USER PERCEPTION FOR OPEN LIVING ROOM AT THE HOUSE IN POST-PANDEMIC COVID-19

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ABSTRAK

Ruang tamu terbuka merupakan konsep ruang tamu baru yang muncul akibat pandemi Covid-19. Teras yang awalnya hanya berfungsi sebagai area peralihan antara bagian luar dan dalam rumah, kini berubah fungsinya menjadi area yang digunakan untuk menerima tamu. Yaitu upaya masyarakat meminimalisir penyebaran Covid-19 dengan membatasi akses tamu yang masuk ke dalam rumah. Meski pada tahun 2023 pandemi telah dinyatakan berakhir oleh WHO, namun tren ruang tamu terbuka terus berlanjut karena berbagai alasan. Setiap orang mempunyai pertimbangan dan kecenderungan yang berbeda-beda yang dipengaruhi oleh pengalaman pribadi dalam menentukan posisi ruang tamu dalam sebuah hunian. Penelitian ini bertujuan untuk mengungkap faktor-faktor persepsi pengguna terhadap posisi ruang tamu pada rumah tinggal. Penelitian ini menggunakan metode kualitatif dengan pendekatan *grounded theory* yang diperoleh melalui hasil kuesioner offline dan online yang disebarkan dengan menggunakan non-random sampling. Penelitian ini mengungkap persepsi seseorang dalam membentuk dan menciptakan ruang tamu terbuka. Temuan penelitian menunjukkan enam dimensi (variabel laten) yang mempengaruhi persepsi seseorang terhadap posisi ruang tamu: dimensi privasi, visual, kenyamanan, iklim, tradisi/budaya, dan ruang. Rumah hunian dengan posisi ruang tamu di dalam dan di luar (terbuka) cenderung dipilih karena dapat menghemat penggunaan listrik dan AC serta memiliki udara yang lebih segar.

KATA KUNCI: persepsi, ruang tamu terbuka, rumah, pasca covid-19

The open living room is a new guest room concept that emerged due to the Covid-19 pandemic. The terrace, which initially only served as a transitional area between the outside and the inside of the house, has now changed its function to become an area used to receive guests. That is the effort of the community to minimize the spread of COVID-19 by limiting the access of guests who enter the house. Even though in 2023 the pandemic has been declared over by WHO, the trend of open living rooms continues for various reasons. Everyone has different considerations and tendencies influenced by personal experience in determining the living room position in a residence. This study aims to reveal the factors of user perception of the living room position in a residential house. The research uses qualitative methods with a grounded theory approach obtained through the results of offline and online questionnaires distributed using non-random sampling. This research reveals a person's perception of forming and creating an open living room. The research findings indicate six dimensions (latent variables) that influence a person's perception of living room position: privacy, visual, comfort, climate, tradition/culture, and space dimension. Residential houses with the position of living room inside and outside (open) tend to be chosen because they can save on using electricity and air conditioners and have fresher air.

KEYWORDS: perception, open living room, house, post covid-19

INTRODUCTION

A residential house has several rooms that support user activities, such as a family room, bedroom, dining room, bathroom, living room, etc. Each room has a different function according to the activity needs of the house occupants (Putra 2014). The living room is a place to receive guests as well as to communicate with outsiders. The living room is usually located at the front of the residential building structure, so the living room is the first room entered by arriving guests (Ibadi 2021). According to Ching and Binggeli (2011), well-planned and arranged spaces fulfill the human needs to feel calm and comfortable. The need for security and comfort (safety and security needs) is a life need, especially human psychological needs in activities (Maslow and Iman 1993).

The culture of friendship possessed by Indonesians gives rise to the need for a living room in a residence (Ibadi and Wijanarko 2022). Ibadi (2021) in his research said that living rooms have closed and open characteristics. The concept of an open living room outside the house using the terrace area as a place to receive guests is a Betawi and Javanese traditional culture that has long been applied in traditional houses (Kusumowardani 2021). This Covid-19 phenomenon is a consideration for re-using local architectural wisdom values in every building construction (Damayanti 2021). In the past, social interactions in the form of visiting each other's homes were carried out quite frequently, so the host often used the living room. Then, from an Islamic point of view, receiving guests during a gathering is an honor for the host, so the host is obliged to honor the guest. This can be interpreted as an essential space for receiving guests.

Health is important because healthy residents have better immunity to ward off viruses (Farah 2020). Therefore, home design will focus more on healthy and economical concepts (Fivanda and Ismanto 2021). This Covid-19 pandemic can make people more productive and creative in accelerating design (Nurpribadi 2021). According to Kusumowardani (2021), this can be done by presenting a more creative space design and integrating new lifestyle patterns through the application of tropical architecture. The planning of the living room in the post-pandemic period needs to be designed as well as possible by adapting to new patterns of behavior and activities in order to make guests feel comfortable without disturbing the movements and activities of users in the room, inside the house. Room dimensions, size of furniture, and circulation patterns are factors that influence the planning and arrangement of the living room (Surowiyono 1982). Simple house formulations that compromise with COVID-19 can be designed with open concept houses, modern minimalist houses, hygiene aspects, and air circulation and lighting (Umar and Ramadhan 2022).

In a planning process, making a decision, and a person's preferences will not stop at a certain time and aspect (Syafrina et al. 2018). Zinas and Jusan (2012) said that a person's perceptions and preferences will constantly develop according to the dynamics of a person's experience.

In connection with the explanation above, this research aims to reveal the factors that influence a person's preference for an open living room in a residence. Regarding variations in the position of the open living room, the scope and limitations of this research only focus on the position of the living room in the front and back areas of the house. This research is still limited to the case of landed houses without certain dimensional restrictions, such as type 21 houses or other types of homes. A limitation of this research is that it does not focus on variations in open living rooms in houses with two or more floors, in cases where the living room is on the bottom or top floor of the house.

Research Objectives and Urgency

This research aims to reveal user preference factors for open living spaces in residential homes. It is hoped that the results of this research will develop knowledge regarding user preferences for open living rooms and become a reference as a basis for designing open living rooms. It is also hoped that the basis for designing an open living room will be useful for knowledge in the field of architecture, especially for academics and practicing architects.

State of The Art of Research

The problem after COVID-19 is that many individuals are still worried and afraid to receive guests into their homes and only receive guests on the house's terrace. Concern about the spread of the Covid-19 virus which could possibly occur in a closed room is a strong reason for creating an open living room. Activity conditions that are different from activities after the pandemic force users to adapt to new activities and create open living spaces in their homes.

In general, each person has different considerations and tendencies in the choice-making process which are influenced by personal experience. Determining variations in the position of a closed or open living room can be affected by the perceptions and preferences of the house's occupants, especially parents as heads of the family (Triyuli 2005). When making a decision, a person's perceptions and preferences will not stop at a particular time and aspect (Syafrina et al. 2018). Zinas and Jusan (2012) said that a person's perceptions and preferences will constantly develop according to the dynamics of a person's experience.

In connection with the explanation above, this research aims to reveal the factors that influence a person's preferences and preferences for open living spaces in a residence. User perceptions of open living spaces in residential homes can be seen by considering several indicators, namely preferences, users, living room concept, and the Covid-19 pandemic. The research roadmap can be seen in Figure 1.
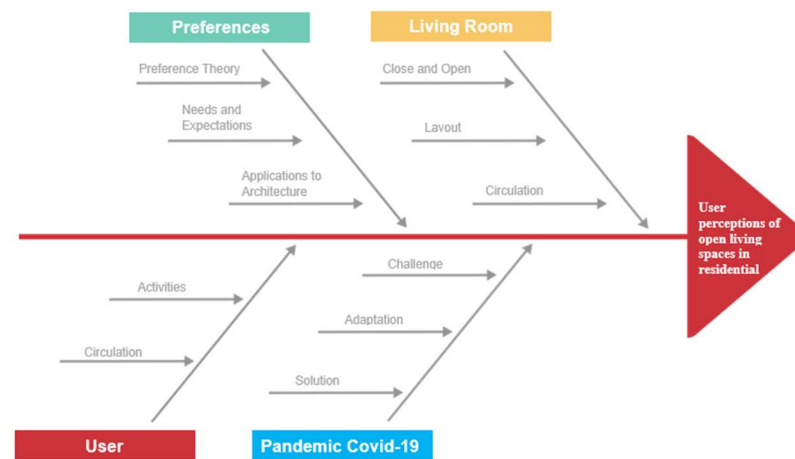
Figure 1. Research Roadmap
(Source: Researcher Document, 2023)

METHOD

This research uses an exploratory qualitative method using a grounded theory approach (Corbin and Strauss 1990). The grounded theory approach is carried out from the empirical level to the theoretical concept level (Kosasih 2018). The technique used is to find a theory of a particular phenomenon and situation based on empirical data, namely through a person's response or answer (Corbin and Strauss 1990). The data obtained is then analyzed and arranged in a hypothesis model.

Operational data in this research focuses on physical and non-physical aspects in looking at user perceptions of the living room position at the house (Table 1).

Table 1. Research Operational Data Matrix

No.	Focus Observation	Sub Focus Observation	Research Operational Data		
			Indicator	Sub Indicator	Operational definition
1.	Physical aspect	Existing Living Room Condition	Layout	Furniture	Arrangement of furniture in the living room
				Position	Position of the living room in the house plan
				Area	The length and width of the furniture
			User	Activity	Users and activities carried out
2	Non-physical aspects	Preferences/Expectations for Open Living Spaces	Preference	-	The user's view of the living room is open
			Hope	-	User expectations for open living spaces

(Source: Researcher Analysis, 2023)

Method of collecting data

Data was collected by distributing open-ended online questionnaires regarding user preferences for open living rooms in residential homes. The preference research used in this research revealed preferences, namely the objects that are perceived/evaluated are real objects that exist in the field (Farasa 2017).

The selection of samples (respondents) used a non-probability sampling method with a snowball sampling technique. Nurdiani (2014) explains that the snowball sampling technique is a method for selecting and taking samples in a network and is obtained through a rolling process from one respondent to another.

The contents of the questionnaire questions are open-ended. In this research, respondents were asked to answer questionnaire questions related to their impressions of the previous or current condition of the living room and the respondents' future expectations regarding their preference for designing open living rooms in residential homes.

Data Analysis

In this research, three stages were carried out to analyze the collected data: open coding, axial coding, and selective coding (Corbin and Strauss 1990). At the open coding stage, researchers grouped keywords obtained from respondents' answers into several large

categories. These categories will represent several keywords that have something in common. Next, axial coding analysis was carried out to determine the relationship between these categories through correspondence analysis. Analysis was used to find the relationship between respondents' reasons and expectations regarding user perceptions of open living spaces in residential homes. The final stage, selective coding, is carried out to formulate the final research hypothesis model, which will be displayed in diagram form.

RESULT AND DISCUSSION

Respondent Characteristics
Age
The questionnaire was filled in by respondents ranging in age from teenagers to adults, from 17 to 45 years old and above. Based on the diagram below (Figure 2), most respondents are in the productive age, namely 25 to 35 years. Meanwhile, teenagers aged 17 to 24 years were the fewest respondents.
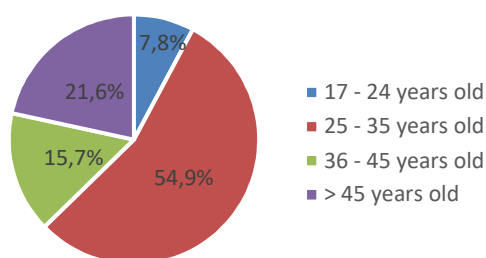

Figure 2. Age characteristics of respondents.
(Source: Researcher Analysis, 2023**)**

Occupation
Respondents were filled with various people with different work backgrounds. Respondents who work as BUMN/ASN employees are the most significant number of respondents at 47.1%. Meanwhile, the respondents at least work as housewives (IRT).
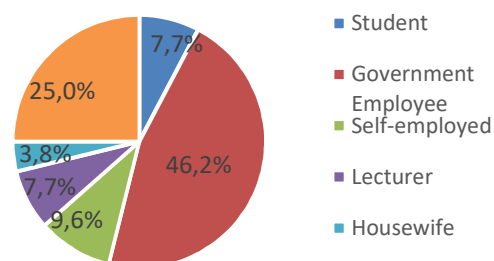

Figure 3. Job characteristics of respondents.
(Source: Researcher Analysis, 2023)

Existing Condition of The Respondent's Living Room
At the initial stage of this research, the researcher wanted to know the condition of the living room in the respondent's house in the illustration of variations in the position of the living room in the questionnaire (Figure 4). These results are used to identify the relationship between preferences and respondents' reasons for determining the location of the living room in their home.
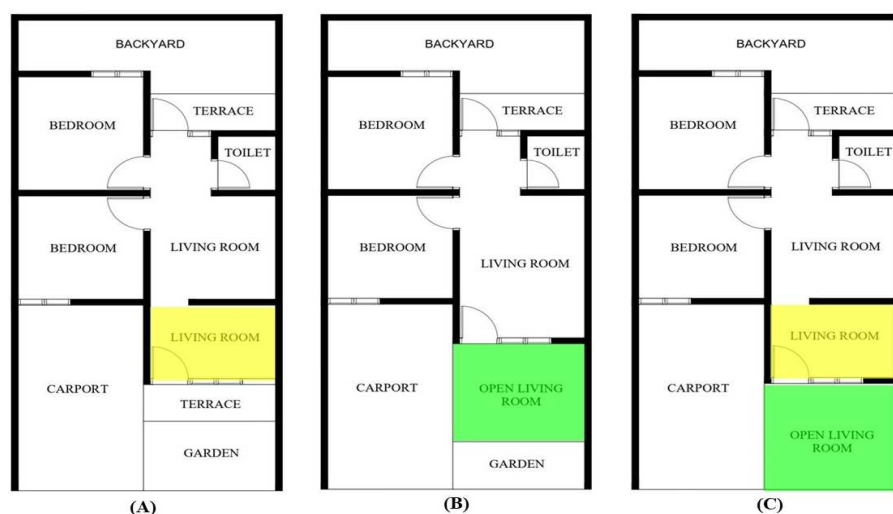

Figure 1. Variations in the position of the living room in a residential house.
(Source: Researcher Document, 2023)

From the picture above, there are three variations in the position of the living room in the respondent's house: (A) the Living room is in the house; (B) The living room is outside the house, and (C) The living room is inside and outside the house. These variations in the position of the living room are representative of the various types of living room locations in residential homes that exist in Indonesia today. The type of living room in the house (type A) is the living room position that has existed in Indonesia for a long time. Meanwhile, the open living room position outside the house (type B) and the living room position inside and outside the house (type C) are living room positions that have developed among the public after the COVID-19 pandemic to prevent the spread of the virus. COVID-19 by restricting other people from freely entering the house.
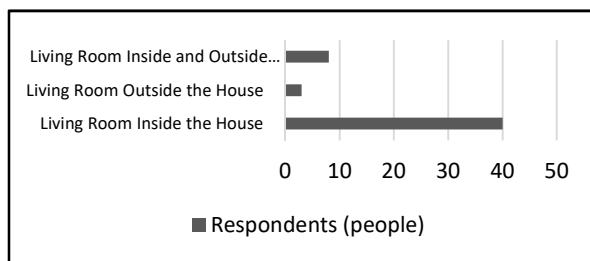

Figure 2. Histogram of the existing condition of the living room position in the respondent's house.
(Source: Researcher Analysis, 2023)

The living room positions obtained were based on respondents' experiences (see Figure 5), namely the living room position inside the house (40), the living room position outside the house (3), and the living room position inside and outside the house (8). The most dominant living room position owned by respondents in the existing condition of their current residence is the living room position in the house. This is because the culture of receiving guests in Indonesia is done at home. Then the position of the living room outside the house or inside and outside the house tends to be small.

Furthermore, regarding the expectations of respondents' preferences regarding the position of the living room in the house (figure 6), it was found that the position of the living room was inside the house as many as 15, the position of the living room was outside the house as many as 10, and the position of the living room inside and outside the house was as many as 26.
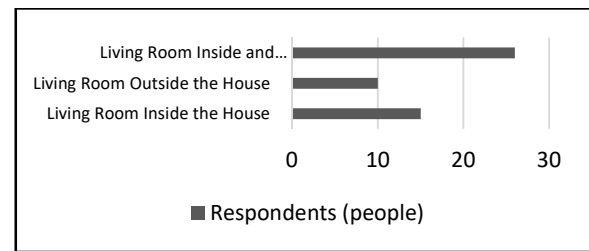

Figure 3. Histogram of expectations for the living room position in the respondent's house.
(Source: Researcher Analysis, 2023)

The data obtained from the diagram above shows that there has been a change in the perception of the position of the living room in the respondent's residence. The changes are seen based on the existing condition of the living room in the respondent's house and the respondent's expected preferences. A significant change occurred in respondents' tendency to choose the living room's position inside and outside the house. The changes that occurred were 18 respondents, from 8 to 26. The position of the living room outside the house increased by 7, from 3 to 10. Meanwhile, the position of the living room inside the residence decreased by 30, from 40 to 15. Explanation of the reasons for the changes that occur in respondents' preferences for 3 variations in the position of the living room in the residence will be discussed more fully and clearly.

Living Room Position Preferences In Residence

After knowing the respondents' preferences in determining the position of the living room in their home, the next step will be to see the relationship between the respondents' reasons and preferences and the results of open coding. These results are used to identify keywords obtained from respondents' answers in the form of text data.

The naming and grouping of keywords were obtained through the results of the respondents' reasons for choosing the position of the living room in a residence from the illustration of 3 (three) variations in the position of the living room in a house. Examples of reasons for respondents who chose the answer: the position of the living room is inside the house (1), the position of the living room is outside the house (2) and the position of the living room is both inside and outside the house (3) can be seen in the quote below.

*(1) "Not all guests who come can be received outside the house, because there may be conversations with guests that are **private**, and it is also a*

*tradition that when receiving important guests, they must be allowed to enter the house, so it depends on the **tradition/culture** of the homeowner."* (Respondent 26)

(1) *"There is a **transition** from the outer room to the living room (inner room)."* (Respondent 38)

(2) *"Basically, the design and position of the living room as in the picture does not reflect the **local culture** and **climate** in Indonesia, but with the development of time and technology, views like this have begun to fade, not to mention the **influence of increasingly high land prices**, resulting in land for houses also getting smaller. So, these factors influence my view of the overall house design. Ultimately, **maximizing the function of space** inevitably becomes an absolute choice, especially for people from the lower middle economic class. "Using an open space design as in the picture could be one solution to the problem I mentioned at the beginning, depending on the architect's astuteness in managing the design."* (Respondent 30)

(2) *"The reason is because it is close to the park so that guests have a good **view**."* (Respondent 38)

(3) *"Because the living room position can provide more **privacy** for home users. For example, if I work as a lecturer, I will receive students in the living room area outside the house. Meanwhile, for **important** guests, I will receive guests in the area inside the house."* (Respondent 1)

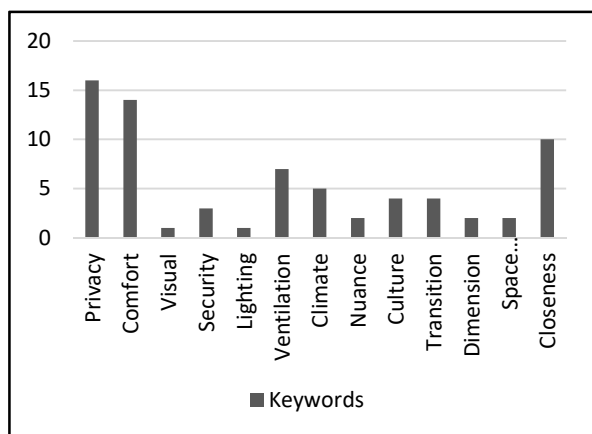(3) *"Because he likes the outdoor and indoor **feel**."* (Respondent 8)

Figure 4. Frequency of keywords for respondents' reasons regarding preference for the living room position in their home.
(Source: Researcher Analysis, 2023)

After grouping the keywords obtained from the results of the respondent's questionnaire answers, the open coding stage was then carried out regarding the respondents' reasons regarding the preference for the living room position in their residence, namely 7 categories (71 frequencies). Categories are obtained from keywords that have been analyzed using distribution analysis. The results of open coding regarding respondents' reasons regarding preferences in determining the position of the living room in their home can be seen in Table 2.

Table 1. Open Coding Results Regarding Preferences for Living Room Positions in Residential Homes

No.	Representing Keywords	Category (Frequency)
1	Privacy	Privacy (29)
	Closeness	
	Security	
2	Visual	Visual (3)
	Nuance	
3	Comfort	Comfort (22)
	Ventilation	
	Lighting	
4	Climate	Climate (5)
5	Culture	Tradition/Culture (4)
6	Transition	Space Dimension (8)
	Dimension	
	Space Optimization	

(Source: Researcher Analysis, 2023)

Based on the results of keyword grouping (open coding), the most dominant categories emerged, namely the privacy category with 29 (41%), comfort with 22 (31%), spatial dimensions with 8 (11%), climate with 5 (7%), tradition/culture as much as 4 (6%), security as much as 3 (4%), and visuals as much as 3 (4%). The frequency of categories based on respondents' reasons regarding preferences for the position of the living room in a residence can be seen in Figure 8.
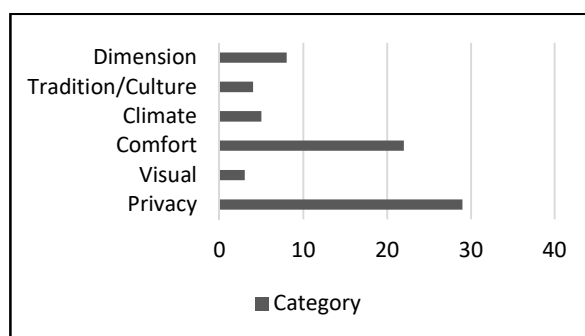

Figure 5. Frequency of categories of respondents' reasons regarding preferences for the living room position in the residence.

(Source: Researcher Analysis, 2023)

The most dominant aspect that emerged regarding respondents' preferences in determining the position of the living room in their home was the **privacy** category. A person's tendency to choose the position of the living room in a residence is based on the different levels of privacy for each variation of the position of the living room in a house. This is also motivated by the closeness between the homeowner and visiting guests because social relationships will influence the respondent's choice of the living room position where they will receive guests. The position of the living room far from private areas in the house will minimize access for guests who enter the house. This has been further strengthened in the pandemic and post-Covid19 pandemic era to prevent the spread of the virus.

Differences in the position of the living room in a residence will affect the **visual** appearance received by guests and homeowners. The difference in distance between the living room to the garden or the living room to the outside area (road) will give a different visual impression. The position of the living room inside or outside the house will provide a different feel. For example, the living room inside the house will give an indoor impression where guests will enjoy the interior sense of the house, while the living room outside the house will give an outdoor impression where Guests will enjoy the atmosphere of the exterior of the house with direct views to the outside of the house.

The **comfort** factor is closely related to the ventilation and lighting aspects received by room users based on the position of the living room. The living room inside the house uses more artificial ventilation and lighting. In contrast, the living room outside the house is more dependent on existing natural conditions so **climate** differences in each region influence respondents' preferences in choosing the position of the living room. Homeowners or guests with a smoking habit will also influence their choice of the living room position in their home.

Indonesia, which has long had a tradition of receiving guests inside the house, also has a significant influence on the way respondents choose the position of the living room in the house so that the open living room outside the house is still considered not by **tradition**s and **culture** in Indonesia. However, as time goes by, land prices are getting higher, resulting in smaller house land and room dimensions so that existing terrace land is **maximized as open space** for

receiving guests. This caused a change in the space transition, where initially, the indoor space (living room) was limited by the terrace to the outdoor area (garden), which is no longer found.
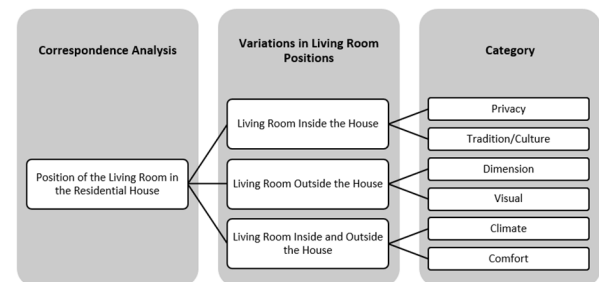

Figure 6. Correspondence analysis between relationships and reasons related to respondents' preferences in determining the position of the living room. (Source: Researcher Analysis, 2023)

After the distribution analysis, the next stage of axial coding will be carried out with a correspondence analysis process (Figure 9). This correspondence analysis aims to determine the relationship between respondents' preferences and reasons regarding preferences for the position of the living room in their home.

The Position of the Living Room Inside the House (I)

Respondents tend to choose the position of the living room in the house based on considerations of privacy and tradition/cultural aspects. The reasons given by respondents regarding the privacy aspect are that there is a connection between the close social relations of guests and the homeowner, so conversations between the two are considered best to take place at home. This is inseparable from the tradition/culture of Indonesian people, who always receive guests inside the house so that the position of the living room outside the house is considered less appropriate to the existing culture.

The Position of the Living Room Outside the House (II)

Respondents tended to choose the position of the living room outside the house based on considerations of spatial and visual dimensions. Respondents' reasons regarding the spatial dimension aspect were influenced by the limited land space in housing, which was getting smaller. This is caused by the increase in land prices every year, which makes respondents assume that the dimensions of the living room do not need to be too large and can replace the function of the terrace into an area for receiving guests, so that

the area inside the house is maximized for use for more private activities such as the family room and bedroom. The position of the living room outside the house will make guests feel an outdoor feel like a garden and has a skylight so that the visual appearance received by guests who come seems more relaxed.

The Position of the Living Room Inside and Outside the House (III)

Respondents tend to choose the position of the living room inside or outside the house based on considerations of climate and comfort aspects. Indonesia, which has a tropical climate with 2 (two) different seasons, namely the dry season and the rainy season, makes respondents assume that having 2 (two) types of living room positions inside and outside the house is the right choice. During the rainy season, guests who come are welcomed into the house. Meanwhile, guests can be received in the open living room during the dry or hot season so that the use of electrical energy for lighting and ventilation can be minimized. Apart from that, homeowners and guests who smoke can do so in the open living room, thus providing comfort in terms of ventilation because cigarette smoke does not enter the house.

Hypothesis Model

After carrying out the correspondence analysis process, the final stage was the selective coding process, namely formulating a hypothesis model for research findings related to preferences for the position of living rooms in residential homes. The pie chart shows the frequency with which it occurs.
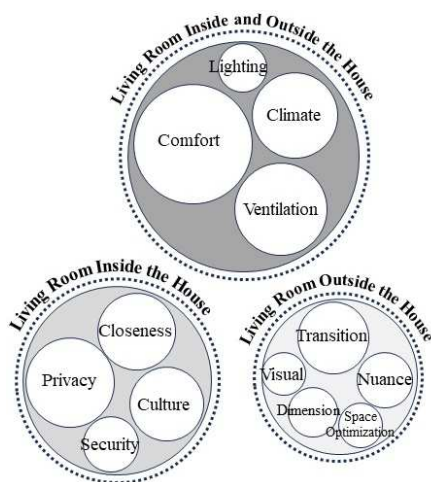

Figure 7. Hypothesis model of factors that influence respondents' tendencies in choosing the living room position in a residence.
(Source: Researcher Analysis, 2023)

The larger the circle, the higher the frequency with which that category appears. The closeness between circles shows the proximity of the relationship between categories. The circle diagram (Figure 10) is divided into 3, namely circles collected in various positions in the living room in the house.

CONCLUSION

In determining preferences for the living room position in a residence, preferences change due to changes in the respondent's experience. There are 6 aspects that influence changes in respondents' perceptions, namely aspects of privacy, tradition/culture, spatial dimensions, visuals, climate, and comfort.

The tendency of respondents to choose the position of the living room in the house is based on considerations of privacy and tradition/cultural aspects. The reasons given by respondents regarding the privacy aspect are that there is a connection between the close social relations of guests and the homeowner so conversations between the two are considered best carried out at home. Respondents tended to choose the position of the living room outside the house based on considerations of spatial and visual dimensions. Respondents' reasons regarding the spatial dimension aspect were influenced by the limited land space in housing, which was getting smaller. This is caused by the increase in land prices every year, which makes respondents assume that the dimensions of the living room do not need to be too large and can replace the function of the terrace into an area for receiving guests. Meanwhile, respondents tend to choose the position of the living room inside and outside the house based on aspect considerations: climate and comfort. Indonesia, which has a tropical climate with 2 (two) different seasons, namely the dry season and the rainy season, makes respondents assume that having 2 (two) types of living room positions inside and outside the house is the right choice.

The findings in qualitative research using a grounded theory approach still need to be improved to obtain a good level of validity and reliability. The validity and reliability of the results of this research need to be increased by verifying the research results in different cases and contexts. The findings from this research are still based on the general public's perspective. Similar research based on the architect's

perspective needs to be carried out. A comparison of the perspective of the general public as users and the perspective of architects as designers is interesting knowledge to enrich the discourse.

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