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## PUBLIC AND COMMERCIAL FACILITIES AS A REINFORCEMENT OF RESIDENTIAL PREFERENCES IN JOHOR CITY HOUSING, MEDAN

Muhammad Riza Asrofi Angkat<sup>1</sup>, Dr Ir Dwira Nirfalini Aulia<sup>2</sup> and Beny O Y Marpaung<sup>3</sup>

<sup>1</sup>Master Student of Master Degree Program, Faculty of Engineering, Universitas Sumatera Utara Medan 20155, Indonesia

<sup>2</sup>Lecturer Master Degree Program, Faculty of Engineering, Universitas Sumatera Utara Medan 20155, Indonesia <sup>3</sup>Lecturer Master Degree Program, Faculty of Engineering, Universitas Sumatera Utara Medan 20155, Indonesia

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## ABSTRACT

The need for houses and housing will continue and increase every year. Housing equipped with facilities and infrastructures such as public facilities and commercial facilities presented by developers can be an added value for products offered to the public. The presence of public and commercial facilities allows the creation of a modern lifestyle, making it easier for residents to fulfill their daily needs, saving time, costs and energy, increasing comfort and increasing the selling value of housing. Housing is no longer limited to residential areas, but becomes a form of welfare, standard of living, personality and human civilization of its inhabitants. Johor City housing, located on Jalan Karya Wisata Medan Johor, is built with a cluster concept with a one gate system and clear boundaries between clusters and is equipped with planned, diverse and complete public and commercial facilities. The purpose of this research is to analyze the existence of public and commercial facilities as a reinforcement of residential preferences in Johor City housing. The research uses quantitative methods with the analysis technique used is descriptive. Data collection through the distribution of questionnaires using google form to residents who are proportionally distributed in each cluster. Research variables include demographics, facilities (J Walk and J Square), environmental comfort, facilities, infrastructure, location and accessibility and design. The research findings explain that public and commercial facilities are reinforcing residents' preferences in choosing their occupancy in Johor City housing and there is a correlation from the middle to upper socio-economic strata who prefer housing based on facilities and cluster systems.

**KEYWORDS**: Preferences, Residential Preferences, Housing, Facilities, Occupancy

## 1. INTRODUCTION

As one of the basic human needs, the demand for housing will continue and increase every year in accordance with the increase in population and the growing economic and socio-cultural demands. Law No. 11/2011 on Housing and Settlement Areas explains that a house is a building that functions as a livable residence, a means of family development, a reflection of the dignity of its occupants,



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and an asset for its owner. Home is a place to unwind, a place to mingle, and foster a sense of family among family members, a place to shelter the family and store valuables, and the house is also a social status symbol (Azwar in Mukono, 2000). In line with the house, housing is generally defined as an association of several houses that function as residences and dwellings built by the government and the private sector. (Sunarti, Textbook of Housing and Settlement, 2019). Housing is also generally known to have complete facilities and infrastructure and is built formally with a clear license by the developer.

The various housing concepts offered to the community become the basis of preferences for each individual in choosing their place of residence. Settlement preference according to Sinulingga (Kurniasih, 2005: 14) is a person's desire or tendency to settle or not settle in a place that is influenced by variables. Meanwhile, Porteus (in Hidayati, 2014) explains that residential preference means a person's tendency to make a decision to settle or not, and usually the preference between one person and another varies depending on the factors that cause it. Individuals in owning housing will be closely related to humans as residents, behavior, rules and desires that are dynamic and constantly evolving (Santoso & Riviwanto, 2011). This causes residential preferences to be very important, following the development and dynamic. These residential preferences are also useful as a guide in the direction of urban settlement development to be more optimal and in accordance with the expectations and desires of the community. In determining the location of settlement, each individual has criteria and preferences for living in places that they think are to their liking. Some may choose to live in the city center, suburban areas, industrial areas or mountainous areas. Heru Supriyanto (2005) revealed that the superiority of facilities is a consideration for consumers in choosing housing at Puri Sewon Asri. Therefore, the more facilities offered by the developer will be considered by consumers in buying the residence. Iskandar and Sumiati (2018); Imalia and Aprileny (2020); and Sugianto and Ginting (2020) also state the importance of facilities to residential purchasing decisions, this is revealed in their research that facilities have a significant positive influence on residential purchasing decisions.

One of the largest private housings in Medan Johor District is Johor City Housing, located on Jalan Karya Wisata Medan Johor, this housing is built with the concept of different clusters with types and building areas tailored to market needs. Each cluster is equipped with its own security system and has clear boundaries between clusters and other facilities. Housing is equipped with planned, diverse and complete public and commercial facilities such as clean water, electricity, roads, houses of worship, education, trade and culinary centers with parks and outdoor play areas. Apart from being a supporting factor for the needs and activities of residents, the existence of public and commercial facilities is also a reason for people to come and live in this housing.

This research seeks to analyze the existence of public and commercial facilities as a reinforcement of residential preferences in Johor City housing, Medan.



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## 2. METHODOLOGY

In conducting a study of public and commercial facilities as a reinforcement of preferences in Johor City Medan Johor housing, researchers use quantitative descriptive research methodology, which is research that will describe the situation as it is and draw conclusions and display them based on observed data using numbers (Arikunta, 2006).

## 2.1 Research location

The determination of the research location in Medan City was based on the high number of planned housing developments. The research location has at least been occupied and has adequate commercial public facilities, planned and has been running for at least 5 years with the number of building units that have been sold and occupied at least 1000 units. One of the sub-districts in Medan City with high planned housing growth is Medan Johor Sub-district and Johor City (J City) Housing is one of the private planned housings located in the sub-district with a total of 1,000 residential units. This housing is designated as the research location. Johor City Housing is located on Jalan Karya Wisata, directly adjacent to the Deli River and Jalan Luku. This housing was built since 2010 and is equipped with various public and commercial facilities to support the activities and needs of residents and the surrounding community. This housing presents various types of housing which are divided into several clusters according to the type and area of land with one gate system security to provide environmental comfort and security.



Figure 1 Map of johor city residential area Sumber: Google Map



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Figure 2. Clusters in Johor City Housing Source: Personal Documents & PT Capital



Figure 3 J Walk and J Square facilities Source: Personal Document

## 2.2 Determination of Research Variables

Determination of research variables is based on the problems and theoretical basis referred to. The research variables are then translated into a questionnaire. The questionnaire is divided into 2 parts, namely respondent demographic data and preference variables. The following table outlines the components of the research variables used in the questionnaire.



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| No | Demographic Data Type         | Data Source   | Question Type |
|----|-------------------------------|---------------|---------------|
| 1  | Name                          | Questionnaire | Open          |
|    |                               |               | Questionnaire |
| 2  | Gender                        | Questionnaire | Closed        |
|    |                               |               | Questionnaire |
| 3  | Home Ownership Status         | Questionnaire | Closed        |
|    |                               |               | Questionnaire |
| 4  | Length of current residence   | Questionnaire | Closed        |
|    |                               |               | Questionnaire |
| 5  | Location of current residence | Questionnaire | Closed        |
|    |                               |               | Questionnaire |
| 6  | Occupation                    | Questionnaire | Closed        |
|    |                               |               | Questionnaire |
| 7  | Income level                  | Questionnaire | Closed        |
|    |                               |               | Questionnaire |
| 8  | Education level               | Questionnaire | Closed        |
|    |                               |               | Questionnaire |

## Table 1 Demographic data of respondents

Source: Data processed, 2023

## Table 2 Variables and sub-variables of respondents' preferences

| Variable                 | Sub Variable                                                                                             | Draft Questionnaire                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Residential facilities   | - J Walk and J Square                                                                                    | As residential preferences, frequency of use, functions and facilities                 |
| Environmental<br>comfort | <ul> <li>Security</li> <li>Noise</li> <li>Privacy</li> <li>Interaction between<br/>neighbors</li> </ul>  | How is crime in housing, noise level,<br>privacy and relationship between<br>residents |
| Facilities               | <ul><li>Open Space</li><li>Vegetation</li><li>Shopping Facilities</li><li>Entertainment center</li></ul> | How complete the facilities are and<br>what condition they are in                      |
| Infrastructure           | <ul><li>Drainage network</li><li>Road network</li><li>Waste management</li></ul>                         | Flood-free location, housing road condition and waste treatment method                 |
|                          | - Location Strategy                                                                                      |                                                                                        |



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| Variable               | 9 | Sub Variable                     | Draft Questionnaire                                               |  |  |  |  |
|------------------------|---|----------------------------------|-------------------------------------------------------------------|--|--|--|--|
| Location accessibility |   | Accessibility<br>Pedestrian path | Location of facilities, access and condition of pedestrian paths. |  |  |  |  |
| Design                 | - | Style                            | Assessment of building design and<br>quality                      |  |  |  |  |

Source: Data processed 2023

### **2.3 Data Collection Methods**

This research data includes primary and secondary data. Primary data is obtained through online questionnaire distribution to respondents using google form. Meanwhile, secondary data used in this study can be in the form of documents related to research such as literature, journals, Central Bureau of Statistics data and previous research.

| Variables                    | Required Data                                                                               | Data Collection<br>Technique |
|------------------------------|---------------------------------------------------------------------------------------------|------------------------------|
| - Demographics               | Information related to occupation, income,                                                  | Questionnaire                |
|                              | length of stay, location, housing status, gender and education.                             |                              |
| - Residential facilities     | Frequency of use, function and condition of the                                             | Questionnaire                |
| (J Walk dan J Square)        | facility                                                                                    |                              |
| - Environmental Comfort      | Noise levels, crime and privacy between residences and commercial public facilities         | Questionnaire                |
| - Facilities                 | Facility condition, availability and distance from residence                                | Questionnaire                |
| - Infrastructure             | Flooding, residential road conditions and waste management                                  | Questionnaire                |
| - Location and accessibility | Existence of J Walk and J Square locations, traffic flow, access and pedestrian conditions  | Questionnaire                |
| - Design                     | The quality of the building, the design of the building is attractive and suitable for your | Questionnaire                |
|                              | needs.                                                                                      |                              |

## Table 2 Data needs and collection methods

Source: Data processed 2023

The questionnaire is composed of 2 parts, namely respondent demographic data and preference variables. The data processing method used is a statistical method by collecting and verifying data, scoring based on respondents' answers, providing data presentation with an explanation of the data that



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has been processed and analyzed and then concluding the research results. Statistical calculations used to process and describe data are using descriptive statistics.

Research respondents are a sample of the population who come from residents of Johor City housing who live in these residences both as owners and tenants who use public and commercial facilities in Johor City housing. Johor City housing which consists of 4 clusters namely Cluster Metropolis, Cluster J Elite, Cluster J Crown and J Line with a total of 835 residential units. The following table outlines the number of dwellings for each cluster.

| No                          | Cluster      | Number of Units |  |  |  |  |
|-----------------------------|--------------|-----------------|--|--|--|--|
| 1                           | J Metropolis | 375             |  |  |  |  |
| 2                           | J Crown      | 180             |  |  |  |  |
| 3                           | J Elite      | 200             |  |  |  |  |
| 4                           | J Square     | 80              |  |  |  |  |
|                             | Total        | 835             |  |  |  |  |
| Source: Data processed 2023 |              |                 |  |  |  |  |

## **Table 3 Number of Residential Units**

Source: Data processed 2025

## **3. RESULT AND DISCUSSION**

## 3.1 Demographic Characteristics of Johor City Housing Residents

The demographic characteristics of Johor City housing residents who are respondents to this study include gender, occupation, education level, income level, current residence location, home ownership status and current length of stay. The number of respondents is 92 people spread across each cluster.

Based on the gender of the respondents, 73.9% were male and 26.1% were female. The type of work of the majority of respondents is self-employed as much as 41.3% followed by civil servants / stateowned enterprises as much as 23.9%, private employees 18.5%, students 14.1% and 1.9% others. The last level of education of respondents is mostly Bachelor (S1) as much as 69.6%, postgraduate as much as 20.7% and the rest of the education level is diploma and high school. This suggests that most respondents have a relatively high level of education. Income levels are grouped into 4 groups starting from < 5 million rupiah to  $\ge 15$  million rupiah per month. From the data, it can be seen that the income level of respondents is dominated by income  $\geq 15$  million per month as much as 51.1%, income level > 10 million rupiah - 15 million rupiah < as much as 23.9%, income level > 5 million rupiah - 10 million rupiah < as much as 7.6% and < 5 million rupiah as much as 7.6%. Considering that the 2023 MSE in Medan City is IDR 3,624,117.59 (https://www.tribunnews.com), as well as the range of respondents' income levels that are predominantly above the 2023 MSE in Medan City, it can be said that the income is high.



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Based on the location of the respondent's residence, the majority of Johor City housing respondents live in Cluster J Metropolis as much as 55.4%, Cluster J Elite as much as 21.7%, Cluster J Crown as much as 15.2% and the rest are located in J Square as much as 7.6%. As for the status of home ownership, 80.4% of respondents' houses in Johor City housing are self-owned, then 10.9% with the status of rental houses and 8.7% with the status of belonging to parents. In terms of length of stay as many as 70.7% of Johor City housing respondents have settled for > 5 years, then 22.8% have settled > 3 years - 5 years < and the remaining 6.5% have just settled in Johor City Housing for > 1 year - 3 years <.

## **3.2 Public and Commercial Facilities as Settlement Preferences**

Fulfillment of housing in accordance with the residential preferences of each individual will increase comfort and satisfaction for people living in the dwelling.

The majority of Johor City housing residents make public and commercial facilities a consideration in determining their choice of residence in Johor City. The existence of these facilities is a factor in their preferences in choosing housing. Facilities can help meet their needs in living and are considered to be able to support life and various life needs both in terms of economy, education, religion and the need for family entertainment. This can be seen from 52.17% of respondents strongly agreeing that public and commercial facilities are a consideration in determining their choice of residence in J City, 44.57 agreeing, 3.26 being neutral and no respondents expressing disagreement.

As many as 51.09% of respondents also agreed that public and commercial housing facilities were complete to support all activities of the residents' lives, while 20.65% strongly agreed and each as many as 4.35% strongly disagreed, 15.22% disagreed and 8.70% were neutral.

Respondents as much as 54.35% also agreed that the J Walk and J Square facilities were able to fulfill their daily needs. 26.09% strongly agreed, 7.61% disagreed and were neutral while 4.35% disagreed. The community feels that in fulfilling their daily needs they no longer need to leave housing because the facilities in housing are complete and answer all daily needs.

The condition of the facilities that are well planned and always carried out routine maintenance every day by placing cleaners in each part of the facility makes residents feel that the facility is feasible and adequate, this is reflected in the results of the questionnaire where as many as 55.43% agreed, 23.92% strongly agreed, 11.93% disagreed, 5.43% were neutral and 3.26% strongly disagreed with the statement.

The majority of residential communities feel happy to live in Johor City Housing. As many as 53.26% strongly agree that the J Walk and J Square facilities are what make them happy to live in Johor City housing and 38.04% agree, 4.35% are neutral and only 3.26%, 1.09% disagree and strongly disagree. This reaffirms that their preference in choosing housing is due to the J Walk and J Square facilities.



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Along with a sense of pleasure towards these facilities, residential communities also often utilize housing facilities, where 51.09% agreed with the statement, 30.43% strongly agreed, 10.87% disagreed, 6.52% were neutral and only 1.09% disagreed. This shows that the residential community appreciates the pleasure of the facility by utilizing the facility in various activities of life.

Respondents felt that this facility was able to meet the need for entertainment for families so that 52.17% agreed that J Walk and J Square were one of the centers for family entertainment, 19.57% strongly agreed, 18.48% disagreed, 7.61% were neutral and 2.17% strongly disagreed.

The detailed percentage of residential preferences in Johor City Housing can be seen in the following table 4.

| Facility as Preference                                          | Percentage |       |      |       |       |  |
|-----------------------------------------------------------------|------------|-------|------|-------|-------|--|
| Facility as I reference                                         |            | TS    | Ν    | S     | SS    |  |
| - Public and commercial facilities are a consideration in       | 0          | 0     | 3.26 | 44.57 | 52.17 |  |
| determining the choice of living in Johor City                  |            |       |      |       |       |  |
| - Public and commercial facilities are complete                 | 4.35       | 15.22 | 8.70 | 51.09 | 20.65 |  |
| - J Walk and J Square facilities are able to fulfill your daily | 4.35       | 7.61  | 7.61 | 54.35 | 26.09 |  |
| needs                                                           |            |       |      |       |       |  |
| - The condition of public and commercial facilities is decent   | 3.26       | 11.96 | 5.43 | 55.43 | 23.91 |  |
| and adequate                                                    |            |       |      |       |       |  |
| - The existence of J Walk and J Square facilities makes you     | 1.09       | 3.26  | 4.35 | 38.04 | 53.26 |  |
| happy to live in Johor City.                                    |            |       |      |       |       |  |
| - I often utilize J Walk and J Square housing facilities        | 1.09       | 10.87 | 6.52 | 51.09 | 30.43 |  |
| - J Walk and J Square as one of the family entertainment        | 2.17       | 18.48 | 7.61 | 52.17 | 19.57 |  |
| places                                                          |            |       |      |       |       |  |

## Table 4 Preferences of public and commercial facilities as residential preferences

Source: Data processed 2023

## **3.3 Environmental Comfort**

The environmental comfort factor is important for a person's preference in choosing housing. This comfort factor consists of several sub-variables including crime rate, noise, privacy and interaction between neighbors.

A safe residential environment is an environment that is safe from crime both while in the house and while doing activities in the neighborhood around housing. A total of 57.61% of respondents agreed saying that the crime rate was low due to adequate security facilities, 22.83% said they strongly agreed,



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10.87% disagreed, 6.52% were neutral and 2.17% strongly disagreed. The security factor in housing facilities is supported by the availability of security guards in occupancy and facilities. Security guards are on guard 24 hours 7 days by setting up security posts in each residential cluster and access in and out of housing. Besides being on duty at the security post, officers also routinely go around the facility area to ensure that environmental security is maintained. The facility is also equipped with a CCTV system located at every entrance and exit and strategic points.

Activities at J Walk and J Square facilities are very diverse ranging from the economic, education, sports and entertainment sectors. These various activities are well managed by the developer to be accommodated and in accordance with the needs of residential residents. Activities have even started since 6am. All of these activities do not cause significant noise for residents, in the sense that every activity of residents in their dwellings is not disturbed audio so that the comfort of residents to stay is still obtained. This is reflected in the respondents' answers where 63.04% agreed that the activities of the J Walk and J Square facilities did not cause noise for residents, 16.30% strongly agreed, 9.78% disagreed and 5.43% each stated neutral and strongly disagreed with the statement.

The housing system that uses a cluster system where access to housing is not a public access that can be passed by the general public results in the creation of privacy between the residential environment and the residential facility environment. Privacy affects the tranquility of the environment. Each individual or group tends to control itself interacting with other people both visually, audibly and olfactory (Laurens, 2004). In line with the respondent's statement where 48.91% agreed that there was privacy between commercial public facilities and residential neighborhoods, 32.61% strongly agreed, 8.70% were neutral, 6.52% disagreed and only 3.26% strongly disagreed.

Meanwhile, 52.17% of respondents agreed that public facilities in housing provide outdoor games and 21.74% strongly agreed with this statement. One of the outdoor games is in the middle of the J Walk facility, this facility is also a place for residential communities to interact between neighbors.

In addition, the open spaces around J Walk and J Square become a place to interact between residents, so that social relations, a sense of family are created between residents of housing. Maslow in Syafrina et al (2018) revealed that humans as social beings have a need for social relationships that are always related to interactions between one another. This is in line with the results of the questionnaire where 48.91% of respondents agreed, 22.83% strongly agreed that J Walk and J Square facilities create good interactions between neighbors. This shows that the space at J Walk and J Square has succeeded in becoming a forum for interaction between housing residents.



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| Comfort                                                | Percentage |       |      |       |       |  |
|--------------------------------------------------------|------------|-------|------|-------|-------|--|
| Connort                                                | STS        | TS    | Ν    | S     | SS    |  |
| Low crime rate due to adequate security facilities     | 2.17       | 10.87 | 6.52 | 57.61 | 22.83 |  |
| J Walk and J Square do not cause significant noise in  | 5.43       | 9.78  | 5.43 | 63.04 | 16.30 |  |
| residential areas                                      |            |       |      |       |       |  |
| There is privacy between commercial public facilities  | 3.26       | 6.52  | 8.70 | 48.91 | 32.61 |  |
| and residential neighbourhoods                         |            |       |      |       |       |  |
| Outdoor play space in public facilities                | 2.17       | 17.39 | 6.52 | 52.17 | 21.74 |  |
| J Walk and J Square facilities create good interaction | 5.43       | 15.22 | 7.61 | 48.91 | 22.83 |  |
| between neighbours                                     |            |       |      |       |       |  |

## Table 5 Environmental comfort preference (%)

Source: Analysis result, 2023

## **3.4 Environmental Facilities**

Environmental facilities consist of several sub-variables including the condition of open space, vegetation, the availability of shopping centers, the distance between residences and supermarkets and the presence of entertainment and play facilities.

The majority of residents as much as 56.52% agreed that shopping centers / supermarkets were available in housing, 29.35% strongly agreed and 9.78 stated neutral. There are at least 3 supermarkets available in J Square to facilitate the daily needs of housing residents. With a location that is not far from each housing cluster, residents can easily access the supermarket on foot.

J Walk and J Square facilities are also able to present as a means of entertainment for residents and the surrounding community. Entertainment at this facility includes a variety of live music, karaoke, billiards and contemporary cafes with a variety of unique and interesting concepts. The community agrees with this where 53.26% of respondents stated that entertainment and play facilities exist at J Walk and J Square facilities and 20.65% strongly agreed with this statement. While 17.39% were neutral. 6.52% disagreed and 2.17 strongly disagreed.

Open space facilities at J Walk and J Square facilities are also available and the condition is well maintained. The existence of janitors who routinely maintain and clean it makes this facility remain in a condition suitable for use in various activities, both individually and in groups with family members.

Residents are often seen using this facility, especially in the morning when the general public has not yet arrived. Towards the afternoon many children utilize the open space to play and other activities. Residents agreed as much as 58.70% if the J Walk open space was well maintained and 18.48% strongly agreed. A total of 15.22% stated that they were neutral, 5.43% disagreed and 2.17% strongly disagreed. Likewise, with the vegetation contained in these facilities, the majority of respondents,



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57.61%, agreed that the vegetation on J Walk and J Square was beautiful and natural, 17.39% strongly agreed and 8.70 were neutral.

This can be seen where along the road to the housing exit access is planted with vegetation and around J Walk is surrounded by shady tree species that make the outdoor atmosphere of J Walk shadier and more protected from direct sun exposure.

| Environmental Facilities –                              |      | Persentase |       |       |       |  |  |
|---------------------------------------------------------|------|------------|-------|-------|-------|--|--|
| Environmental Facilities                                | STS  | TS         | Ν     | S     | SS    |  |  |
| Availability of shopping centers / supermarkets in      | 1.09 | 3.26       | 9.78  | 56.52 | 29.35 |  |  |
| housing estates                                         |      |            |       |       |       |  |  |
| The existence of entertainment and play facilities at J | 2.17 | 6.52       | 17.39 | 53.26 | 20.65 |  |  |
| Walk and J Square                                       |      |            |       |       |       |  |  |
| The condition of open space on J Walk is well           | 2.17 | 5.43       | 15.22 | 58.70 | 18.48 |  |  |
| maintained                                              |      |            |       |       |       |  |  |
| There is beautiful and natural vegetation on J Walk     | 3.26 | 13.04      | 8.70  | 57.61 | 17.39 |  |  |
| and J Square                                            |      |            |       |       |       |  |  |

## Table 6 Preference of environmental facilities

Source: Hasil analisis, 2023

## 3.5 Neighborhood Infrastructure

Environmental infrastructure consists of several sub-variables including flood-free, physical condition of roads, wide and well-maintained residential roads and waste treatment.

A total of 55.43% of Johor City housing residents said they strongly agreed that the residential environment was flood-free, while 39.13% agreed, 4.35% were neutral and 1.09% disagreed. This is because the housing drainage system is well planned and built. The drainage flow is made with a closed system flowing directly into the Deli river which is directly adjacent to the housing. The position of housing that is higher than the Deli river makes this area flood-free.

Road facilities in housing are quite good and routine maintenance is carried out by the manager, so physically there is no significant damage to the housing road median. This is in line with the respondent's statement that 67.39% agreed that the physical condition of the housing road was good and 16.30% strongly agreed, and 6.52% were neutral. The size of residential roads is also quite wide where the width of the road is adjusted to its capacity and function respectively. The width of the road on the cross path in and out of housing is wider than the road inside the housing cluster.

Cross-housing roads are divided into 2 lanes with limited road medians to avoid traffic conflicts in the opposite direction. Road media using concrete blocks in addition to the price of this material is relatively cheap and easy to maintain, this media is also suitable for absorbing water.



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This is in accordance with the function of the Medan Johor area as a catchment area so that open space areas that function as roads can still function as catchment areas. In line with the above, respondents also agreed that residential roads are wide enough and well maintained as much as 61.96% and 16.3% strongly agreed with the statement. With a large enough road width, the traffic flow is quite smooth even though there are activities at the J Walk and J Square facilities.

The majority of residents as much as 64.13% of Johor City housing respondents said they agreed that there was good household waste treatment in housing 16.03% strongly agreed, 13.04% stated neutral and 5.43% disagreed with the statement. The housing manager has provided a special officer in charge of transporting household waste every day in each residential cluster where the waste will be collected and then disposed of to the nearest landfill. This keeps the residential area clean. The full percentage value can be seen in the following table.

## Table 7 Preferences for environmental infrastructure (%)

| Environmental Infrastructure                        | Percentage |      |       |       |       |  |
|-----------------------------------------------------|------------|------|-------|-------|-------|--|
| Environmental infrastructure                        | STS        | TS   | Ν     | S     | SS    |  |
| Flood-free housing environment                      | 0.00       | 1.09 | 4.35  | 39.13 | 55.43 |  |
| The physical condition of residential roads is good | 3.26       | 6.52 | 6.52  | 67.39 | 16.30 |  |
| Housing roads are wide and well maintained          | 2.17       | 8.70 | 10.87 | 61.96 | 16.30 |  |
| There is good household waste treatment in housing  | 1.09       | 5.43 | 13.04 | 64.13 | 16.30 |  |

Source: Analysis result, 2023

## 3.6 Location and Accessibility

Location and accessibility consist of several sub variables including strategic location, easy access in and out of housing, traffic activities and pedestrian conditions.

As many as 52.17% of respondents who live in Johor City housing said they agreed that the location of J Walk and J Square in housing was very strategic and as many as 36.96% strongly agreed, 6.52% were neutral and 4.35% disagreed. This can be seen from the position of J Walk and J Square which divides the housing where access in and out of housing is always through this facility. Its location facing the main road of housing makes it easy for residents and the surrounding community to visually see the facilities available at Johor City housing.

As many as 47.83% of respondents of Johor City housing residents said they agreed that access in and out of housing was easy, 25% strongly agreed, 9.78% were neutral, 14.13 disagreed and 3.26% strongly disagreed with the statement. Access here can be divided into 2 parts, namely access in and out of housing and access in and out of residential clusters. Access in and out of the cluster is very easy because it is guarded by security officers who regulate traffic flow so that there are no significant



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difficulties. Each cluster also has its own access with a fairly large entrance width. For access in and out of housing consists of 2 accesses, namely the main access from Jalan Karya Wisata and the second access from Jalan Luku IV. The mobility of residents to get out of housing is also very easy because it is close to the ring road which can be a means of connecting residential areas with other areas outside Medan Johor Sub-district.

The majority of respondents, namely 57.61% of residents of Johor City housing said they agreed that the activities of J Walk and J Square did not interfere with residential traffic, 20.65% strongly agreed, 5.43% were neutral, 13.04% said they disagreed and 3.26% stated that they strongly disagreed with the statement.

With the field of residential main roads that are wide enough and use one traffic lane in the J Walk area, of course this makes all J Walk and J Square activities not interfere with the mobility of residents in carrying out their activities in and out of the residence. At J Walk and J Square there is also a special parking lane for 4-wheeled and 2-wheeled vehicles so that access to the main residential road is not disturbed by the flow or rate of vehicle parking. In addition, the existence of parking officers is also very helpful in regulating vehicle traffic so that even though the activities at J Walk and J Square are very crowded at certain moments, the traffic flow is still well controlled and does not interfere with housing residents.

For pedestrian access, the manager provides a good and well-maintained pedestrian path along the road at J Walk and J Square so that pedestrians can calmly walk around the facility without having to be disturbed by the activities of residential traffic flow. This is in line with the results of the questionnaire where 63.04% of respondents agreed that the pedestrain conditions in housing were feasible and adequate, as many as 16.30% strongly agreed and 13.04% disagreed, 5.43% were neutral and 2.17% strongly disagreed with the statement. The full percentage value can be seen in the following table

| Percentage |                      |                                                                                                      |                                                                                                                                                       |                                                                                                                                                                                                           |  |
|------------|----------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| STS        | TS                   | Ν                                                                                                    | S                                                                                                                                                     | SS                                                                                                                                                                                                        |  |
| 0.00       | 4.35                 | 6.52                                                                                                 | 52.17                                                                                                                                                 | 36.96                                                                                                                                                                                                     |  |
|            |                      |                                                                                                      |                                                                                                                                                       |                                                                                                                                                                                                           |  |
| 3.26       | 14.13                | 9.78                                                                                                 | 47.83                                                                                                                                                 | 25.00                                                                                                                                                                                                     |  |
| 3.26       | 13.04                | 5.43                                                                                                 | 57.61                                                                                                                                                 | 20.65                                                                                                                                                                                                     |  |
|            |                      |                                                                                                      |                                                                                                                                                       |                                                                                                                                                                                                           |  |
| 2.17       | 13.04                | 5.43                                                                                                 | 63.04                                                                                                                                                 | 16.30                                                                                                                                                                                                     |  |
|            |                      |                                                                                                      |                                                                                                                                                       |                                                                                                                                                                                                           |  |
|            | 0.00<br>3.26<br>3.26 | STS         TS           0.00         4.35           3.26         14.13           3.26         13.04 | STS         TS         N           0.00         4.35         6.52           3.26         14.13         9.78           3.26         13.04         5.43 | STS         TS         N         S           0.00         4.35         6.52         52.17           3.26         14.13         9.78         47.83           3.26         13.04         5.43         57.61 |  |

## Table 8 Location and accessibility preferences (%)

Source: Analysis Results, 2023



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## 3.7 Design

The design factor also consists of several sub-variables, including attractive housing design and fulfilling the wishes of residents, attractive J Walk and J Square designs, adequate building quality and whether J Walk is well known in the community.

A total of 45.65% of Johor City housing residents said they agreed that the design of residential buildings and residential environments was attractive and in accordance with the wishes of residents and 7.61% strongly agreed but there were 32.54% who disagreed. This presentation value shows that building design is not the main preference in choosing housing in Johor City housing. Each individual certainly has their own characteristics and needs so that the general residential design built by the developer is unable to meet the expectations and desires of each individual.

This resulted in many residences in Johor City housing to renovate both partially and as a whole to their occupancy in order to accommodate the wishes of the residents. This is in line with the statement that only 22.83% agreed that the quality of residential buildings was adequate and 4.35% strongly agreed. Meanwhile, 52.17% disagreed and 13.04% strongly disagreed with this statement. This shows that the majority of respondents stated that the quality of residential buildings is not good (bad). Apart from the fact that the residential design is not very attractive, the poor quality of the building is also a supporting factor for residents to renovate their occupancy.

Meanwhile, in contrast to the results of respondents from the statement that if the design of the J Walk and J Square building designs is unique and attractive, 55.43% of respondents stated that they agreed with the statement and 10.87% strongly agreed. 17.39% disagreed and 4.35% strongly disagreed. This shows that the design of J Walk and J Square planned by the manager is seen by respondents as quite successful and in accordance with the expectations of residents, both in function and design. This is enough to make the facility attract people to visit and do activities in it.

This is in line with respondents' statements where 47.83% agreed that the J Walk and J Square facilities were quite popular in the community and 42.39% strongly agreed. Only 4.35% disagreed and 5.43% were neutral. This picture explains that the function of the J Walk and J Square facilities has been successful so that it has a positive impact on the residential community and the surrounding environment. The full percentage values can be seen in the following table



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| Design                                               | Percentage |       |       |       |       |  |  |
|------------------------------------------------------|------------|-------|-------|-------|-------|--|--|
| Design                                               | STS        | TS    | Ν     | S     | SS    |  |  |
| The design of residential buildings and              | 4.35       | 31.52 | 10.87 | 45.65 | 7.61  |  |  |
| neighborhoods is attractive and in accordance with   |            |       |       |       |       |  |  |
| the wishes of residents                              |            |       |       |       |       |  |  |
| J Walk and J Square building designs are unique and  | 4.35       | 17.39 | 11.96 | 55.43 | 10.87 |  |  |
| attractive                                           |            |       |       |       |       |  |  |
| The quality of residential buildings is adequate     | 13.04      | 52.17 | 7.61  | 22.83 | 4.35  |  |  |
| J Walk and J Square facilities are well known in the | 0.00       | 4.35  | 5.43  | 47.83 | 42.39 |  |  |
| community                                            |            |       |       |       |       |  |  |

## Table 9 Design preferences (%)

Source: Analysis result, 2023

### **4. CONCLUSION**

Based on the results of data analysis and discussion, it can be concluded that the public and commercial facilities factor has an influence as a preference amplifier for a person in choosing his residence and is a consideration in determining a place to live in Johor City housing.

The research found that in order for public and commercial facilities (J Walk and J Square) to meet daily needs and be utilized by residents, they must be complete, feasible and adequate, both in design, function and accessibility.

The research also found 4 factors that can strengthen the J Walk and J Square facilities as residential preferences, namely 1) the maintenance of environmental comfort, namely the existence of privacy and safety 2) the availability of facilities to support economic activities and family entertainment 3) the availability and maintenance of environmental infrastructure in the form of flood-free, good road conditions, wide and well maintained. household waste management and cleanliness, 4, 4) accessibility to the location of J Walk and J Square which can be reached by each resident from various different clusters easily because it is in the middle of a residential area and is equipped with a decent and adequate pedestrian path (strategic) 5) the design of J Walk and J Square is built uniquely and attractively.

The results of the study also explain that public and commercial facilities reinforce the preferences of residents in choosing their occupancy in Johor City housing and the correlation of the middle and upper socio-economic strata who prefer housing based on facilities and cluster housing systems.



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#### REFERENCES

- 1. Aulia, D.N & Suryani, Lisa (2013), *Kepuasan Penghuni Perumahan Formal sebagai Indikator Preferensi Bermukim di Perkotaan*, Laporan Akhir Hbar Fundamental, Universitas Sumatera Utara, Medan
- 2. Syafrina, A, Tampubolon A.C, Suhendri, Hasriyanti, N, Kusuma H.E, 1 Juni 2018, *Preferensi Mayarakat Tentang Lingkungan Perumahan yang Ingin Diitnggali*, Jurmal Ruas, hlm 32
- 3. Haris, E, Aulia, D.N, Utami, W, Maret 2020, *Preferensi Bermukim Masyarakat Kecamatan Medan Johor Kota Medan*, Jurnal Ruang Luar dan Dalam , hlm 103-119
- 4. Khakim, A.L., 2009, Analisa Faktor-Faktor yang Berpengaruh Terhadap Preferensi Bermukin di Perumahan Sekitar Kampus Universitas Negeri Semarang, Semarang
- 5. BPS, 2023, Kota Medan Dalam Angka 2022, Badan Pusat Statistik Kota Medan
- 6. BPS Kota Medan, 2023, *Kecamatan Medan Johor Dalam Angka 2022*, Badan Pusat Statistik Kota Medan
- Fadila, F, Yudhana, G, Rini, E.F, April 2017, Faktor Yang Mempengaruhi Preferensi Bermukim Penghuni Perumahan Formal Kota Surakarta Studi Kasus Kelurahan Mojosongo, Arsitektura Vol 15, pp 50-58
- 8. Undang-Undang NO.1 Tahun 2011 Tentang Perumahan dan Kawasan Permukiman
- 9. Turner, John F, 1996, *Freedom to Build, Dweller Control of the Housing Process*, The Macmillan Company, New York
- 10. Sugiono, 2008, Metoda Penelitian Kuantitatif Kualitatif dan R&D, Alfabeta, Bandung
- Fahdian, A.T, Mardiansjah, F.H , 1 Desember 2017, Preferensi Pengembangan Permukiman Pusat Kota di Kelurahan Pandansari, Kecamatan Semarang Tengah, Kota Semarang, Jurnal Pembangunan Wilayah dan Kota, Vol 13 pp 395-409
- 12. Herman, Asnawi, 18 Juli 2016, *Preferensi Bermukim Tenaga Kerja Kawasan Industri Makasar*, Jurnal Pembangunan Wilayah dan Kota, Vol 12 pp 293-302
- 13. Pupita, I.Y, Kurniati, A.C, Sujarto, D, Agustus 2020, *Identifikasi Preferensi Bermukim Mayarakat di Kawasan Perkotaan Yogyakarta (KPY)*, Matra, Vol 1 pp 1-11
- 14. Tang, A, Kusuma, E.H, Riska, A.S, 2022, *Referensi dalam Memilih Hunian Menapak dan Vertikal oleh Generasi Y dan Z di Indonesia*, Ruas, Vol 20 No.1 2022
- 15. Sinurat, A.D, 2020, Kajian Preferensi Bermukim Di Kawasan Peri Urban Kota Medan (Studi Kasus: Kecamatan Namorambe Deli Serdang), Tesis, Fakultas Teknik Universitas Sumatera Utara
- 16. Ariansyah,H.A. P. 2015, Preferensi Pemilihan Tempat Tinggal Pada Perumahan Formal di Kelurahan Tuggulwulung, Skripsi, Fakultas Teknik Universitas Brawijaya
- 17. Alexader Dhea Herbudy Putra. 2014. Persepsi Pemanfaatan Lahan Fasilitas Umum Dan Lahan Terbuka Sebagai Ruang Interaksi Antar Warga Komplek Perumahan Kasus Studi : Komplek Perumahan Puri Timoho Asri 2 Di Yogyakarta. Jurnal Aristektur Komposisi Volume 10 Nomer 6