of common area usage was not directly related to elderly social adjustment. This reflects Fredrickson and Carstensen's (1990) Socioemotional Selectivity Theory, which posits that older adults may intentionally limit social interactions to emotionally fulfilling ones rather than seeking high frequency. Similarly, Blackler et al. (2023) noted that despite the presence of communal spaces, residents often preferred to remain in their rooms due to design discomfort, layout issues, or lack of personalization. This finding aligns with the current research, as the frequency of usage does not significantly impact the social adjustment of elderly residents. However, overall social adjustment levels remain good, likely because the common area still provides spaces that allow for a degree of privacy, particularly in the balcony area. Residents do not necessarily need to engage in activities in the main courtyard; they can still enjoy social interactions and observe events from the more private setting of Zone 4. This flexibility may contribute to their overall sense of well-being and comfort within the environment.

RELATIONSHIP BETWEEN COMMON AREA FUNCTIONALITY PERCEPTIONS AND SATISFACTION WITH COMMON AREAS

An analysis was conducted on the perception levels of common Area Functionality across four dimensions, as previously resulted, and their relationship with Satisfaction with Common Areas, which was measured across four aspects. Spatial design, Atmosphere, Organized activities, and Amenities. The satisfaction levels with common areas are as follows:

1. Spatial design: The average satisfaction level was High. (M = 4.23, SD = 0.69, n =35)
2. Atmosphere: The average satisfaction level was High. (M = 4.31, SD = 0.63, n =35)
3. Organized activities: The average satisfaction level was High. (M = 4.11, SD = 0.72, n =35)
4. Amenities: The average satisfaction level was High. (M = 4.37, SD = 0.65, n =35)

Correlation analysis findings, according to the correlation analysis results in Table 7, only the relationship building dimension of common area functionality showed significant correlations with two aspects of Satisfaction with common areas, as follows:

RELATIONSHIP BUILDING AND ORGANIZED ACTIVITIES

There was a moderate, positive, and statistically significant correlation between relationship building in common areas and satisfaction with organized activities (r = .336*, ρ = .049). As illustrated in Figure 14, elderly residents who strongly agreed with the relationship-building aspect of common areas reported higher satisfaction with organized activities, whereas those with lower agreement levels expressed low satisfaction. Results are in line with Behrendt, Spieker, Sumngern, and Wendschuh (2023), who reported that functional and structural social support, including peer engagement in communal spaces, significantly improves physical and mental health in long-term care. The lack of meaningful relationship-building in certain cases may reflect limitations in current support mechanisms, reinforcing the need for tailored interventions.

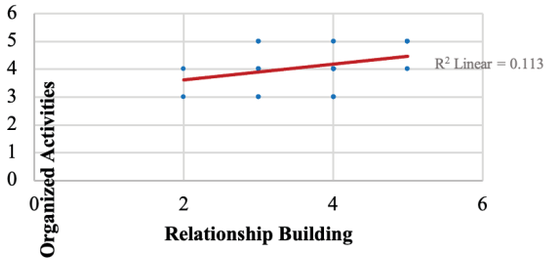

FIGURE 14. Line graph of the relationship between relationship building and organized activities

RELATIONSHIP BUILDING AND AMENITIES

A moderate, positive, and statistically significant correlation was observed between relationship building in common areas and satisfaction with amenities (r = .431**, ρ = .010).

As shown in Figure 15, elderly individuals who strongly agreed with the relationship-building aspect of common areas exhibited higher satisfaction with amenities, while those with lower agreement levels reported lower satisfaction in this aspect. The findings also align with Zavotka and Teaford (1997), who emphasized that physical design elements influence perceived comfort, autonomy, and engagement. High satisfaction with spatial design, atmosphere, and amenities in this study further supports the idea that well-designed environments can enhance both emotional and social well-being.

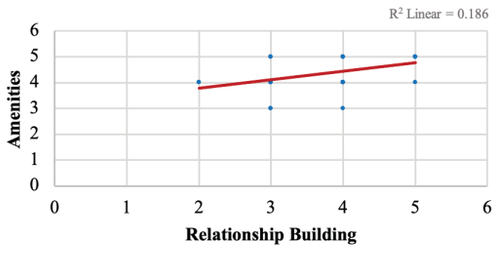

FIGURE 15. Line graph of the relationship between relationship building and amenities

PRACTICAL IMPLICATIONS

Based on the findings, nursing home managers implement design strategies that promote layout flexibility, accessible pathways, and adaptable seating to support inclusive participation. The Design Guide for Long-Term Care Homes recommends clustered seating to foster socialization, handrail-equipped resting areas to aid mobility, and home-like furniture to enhance comfort and emotional connection (Wrublowsky, 2018). Social programming in common areas should be diverse, structured, and responsive to residents' physical and cognitive abilities. Activity zones linked to outdoor gardens and spaces that balance privacy with interaction can encourage sustained participation and accommodate individual preferences.

For policymakers, the study supports adopting environment-centered standards in elderly care, including investment in therapeutic spaces, spatial hierarchy, wayfinding systems, and staff training. These measures align with Thailand's National Plan for the Elderly and global best practices, reinforcing that well-designed environments are key to social adjustment and emotional well-being in institutional settings.

CONCLUSION

This study highlights the critical role of common areas in promoting social adjustment among elderly residents in institutional settings. The findings indicate that while 50% of participants exhibited satisfactory social adjustment, the frequency of engagement in common spaces remained moderate. This suggests that despite the availability of communal areas, various barriers—including personal preferences, underlying health conditions, and mobility limitations—may restrict participation in social activities (Horayangkoon et al. 2011). These limitations align with Abbott et al. (2018), who noted that even when communal areas are accessible, functional, and cognitive barriers may prevent residents from fulfilling their social preferences.

Participants strongly endorsed the role of common areas in fostering social interaction, relationship-building, and group engagement. Additionally, their satisfaction levels were consistently high across multiple factors, including design, atmosphere, organized activities, and available amenities. These findings agree with Zavotka and Teaford (1997), who found that communal environments designed with resident comfort and autonomy in mind improved engagement and social adaptation. They also align with Siette et al. (2022), who demonstrated that nearly 30% of interpersonal communication in aged care occurred in common areas, confirming their role as key facilitators of quality of life.

Given that social adjustment and emotional stability contribute to overall hope and happiness (Jawairia et al. 2021), designing adaptable and engaging spaces becomes a crucial aspect of improving elderly residents' quality of life. Moreover, the results support the Socioemotional Selectivity Theory by Fredrickson and Carstensen (1990), which suggests that older adults may prioritize emotionally meaningful interactions over frequent social contact, helping explain why some residents engaged selectively despite overall satisfaction with the environment.

STRENGTHS AND LIMITATIONS

One of the strengths of this study is its emphasis on environmental design and how common areas enhance social adjustment, reinforcing previous research on built environments and elderly well-being (Thitilertdecha, 2014). However, the study is limited by its small sample size (n = 35) and single-location scope, making generalizability limited. Additionally, the research relied on self-reported data, which may introduce response bias.

SUGGESTIONS FOR FUTURE RESEARCH

Future research should consider expanding the scope of the study by increasing the sample size and including multiple nursing homes across different regions. This would enhance the generalizability of the findings and allow for cross-cultural comparisons to examine how architectural layouts, cultural expectations, and institutional policies influence social engagement and the use of communal spaces (Jawairia et al. 2021; Lee et al. 2002).

Additionally, longitudinal studies are recommended to track changes in residents' social adjustment over extended periods. This would build upon findings from Behrendt et al. (2023), who emphasized the link between social support structures and improved mental and physical health over time in institutional care. Such research could also investigate how continuous engagement in common areas influences well-being trajectories as health conditions evolve.

Given that engagement frequency in communal areas was moderate despite high satisfaction levels, future research should explore potential barriers limiting participation. This echoes the findings by Abbott et al. (2018), who revealed that many residents lacked the opportunity or ability to form social bonds due to cognitive or sensory limitations. Qualitative methods like interviews and focus groups could offer a nuanced understanding of these constraints.

The integration of technology also presents an opportunity for enhancing participation and accessibility. Studies could explore the use of virtual reality (VR) to provide immersive social experiences that reduce loneliness and support cognitive stimulation. Moreover, implementing smart accessibility features—such as automated doors, voice-activated systems, and sensor-based lighting—could help individuals with mobility impairments navigate shared spaces more easily. AI-powered social companions may further promote interaction and offer emotional support, particularly for residents who may be socially withdrawn (New York Post, 2024).

Lastly, specific design interventions and the role of structured social programs should be further investigated. As Hall (2019) and Wrublowsky (2018) suggest, transforming common areas into vibrant, home-like, and flexible environments may lead to greater participation. Future studies could compare resident-led versus staff-organized activities or examine the effects of sensory-rich environments and outdoor access (Thitilertdecha, 2014) to determine what design and programmatic factors most effectively promote sustained social adjustment in nursing homes.

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DECLARATION OF COMPETING INTEREST

None.

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