# Provision of Physical Facilities for Adolescent Mental Health Services in Urban Areas of Malaysia

Hezzrin Mohd Pauzi<sup>1</sup>, Najiah Mohamad Sahide<sup>2</sup>, Mohd Syaiful Nizam Abu Hassan<sup>3</sup>, Sabri Sulaiman<sup>4</sup> & W.N. Jazmina W. Ariffin<sup>5</sup>

1.2.3.4.5 Faculty of Applied Social Sciences, Gong Badak Campus,
 Universiti Sultan Zainal Abidin,
 21300 Kuala Nerus, Terengganu, Malaysia
 Email: hezzrinpauzi@unisza.edu.my

 Received
 Accepted
 Published

 01.12.2023
 08.01.2024
 31.01.2024

https://doi.org/10.61275/ISVSej-2024-11-01-04

#### **Abstract**

One of the effective and efficient implementation of mental health services for teenagers living in urban areas is the provision of adequate and suitable physical facilities for them. However, not many past studies have investigated this issue in Malaysia. This study examines the provision of physical facilities for adolescent mental health services in urban areas.

The study is qualitative. Its sample is teenagers who have received mental health services. Seven adolescents were interviewed. The data collection involved semi-structured interviews using an interview protocol.

Findings show that physical facilities that are conducive environments have compatible building designs for mental health services are suitable for the needs of adolescent patients. However, the interviews revealed that some informants need physical facilities which are more comfortable and spacious rehabilitation places in appropriate locations. These findings help in planning physical facilities providing social care and mental health policies for the youth.

**Keywords:** Physical Facilities, Adolescents, Mental Health Services, Urban Area, Malaysia

## Introduction

Characteristics such as building designs and locations must be taken into account in the planning and development of facilities to provide efficient and effective social services (Hermin et al., 2023; Hezzrin et al., 2016; Pawlak and Vinter 2004; Walker 1989). Moreover, social interaction is also regarded as a crucial element in fostering an engaging atmosphere among the people residing in a building, promoting both physical and psychological well-being (Zahra and Saba, 2023; Mohd Syaiful Nizam et al., 2023). Thus, this issue is important for the implementation of mental health services for adolescents living in any city. However, there are not many studies examining physical facilities and the effectiveness of mental health programmes for people living in cities.

The issue of mental health among adolescents is often hotly discussed in Malaysia. Many studies emphasize the condition but do not focus much on the service system or the implementation of the services, especially from the aspect of physical facilities and locations. This means that the issue of planning these services through projects, that involve the development of physical facilities, needs to be studied since mental health services are increasingly needed by the community. In this context, this paper presents a research that

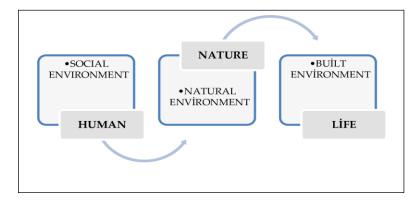
examines the provision of physical facilities for adolescent mental health services in urban areas in Malaysia.

Its objectives are:

- 1. To explore the extent to which the young people are satisfied with the provision of physical facilities for mental health services in Malaysia.
- 2. To ascertain the effectiveness of the services with the facilities provided.

## Theoretical Framework

Program implementation theory shows that the initial stage of physical facility planning involves an assessment of current needs and planning for changes or improvements that need to be made. Among the aspects of planning are program requirements or client requirements, costs, and time required. The need aspect of the social program involves the provision of physical facilities that suit the needs of the client.



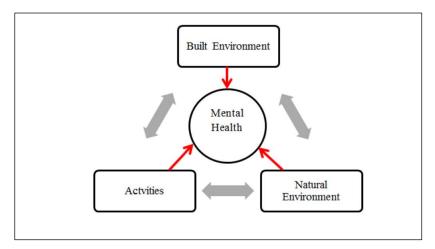
**Fig. 1**: Function of planning Source: Çelikyay,2016

In the ecological planning field, planning is a decision-making and spatial organization process connecting with people, Nature, and life (Fig.1). Furthermore, planning establishes a comprehensive framework that encompasses the interrelationships and interdependencies among social, environmental, and built environments. According to Bubolz and Sontag, (1993), planning establishes a comprehensive framework that encompasses the interrelationships and interdependencies among social, environmental, and built environments. The ecological approach includes three aspects: planning, design, and implementation. There is a reciprocal relationship between people and Nature: people have an influence on Nature by their essential activities, and Nature also has an effect on people (Hawley, 1986). The interplay between people, Nature, and the built environment should serve as a guiding principle for planners, urban designers, architects, and urban policymakers throughout the entire planning process, with a focus on ecological considerations.

Moreover, the theoretical framework of physical facility planning also take into account environmental psychology and environment-behavior relationships. Environmental psychology is a multidisciplinary social science exploring human interaction with the surroundings (Roberts et al. 2023). It investigates how individuals influence their natural and constructed environments, and how these settings, in turn, influence them. Canter and Canter (1979) argue that the environment-behavior relations are highly valuable in facility design to create therapeutic environments. According to them, facilities must be constructed according to the specific requirements of the target demographic.

Willis (1980) identifies several key design issues for mental health facilities, including welcome areas, circulation areas, therapists' offices, inpatient rooms, dayrooms, staff stations, activity therapy areas, cafeterias, as well as colour and patterning, and material and finishes. Pourhadigavabari and Mahmoudi (2023) also promote the concept of designing therapeutic environments that incorporate elements such as natural light, landscape, and natural ventilation.

They both also discuss the impact of artificial light, desirable and unpleasant noise, the impacts of colour, and the significance of green areas in promoting health through built-environments.



**Fig. 2:** A Cycle of Relationship in the Physical Environment Source: Marzhuki et al. (2019)

Moreover, Mazhuki et al. (2019) demonstrate that there is a significant relationship between the built environment, natural environment, activities and mental health. Figure 2 outlines the relations among the natural environment, the built-environment and mental health and well-being. This framework when elaborated unravels the nature of the urban physical environment and its direct or indirect impact, as well as the methods used to quantify it. Scopes are categorized into three primary constituents: the constructed environment, the natural environment, and the activities. In their theoretical relations, each component elucidates the correlation and its impact on mental health. Indeed, each component plays a crucial role in determining the impact on overall health and mental well-being.

This theoretical framework is utilized as a guiding principle in this study, when investigating the impact of these aspects on the provision of mental health services for adolescents residing in urban settings.

## Literature Review

There is plenty of research that have examined the relationships between mental health and the physical environment. Environmental psychology, and environment-behaviour studies in particular have examined this issue in depth. For example, Hooper et al. (2023) examine the requirements of the planning stage of physical facilities for mental health services and conclude that they include appropriate locations, suitable building designs, indoor space and layout, private space, ventilation, area, safety features, and adequacy of facilities or equipment needed during treatment. They also show that residential design in Australia affects an individual's mental health. However, they refer to the design of private houses and say that few studies have explored how to optimize the design of high-density housing to promote residents' mental wellbeing. According to them, greater implementation of a combination of design requirements for solar and daylight access, acoustic and visual privacy, private open space, storage, communal circulation spaces, car parking, and a greater flat mix result in significantly higher positive mental well-being.

They also stress on the interior environments and the relevance of natural ventilation and thermal comfort on physical health and cognitive function. In fact, they show that daylighting and poor window views are linked to a 60% and 40% increase in the likelihood of depression, respectively. However, they focus on those households that are adults, and the study location is in Australia. The study is also on those who live in apartment-type houses. Nevertheless, these findings can be used as a guide to study the need for appropriate physical facilities in adolescent mental health services.

Tsekleves et al., (2020) examine the need for playful space design for rehabilitation of dementia patients. They have conducted a study on the need for creative space design for the rehabilitation of dementia patients. They seek to promote social interaction among persons with dementia, to develop imagination and creativity, and to engage even the most hesitant and insecure members. However, they reveal that the precise concept and nature of co-design in the context of working with people with dementia are unclear.

Kiser (2009) offers a comprehensive examination of the primary factors to be taken into account when creating living spaces for individuals with neuro impairment resulting from acquired brain injury (ABI). He explores the components that must be taken into account to ensure that the environment is created with a functional perspective. This analysis encompasses the examination of how cognition and various impairments, such as visual, visuo-perceptual, motor, behavioural, and sensory impairments impact residential design concerns and security. Moreover, resources are available for people engaged in house design for this specific demographic to aid in making design choices and carrying out the plans.

According to Wills (1980), the design of mental health facilities can optimize the necessary human interactions for therapy and effectively address people's fundamental requirements for safety, security, self-esteem, and the cultivation of interpersonal and social skills. To identify the elements in the layout of indoor areas that maximize people's receptiveness to therapy, Wills (1980) has investigated six community mental health centres in Indiana. Indeed, he provides design suggestions for mental health facilities in various places including reception and admission areas, corridors and stairwells, therapists' offices, inpatient rooms, and dayrooms He also establishes the correlations between colour, visual patterning, and light, as well as the processes of choosing the materials and finishes. In summary, recent research indicate that the physical facilities, often known as the built environment, have an impact on the effectiveness of therapeutic environments, specifically mental health treatments.

# Research Methodology

This study applies the interpretivism paradigm. This paradigm analyzes in depth an issue such as human attitude and behavior (Creswell and Creswell, 2022; Jazmina et al., 2023). This study is qualitative. It was conducted in the urban area of the Malaysian Peninsular. The study sample was adolescents who had received mental health services. It uses a purposive technique for sampling. A total of seven (7) adolescents were interviewed. The data collection method is a semi-structured interview session using an interview protocol. The research analysis is done thematically. ATLAS TI Version 23 software was used for the interview data analysis. Consent was obtained from the informants before the interviews.

# **Findings and Discussion**

An interview session was conducted with seven informants. The results of the study include the demographic characteristics of the informants, which refers to the informant's background that has been collected including the informant's gender and age. Table 1 displays the demographic characteristics of the adolescent informants interviewed on the availability of physical facilities for mental health services. The informants were aged between 21 and 22 years.

**Table 1.** Demographic Profile of Informants Source: Authors

Informant	Gender	Age	
1	Female	21	
2	Male	21	
3	Female	22	
4	Female	22	
5	Female	21	
6	Female	21	
7	Male	22	

Table 2 shows some themes about the provision of physical facilities for mental health programs from interview sessions with adolescent informants living in urban areas. They are:
1) Conducive physical facilities, 2) Compatibility of building design, and 3) Location appropriateness.

**Table 2:** Thematic, sub-thematic, and Informant for the provision of physical facilities for adolescent mental health services in urban areas

Source:	Authors

Thematic	Sub-thematic	Informant
Conducive physical facilities	Provision of adequate table and chair facilities	1,2,3,4,5,6,7
	Provided air condition	
Compatibility of building design	<ul> <li>Attractive design that meets the client's needs</li> </ul>	1,2,4,5
	Small room	6,7
Location appropriateness	Location far from residential and crowded	3,4

All the informants expressed satisfaction with the physical amenities available, which aligns with the subject of conducive physical facilities. They affirmed that the constructed facility was suitable, a private space equipped with air-conditioning amenities, and had ample table and chair provisions. According to the Informant 1, the recuperation room had a comfortable ambience as a result of air-conditioning, which kept the temperature cool. These sufficient amenities expedite the process of mental health recuperation. They are satisfied with the amenities offered. This study aligns with the findings of Hooper et al. (2023) and Wills (1980), indicating that the attributes of physical facilities have a significant impact on the healing process of clients.

"The facilities here make me feel at ease. It's not hot. It is cold because of the air conditioning. This good condition made my recovery process easier".

(Informant 1)



**Fig.3:** Air-conditioned therapy room. Source: Author



**Fig.4:** Activities space room Source: Author



**Fig.5:** Provision of chairs in the therapy room Source: Authors

"Physical facilities such as tables and chairs for rehabilitation activities are sufficient and comfortable".

(Informant 3).



**Fig.6:** Colorful design Source: Authors

The findings also show that the design possesses an aesthetically pleasing quality that effectively fulfils the requirements of the people. Most of the informants were satisfied with the comfortable, attractive design of the spaces and the walls painted in attractive colours. This mental health rehabilitation service is also equipped with interesting therapy tools. This viewpoint aligns with the research conducted by Trekleves et al. (2020), which posits that individuals undergoing the rehabilitation process can benefit from the incorporation of creative spatial design to foster the development of imagination and creativity.

"I love the facilities here; the design is attractive and comfortable. This eased my recovery process. By providing other related tools or facilities"

(Informant 5)

Nevertheless, there exist individuals who voice discontent with the adequacy of the physical infrastructure for mental health services within their locality. According to some of the informants, the facilities designated for mental health activities are characterized by limited space, lack of spaciousness, and diminished suitability. According to the Informant 7, the dimensions and layout of the activity room of rehabilitation services are limited, allowing for a maximum occupancy of only two individuals, namely the client and the practitioner. Additionally, due to the limited capacity of the small space and the presence of only one practitioner, other clients were compelled to wait outside.

"The design of the rehabilitation activity room is small and cannot accommodate many people. Only me as a client and practitioner at one time".

(Informant 7)

In addition, according to one of the informants, the mental health service facilities provided are less suitable in terms of the location of the facilities. According to him, there are also locations or mental health rehabilitation places that are far from their houses. Although there is the service in the urban area, the location is in a busy city and there is no car parking. This causes informants to be less interested in continuing to make appointments with mental health practitioners.

"The location of the mental health service facility is far from the residence. If the location or service place is located in the city, the area is very busy and there is no parking for cars. This caused me not to come for an appointment with a practitioner".

(Informant 3)

This finding demonstrates that accessibility of location or geographical aspect also plays a role in influencing a client's process of recovering their mental health. This remark is considered analogous to the assertion made by Pawlak and Vinter (2004). Establishing service facilities at far locations from people's residences presents challenges in accessing necessary medical care. The presence of these service facilities within urban areas is also characterized by high levels of congestion, which consequently diminishes clients' enthusiasm for attending therapy sessions.

# **Conclusions**

Through the implementation of this research, the planning process of a programme is effectively executed, encompassing the critical tasks of problem analysis and assessment of the client's mental health program requirements, specifically the provision of physical infrastructure. According to the results of this study, based on the informants' interviews, the spaces should be air-conditioned, not in congested areas, have easy access and parking, and the location of mental health services should be suitable.

This study derived its findings on mental health in the adolescent population. It engaged informants who have previously undergone rehabilitation or are currently doing so. Nevertheless, this study is not without limitations as it relies solely on the interview methodology and a few numbers of 7 respondents. The researchers propose that future studies employ mixed-method and ascertain these with a larger cohort of informants to augment the trustworthiness of the findings.

Nevertheless, it provides some valuable resource for policymakers, governmental bodies, and relevant non-governmental organizations (NGOs) in enhancing the provision of mental health services for adolescents. The findings of this study can inform efforts to align these services with the overarching goals of promoting the well-being of individuals, as outlined in the Mental Health Policy of Malaysia.

# Acknowledgements

This research was supported by the Ministry of Higher Education (MOHE) through the Fundamental Research Grant Scheme project (FRGS/1/2021/SS0/UNISZA/02/3- RR421).

# References

- Bubolz, M.M. & Sontag M.S. (1993) Human ecology theory. In: Boss P.G, et al. editors. Sourcebook of Family Theories and Methods: A Contextual Approach. Springer, doi:10.007/978-0-387-85764-0 17.
- Çelikyay, S. (2016) A Theoretical Framework on Retro-Fitting Process Based on Urban Ecology in Mustafa Ergen., Sustainable Urbanization. United Kingdom: IntechOpen Limited.
- Canter, D.V., & Canter, S. (1979) Designing for Therapeutic Environments: A Review of Research. London: John Wiley & Sons.
- Creswell, J.W., & Creswell, D. (2022) Research Design: Qualitative, Quantitative and Mixed Methods Approaches. Lindon: SAGE Publications.
- Hawley A.H. (1986) Human Ecology: A Theoretical Essay. USA: The University of Chicago Press.
- Hermin Werdiningsih., Ni Kadek Ayu Yulita., Indriasjario. & Arnis Rochma Harani. (2023) Strategies to Improve the Quality of Educational Environments: An Evaluation of the Student Center Building at the Diponegoro University, Semarang, Indonesia. ISVS e-journal, 10(4), pp.156-167.
- Hezzrin Mohd Pauzi., Nor Jana Saim., Norulhuda Sarnon, Kusenin. & Mohammad Rahim Kamaluddin. (2016) Factors Involved in Implementing Effective Moral Rehabilitation Programmes for Child Offenders. E-Bangi, Special Issue 2, pp. 023-036
- Hooper, P., Kleeman, A., Edwards, N., Bolleter, J. & Foster, S. (2023) The architecture of mental health: identifying the combination of apartment building design requirements for positive mental health outcomes, The Lancet Regional Health Western Pacific, 37.
- Kiser L, Zasler N. (2009) Residential design for real-life rehabilitation. NeuroRehabilitation. 25(3), pp. 219-27. Available at: doi: 10.3233/NRE-2009-0518. PMID: 19893190.
- Marzhuki, M.A., Ghazali, N.M., Leh, O.L.H. & Yakob, H. (2019) A Bidirectional Associations between Urban Physical Environment and Mental Health: A theoretical framework. Environment Behavior Proceedings Journal, 5(13), pp. 167-173.
- Mohd Syaiful Nizam, Abu Hassan., Asmawi Ibrahim., Hafis Simin, Khairul Amri Kamarudin., Ain Munirah Khairu Anwar., Nur Ain Mohd Zain., & Hezzrin Mohd Pauzi. (2023) Incidences and Causal Factors of School Dropouts Among the Indigenous Youth in Malaysia. ISVS e-journal, 10(9), pp. 343 351.
- Roberts, M. et al. (2023) The Contribution of Environmental Science to Mental Health Research: A Scoping Review. International Journal of Environmental Research and Public Health, 20(7), pp.1-38.
- Pawlak, E.J & Vinter, R.D. (2004) Designing and planning Programs for Nonprofit and Government Organizations. San Fransicso: Jossey-Bass.
- Pourhadigavabari., M., & Mahmoudi., A. (2023) How to design a therapeutic environment and the interaction of its tranquillity of patients. International Journal of Research in Organizational Behavior and Human Resource Management, 1(3), pp. 32.47.
- Tsekleves E, Bingley AF, Luján Escalante M.A. & Gradinar A. (2020) Engaging people with dementia in designing playful and creative practices: Co-design or co-creation? Dementia, 19(3), pp. 915-931. Available at: doi:10.1177/1471301218791692
- Walker, A. (1989) Project Management in Construction. BSP Professional Books.
- Willis VJ. (1980) Design considerations for mental health facilities. Hosp Community Psychiatry, 31(7), pp.483-90.
- WN. Jazmina W. Ariffin., Syed Shahfiq., Fazil Ahmad., Asmawi Ibrahim. & Farah Syazrah Ghazalli. (2023) Handicraft Innovations: A Strategic Approach to Preserving Intangible Cultural Heritage of Malaysia. ISVS e-journal, 10(7), pp.137-146.
- Wood, E.R.G. & Wood, S.E. (1993) The World of Psychology. Massachusetts: Ally and Bacon. Zahra Ahmed. & Saba Sami Al Ali. (2023) Psychological Relationships Between Heritage Buildings and their Occupants: A Theoretical Exploration. ISVS e-journal, 10(7), pp.211-230.