# THE AFFORDANCES FOR DINING ACTIVITIES: YOUNG GENERATIONS' EXPERIENCE IN DWELLING ENVIRONMENT

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## Abstract

*Human activities and behavior are reciprocally related to the dwelling environment. As the specific expression of culture, how human activities are carried out is related to how they understand and use the affordances of their environment. One of the primary domestic activities closely related to the culture is dining. Culture influences the dining habits of a community and plays a significant role in the form of dwelling architecture.*

*This study explores how dining activities are carried out in urban housing in Indonesia and their relationship to the dwellings' architectural forms. Taking Surabaya as a case study, this phenomenon was studied using a combine-strategy through questionnaires and in-depth semi-structured interviews. The participants are the young generation living in their parent's dwellings with landed housing typology, with and without separate dining rooms. Household members and the dwelling size are not limited to examine how dining activities are conducted in each circumstance.*

*The results show that Indonesian dining culture still influences dining activities in the dwelling. However, dining activities have begun to shift from social to personal activities. The development of a practical lifestyle in recent times has also caused dining activities to be carried out as a complement to other activities. Finally, these phenomena affect the settings and affordance attributes that accommodate dining activities in the dwelling, which understanding can be applied in designing residential architecture.*

*Keywords: Dining; Culture; Affordance; Attributes; Dwelling*

## INTRODUCTION

Humans and the environment have a reciprocal relationship where each affects the other (Rapoport, 2005). How activities are carried out affects the expression of architecture as the locus where activities are conducted, for example, the spatial configuration, spatial quality, and furniture arrangement. The theory of affordance (Gibson, 1979) explains this reciprocity, where the affordances of the built environment serve as something available to be interpreted and used by humans to represent its potential function. This also applies to dwelling as humans' primary architectural domain, where the physical elements or attributes are responded to by human activities and behaviors as a behavioral environment (Lang, 1987). Conversely, humans shape and influence their dwelling by making it an embodiment of their values and desired way of life (Rapoport, 1977).

One of the activities that take place in the dwelling is dining activities. Dining concerns eating, which is a primary activity carried out to fulfill humans' basic physiological needs (Maslow, 1958). On the other hand, dining is also an activity that is heavily influenced by culture, as the way the activity is carried out is a specific expression of a particular culture (Rapoport, 2005). The tradition of dining, which consist of dining activities and food serving, is considered one of the elements of culture (Ariwibowo, 2015). From the architectural perspective, the way in which dining activities occur in the housing environment is also closely related to the architectural form of the dwelling. In Indonesian vernacular architecture, for example, the dining culture influences how dining areas and kitchens are designed, as well as the hierarchy in the use of space (Wazir and Indriani, 2020; Surya and Adhitama, 2021). Another example is how the culture of eating while sitting on the floor in Indonesia contributes to the existence of the norm of not wearing shoes inside the house to keep them clean (Wazir and Indriani, 2020). Moreover, dining activities are continuously transforming with the times. Cultural studies, psychology, and public health often discuss the transformation of eating behaviors. For example, a busier,

more digitally connected life presently affects when, where, and with whom dining activities are carried out (Roshita *et al.*, 2021), as well as hedonic motivation and time-saving orientation supported by the convenience of using online food delivery services (Prabowo and Nugroho, 2019) play significant roles in the transforming the way dining activities take place in the dwelling.

This study examines dining activities from architectural disciplines' perspectives by exploring the relationship between dining activities and dwelling environment architecture. By exploring how dining activities occur in contemporary urban housing with landed housing typology in Indonesia, this study aims to identify the supporting affordances for dining activities in the dwelling. The phenomenon is studied through the younger generation who live in their parent's home to gain an understanding of the current transformation of dining activities in the dwelling. The results can be used to better understand how dining activities are carried out in the dwelling and its behavioral complexities related to the architectural elements which can be applied in designing dwelling architecture.

## LITERATURE STUDY

Dwelling is defined as a system of settings that accommodate different functions, shown through systems of activities (Coolen and Meesters, 2012). Dwelling can be considered a behavior setting that provides congruence between its settings' attributes and the household's collective activities (Coolen, 2014). One primary activity inside a dwelling is eating, which plays a role in fulfilling humans' basic physiological needs. However, apart from being a bodily function, eating is also related to various manners and social aspects, which then be referred to as dining. Hence, dining becomes one of the many activities that are greatly affected by culture. Culture is expressed in dining activities, for example, in various ways of preparing food (ingredients used, cooking methods, and utensils), servings (cutlery such as chopsticks, spoons, and forks; and the way food is served), eating patterns (how many meals a day, preference for eating cold or hot food), as well as other rituals related to dining activities (Hegarty and Mahony, 2001). Cultural practices related to dining activities also include those related to the existence of specially designed spaces for eating and drinking and spaces where eating and drinking are excluded (Newman, 2009). In Indonesian culture, dining activities initially were done while sitting on the floor, scooping with one's hand, and using banana leaves or a wooden plate as the base, including washing one's hands before and after eating (Rahman, 2016). This culture is also known as *lesehan*, which can be described as the sitting culture where people sit directly on the floor to do various activities, including dining (Witjaksono, 2017). It is then transformed into dining on a dining table using

cutleries such as spoons, forks, and knives, following the *rijsttafel* dining culture of the colonial era (Protschky, 2008; Rahman, 2016). In a dwelling, Indonesian practices *lesehan* on a daily basis, as the use of chairs only started in the 19th century and was limited to the aristocrats at the start (Indrawati and Ellisa, 2013).

In general, dining activities in the dwelling are accommodated by the dining rooms. However, in Indonesian dwellings, the dining room is not always manifested as a separate room specifically used for dining only. *Lesehan* culture, which is widely used for dining activities, creates more fluid and flexible space arrangements when compared to using a dining table and chairs (Indrawati and Ellisa, 2013). This condition also has effects on increasing the flexibility in the use of space in the dwelling for dining activities. In Indonesian traditional vernacular architecture, dining activities are accommodated by various spaces. For example, in Joglo houses, the Javanese vernacular architecture, dining activities are conducted in *gadri* which is located behind *dalem* and *senthong* as the central part of the residence and close to the *pawon* or kitchen which is in a separate building behind the main building (Widayati, Rakhmawati, and Pratama, 2019). In Gadang houses, dining as a part of the series of traditional ceremonies is usually conducted on *ruang lepas*, which serves as the center for all activities while also used to receive guests, with a specific seating arrangement based on the family structure hierarchy and kinship as well as sitting positions that are based on genders (Surya and Adhitama, 2021). Another example is how the vernacular architecture of the Toraja and Sumba houses prioritize communal dining in the living space, which means the wider the living space area, the bigger the number of people can gather to eat together (Wazir and Indriani, 2020).

In today's urban housing in Indonesia, the existence of a dining room is partly related to the types of housing, namely formal and informal. Formal housing is built both by the government or private developers based on clear rules resulting in an orderly pattern, while informal housing is an accumulation of houses built by families or individuals without following a formal rule or plan issued by the authority (Kuswartojo *et al.*, 2005). In the formal housing design, spaces for dining activities are provided differently. In dwelling modules with small areas, such as subsidized housing for low-income families, the dining rooms are merged with the guest room and living room as an open space used for various activities. On the other hand, in the formal housing modules with a larger area for middle-class families, the dining rooms tend to be differentiated. However, they are not always separated or partitioned from other rooms such as the kitchen or living room (Putra, Ju and Soedarsono, 2016). In *kampung* houses of informal housing, the dining room is often merged with the guest

room or living room as a living-dining multipurpose use (Funo, Yamamoto and Silas, 2002). A study on eating behavior in Indonesia stated that very few houses have dedicated dining tables and chairs, regardless of the socioeconomic status (Roshita *et al.*, 2021). According to Putri *et al.* (2021), the increasingly rare presence of a dining room in Indonesian dwellings has forced the occupants to do their dining activities in other rooms in the dwelling. Meanwhile, Putra, Ju, and Soedarsono (2016) found that the dining rooms tend to be passive and rarely used for dining activities even when they are available in a dwelling.

This study explores how dining activities occur in the dwelling environment by applying the concept of affordance theory (Gibson, 1979). Lang (1987) explains the mechanism of human interaction with the environment through the fundamental processes of human behavior, which idea is that the environment is formed from affordances for human experiences and behavior. In the discipline of architecture, the affordance theory can be used as a conceptual framework to understand the relationship between the built environment and humans over time, especially concerning the form, function, and meaning of architectural elements (Maier, Fadel and Battisto, 2009). Affordances are formed by the interaction between attributes used to support activities. Usually, there is a complex interaction between environmental attributes as affordances, where the arrangement of attributes in a setting and how these attributes complement each other become an essential component in providing specific benefits for the intended user (Bardenhagen and Rodiek, 2016).

The concept of affordance is subjective and relies on individual factors, which makes it possible for humans to use the environmental attributes flexibly. In the architectural context, this flexibility allows a space to be used differently from how it was initially designed (Farbstein and Kantrowitz, 1978). However, such flexibility is bounded by the social and cultural norms that determine which actions would be supported and restricted to be done with and towards the affordances of the environment (Kyttä, 2002). With that understanding, this study highlights the fact that the dining setting in a dwelling is not always a dining room. Instead, it is shaped by the interaction between affordance attributes with particular nature and qualities used for dining activities and framed by socio-cultural norms. This study then explores how dining activities are carried out in dwelling environments and shows the flexibility and the diversity of the use of spaces as dining settings and attributes as supporting affordances.

**METHODOLOGY**

This study provides an exploration of how dining activities are carried out in urban housing in Indonesia and its supporting architectural elements. Taking Surabaya as a case study, this phenomenon was studied using combined strategy of dominant-less dominant (Groat and Wang, 2013) with insertion of quantitative research design as the less dominant strategy within the framework of a qualitative research design. Using the affordance theory (Gibson, 1979) as a framework, this study aims to understand the users' perspectives regarding the relationship between the built environment and user needs through qualitative research in the natural setting (Groat and Wang, 2013). Qualitative research can provide an in-depth understanding of those relationships as the lived experiences of a particular group or individuals, which is then abstracted into an understanding or description of a universal essence (Creswell, 2007). Thus, this study stands within the constructivist paradigm, as knowledge and understanding of the phenomenon and contexts are derived from the exploration through personal experiences (Spence, 2017).

As this study is based on qualitative research framework as the dominant strategy, purposive sampling was used to select credible sources. Purposive sampling are done by selecting samples based on the characteristics of the samples, especially homogenous sampling, where the samples come from the same population group (Creswell, 2007). In this study, the dining activity in the dwelling is studied through the younger generation aged 20-25 years who live in their parent's homes. Being the younger generation, this population was chosen because they are closely related to the modern era and thus can depict the current situation. On the other hand, living in their parents' home gives them limited control over the use of space in the dwelling (White, 2002), so they are still influenced by the culture adopted by their parents, which is often closer to the traditional culture.

Questionnaire and in-depth semi-structured interviews of participants living in urban housing, both formal and informal settlements, were used as data collection methods. Questionnaires can be used to map human activities and behavior in the built environment more quickly and cheaply, but have the risk of error rate on a certain scale because of the possibility of the respondents giving answers that are inaccurate with the actual condition (Hill, 1984). In this study, questionnaires were used to select participants and as an initial behavioral mapping regarding dining activities and the setting that accommodates them in the dwelling. The sample was selected through purposive sampling by questionnaires distributed to the population, gaining 32 respondents. The data obtained were then analyzed using quantitative descriptive methods, and the results show patterns in dining activities and alternative settings for

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dining in the dwelling. Of the 32 respondents, 9 (nine) participants were selected to explore the phenomenon under study. The participants were selected representing different patterns on the dining activity mapping results and their consent to be involved in the following stages of the study. The selection of participants stops when the data obtained are saturated. All participants live in a house with landed typology where some have a separate dining room, and some do not. The type of settlements, household members, and dwelling sizes are not limited in order to examine how dining activities take place in each circumstance of the affordance of the dwellings' architectural form.

The inquiry then was further explored through semi-structured in-depth interviews as a primary data collection method that focused on the issue under study, where additional questions were asked during the interview process in response to participant statements to gain a deeper understanding of the topic (Niezabitowska, 2018). The data is then analyzed using the conventional content analysis method where the coding categories are derived directly from the text data (Hsieh and Shannon, 2005) to produce data that is organized into themes or categories according to the context of its use.

**RESULTS AND DISCUSSION**

Before exploring dining activities in the dwelling, this study first mapped the existence and use of the dining room. Dining rooms are defined through the affordance attributes, namely the dining table and chairs, whether the room is separated from the other rooms or not. This relates to how humans are able to recognize an environment based on the affordance attributes usually found in a particular environment, which is a part of the knowledge about the relationship between environment and behavior (Coolen, 2014). The questionnaire results show that the dining room is not always present in the respondent's dwellings and has various occupancy frequencies. A total of 17 respondents stated that they use the dining room every day, ten (10) respondents use the dining room occasionally, three (3) respondents do not have a dining room or do not use it, while two (2) respondents only use the dining room on holidays or weekends (Figure 1).

Furthermore, it is known that the dining room is not only a setting for dining activities. In response to the question about the activities carried out in the dining room, 26 respondents answered that they used the dining room for dining, 12 people for gathering with family, five people for relaxing, five people not using the dining room, four people for me-time, three people for cooking, and one person each for work and hobbies (Figure 2).
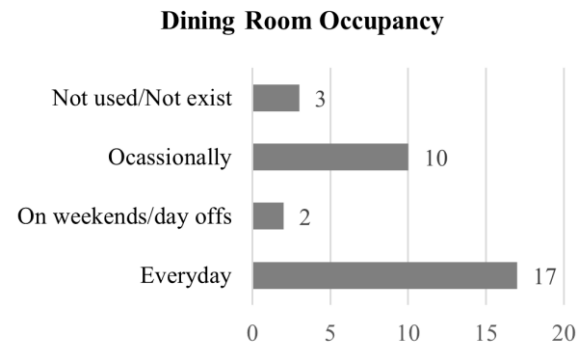


**Figure 1.** Variety of Occupancy Frequency of the Dining Room in the dwelling
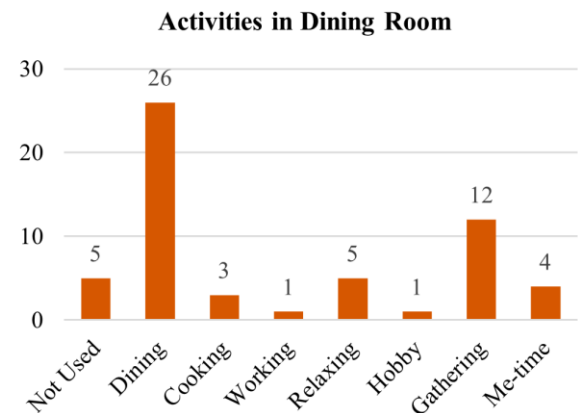


**Figure 2.** Activities take place in the dining room

Meanwhile, through questions regarding the setting for dining activities, it is known that dining activities occur in various rooms in the dwelling. A total of 26 respondents stated that they eat in the dining room, 17 use the living room, 10 use the kitchen, 9 use the bedroom, and 1 use the garden (Figure 3).
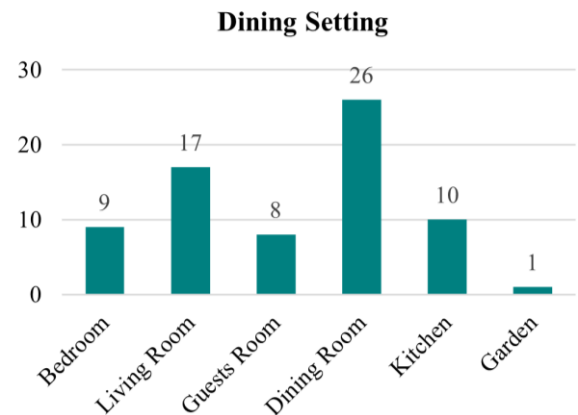


**Figure 3.** Various rooms as a setting for dining activities in the dwelling

Based on these questionnaire results, this study conducted a further search through 9 participants who were selected based on the results of mapping the dining activity settings in the dwelling and their willingness to participate in the following stages of the study. The results and discussion presented in the following sections are of the inquiry to 9 participants with details as shown in Table 1.

**Table 1.** Participants' details

| | Sex | H | HT | Dining Rom | Dining Setting | | S/P |
|---|---|---|---|---|---|---|---|
| | | | | | PS | SS | |
| P1 | M | 2 | F | Yes | Dining room | - | S |
| P2 | F | 4 | I | Yes | Dining room | Living room/ guest room | S |
| P3 | F | 7 | I | Yes | Living room | Bedroom | S > P |
| P4 | M | 2 | F | Yes | Dining room, guest room | - | S > P |
| P5 | F | 5 | F | Yes | Dining room | Living room, bedroom | P > S |
| P6 | F | 2 | F | No | Living room | "Business room" | P > S |
| P7 | F | 3 | I | Yes | Dining room | - | P > S |
| P8 | F | 3 | I | No | Bedroom | Living room/ guest room | P |
| P9 | F | 6 | I | Yes | Kitchen | | P |

H: Household Member      PS: Primary Setting
HT: Housing Type      SS: Secondary Setting
F: Formal Housing      S: Social Activity
I: Informal Housing      P: Personal Activity

All participants occupy a dwelling of a landed housing typology with separate rooms. Thus, the dwelling environment provides more options for users to choose dining settings according to their wants and conditions. This study explores both formal and informal housing because they have different activities and architectural forms, showing different expressions of eating activities in the dwelling. In formal housing, the existence of spaces, including the dining room, was originally the result of a residential module that was part of the facilities and infrastructure built simultaneously with the planned time (Kuswartojo *et al.*, 2005). Meanwhile, dwellings in informal housing are gradually completed through additions and alterations according to the occupants' needs (Funo, Yamamoto and Silas, 2002), hence the existence of the dining room, as well as its conditions and expressions are the result of user needs. Four participants occupy dwellings in formal settlements, 1 of which does not have a dining room, while 5 occupy

dwellings in informal settlements, 1 of which does not have a dining room. The primary setting shows the main setting used by participants for their dining activities. In contrast, the secondary setting is a setting that is used less dominantly or occasionally at certain times.

### *Dining as Social and Personal Domestic Activity*

Apart from being a primary activity to meet human physiological needs, dining activities are also the basis of various social activities (Newman, 2009). In the context of dwelling, Putra et al. (2016) stated that dining activity has a social function that is classified as a family activity, namely domestic activities carried out together with family or household members. On the other hand, the increasingly busy lives, mobility, and digital connectivity give families less quality time together, making families rarely cook and eat together, supported by the increasing habit of eating outside the home (Roshita *et al.*, 2021). Roshita's study also reveals that from 3 meals, only dinner was mainly eaten at home but still seldom done together as a family. It is found that, in general, the trend of dining with the family has decreased in the last few decades due to lack of time during busy schedules, work schedules and work-family factors, as well as distractions in the home environment from TV, gadgets, social media, and other forms (Jones, 2018).

The results of this study empirically show that in the younger generation participants, dining activities at home has begun to shift from social to personal activities to some extent, as shown in Table 1. Dining as a family social activity was experienced by P1 and P2. In these cases, dining activities still serve as an opportunity to gather with family and enjoy time together.

*"Because eating must be (done) together, right… Even though sometimes I want to eat in my room, it's more comfortable to eat at the dining table. First, because we get together, sometimes it's just the three of us because my sister often goes out doing her stuff. After eating, we usually talk, for example on Saturday morning, Sunday morning, or evening, we buy fried food or other snacks and eat there together." – P2 (March 10th,2022)*

For P3 and P4, dining activities are sometimes carried out as personal activities at certain times/occasions but are still dominant done as social activities.

*"Maybe we are kind of old-school, so we gather in places where there is food … Sometimes we eat together, sometimes alone. If I still have work, sometimes my mother eats first, then I follow. Sometimes if we're all hungry together, then we can eat together." – P4 (May 10th, 2022)*

Meanwhile, for P5, P6, and P7, dining activities were more dominantly carried out as personal activities rather than social activities. In these cases, dining is usually done individually by each family member and only done with the family on certain occasions.

*"Oh, for eating together with family, it's most likely just at dinner, but that's rarely the case. Because either 1 or 2 people must have eaten first or later. Unless there is a menu that must be eaten together, for example, Japanese food is called Nabe, or when Mama cooks Udon, which much be eaten together. Then we will eat together" – P5 (May 12th, 2022)*

As for P8 and P9, dining activities are entirely personal domestic activities. They stated that this condition is caused by each family member's activities or bustle, family habits, and preference to conduct dining activity alone.

*"I always eat alone, never together. It's because at home the family has their own activities, so it's a rare occasion to meet and eat together at the same time. Gathering time with family may be rare… If I eat in different places depending on my mood, it can be in the kitchen, terrace, living room, or dining room" – P9 (March 19th, 2022)*

*"… It's up to each family members where to eat. For me, because I like being alone, I prefer to take food downstairs, then eat upstairs in my room while watching YouTube or TikTok." – P8 (March 19th, 2022)*

Whether dining is done as a social or personal activity in the dwelling, there are different architectural expressions regarding the setting and the affordance attributes used. The space needed to dine together in a home environment is not necessarily a formal dining room with table settings that give the traditional image of a family meal but can be a space where the occupants can gather and focus on each other (Jones, 2018). Dining as a social activity is carried out in semi-public or semi-private spaces such as the dining room, guest room, or living room. Meanwhile, because it is done personally, the settings used for dining as a personal activity are found to be more flexible depending on each individual, ranging from spaces with private zoning such as bedrooms to semi-private and semi-public spaces like the dining room, guest room, living room, or even terrace. Furthermore, the settings and affordances will be further discussed in the next sections.

### Dining and Its Complementary Activities

As previously discussed, dining activities are heavily influenced by the demands of a fast-paced lifestyle and busy schedules, making eating activities often done with a time-saving orientation (Jones, 2018;

Prabowo and Nugroho, 2019; Roshita *et al.*, 2021). Through in-depth activity mapping during the interviews, it was found that this condition cause most of the dining activities occur with other activities as complementary activities.

Dining activities as social domestic activities are carried out while gathering and interacting with the household members. Often, dining activities are also done as a break or refreshing time from the busy schedule. Hence, there was a tendency for participants to eat accompanied by entertainment with supporting affordances in the form of TV or smartphones. Entertainment from TV makes eating activities carried out in rooms where the TV is, such as a guest room or living room. In contrast, entertainment from smartphones allows participants to carry out dining activities in a more diverse space.

*"I usually eat in the living room, in front of the TV, while watching TV or sometimes if I don't watch TV, I watch YouTube." – P6 (May 11th, 2022)*

*"Dinner depends on the mood. It can be in the dining room or bedroom while scrolling through social media. I don't turn on the TV because I don't like TV shows right now" – P9 (March 19th, 2022)*

*"Usually, around 12.00, I go downstairs to eat. Usually, I eat while watching movies or anime from a smartphone, but still at the dining table. Sometimes while watching Korean dramas too" – P7 (May 14th, 2022)*

On some occasions, dining activities are forced to be done amid busy daily activities. This situation makes dining activities sometimes done with working as the complementary activity. In this case, the working settings also act as settings for dining activities. This phenomenon is, for example, experienced by P6, who owns an online shop, and P3, who works remotely from home. P6 sometimes eats in her "business room" while finishing her work packing the orders, while P3 sometimes also eats in her room at her desk while finishing work.

*"For example, if I have a lot of products to pack, sometimes I feel like eating is still a waste of time. So I'd still eat it in the business room." – Talia (May 11th, 2022)*

*"If I have a lot of work to do, I eat it at my desk while using my laptop and working." – Luna (May 18th,2022)*

Therefore, the result shows that the variety of the complementary activities carried out in conjunction with dining will affect the selection of settings and the use of attributes as the affordance of dining activities which will be discussed further in the next section.

***The Dining Room as Dining Setting***

This section discusses the dining room as the primary setting for dining activities. The dining room discussed in this section is a formal dining room defined through the affordance attributes, namely the dining table and chairs (Jones, 2018). Putri et al. (2021) found that the dining rooms are not only used for dining but also afford various other hidden activities. Although similar findings were found in this research, this section focuses on the dining room for its function according to the determinism approach, which is to afford dining activities, providing a qualitative explanation of the supporting affordance attributes.

The dining room can accommodate dining activities both as social and personal activities. For P5 who lives in a formal housing with separate dining room, for example, mealtimes affect whether dining is done together with the other family members or as a personal activity, and also visual and thermal comfort that is influenced by the room's lighting conditions. Each of which results in the different use of space and attributes as well as the seating arrangement (Figure 4).

*"At breakfast and lunch, I'm usually the last member of the family to eat. Usually, I sit in a chair facing the kitchen so as not to be dazzled by the sunlight that enters from the window on the south side (the entrance to the house). At dinner, sometimes we eat together. I'd just sit in any seat that's empty." – P5 (May 12th, 2022)*
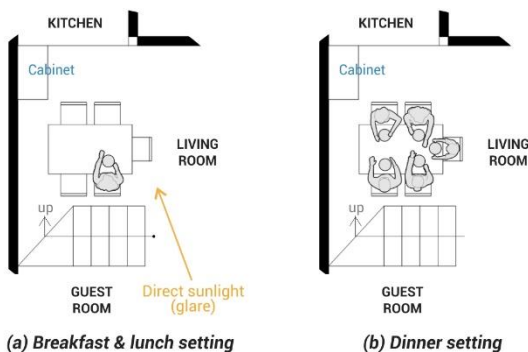


**Figure 4.** P4's Dining room as dining setting and the affordance arrangements alternatives

In P2's informal house, the dining room is merged with the kitchen area and becomes one of the main settings for dining while gathering with family. The selection of the dining room as a primary dining setting apart from the existence of a dining table and chairs as affordance is affected by the aspect of lighting and ventilation. It is supported by attributes in the form of a screen door and window that provide natural lighting and ventilation that make up the room's comfortable atmosphere (Figure 5).

*"We usually eat in the kitchen, which is merged with the dining room, so the food can be served directly to the table as soon as we finish cooking. The dining room and kitchen are at the very back of the house. There is a big window, so we don't need to use lights from morning to evening. The dining table is minimalist with 4 seats. The room is not so spacious, so the table is positioned directly against the wall. What makes it nice is that there is a door that leads to an empty space. In houses in cities, there are sewers between houses, right, so the back wall doesn't stick to the neighbor's wall. There's a space like that behind the house, and it's not being used, so it's dirty. We put a screen door with mesh, so the wind can come in, so it's nice when the wind blows during the day." – P2 (Maret 21st, 2022)*
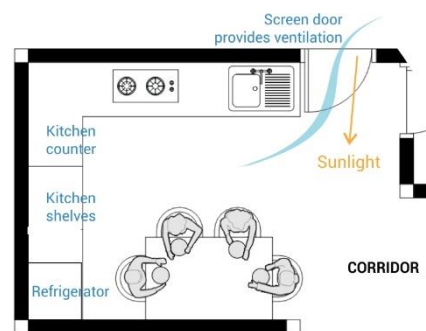


**Figure 5.** Dining room as dining setting in P2's dwelling

From the discussion above, it is known that apart from the existence of dining tables and chairs as the main affordance for dining activities in the dining room, the

selection of this room as a dining setting is also influenced by time and occasion as well as indoor spatial quality conditions formed by lighting and ventilation. In addition, the use of attributes, including the seating arrangement and what activities can be done in the dining room is influenced by habits in the family.

### Other Rooms as Dining Setting

Putri, Kusuma, and Riska (2022), through their study on dining activities at home, found that dining activities are not only carried out in the dining room but also in other rooms in the dwelling. However, the research was conducted by asking about the variety of activities that occur in the dining room only to the respondents who have a dining room and asking about the variety of settings for dining activities only to the respondents who do not have a dining room. Therefore, the study did not explore the possibility of dining activities being conducted in other settings by respondents who have a dining room. On the contrary, through the inquiry from questionnaires and interviews in this study, it is found that dining activities are also carried out in other rooms in the dwelling regardless of the presence or absence of a dining room. The use of other rooms in the dwelling as a setting for dining activities can be a form of negotiation over the absence of a dining room or the incompatibility of the dining room with the needs of the users' eating activities, as well as a form of preference or choice.

This study also reveals that the *lesehan* culture is still found in dining activities in participants' dwellings, especially those in the informal housings. Therefore, although dining tables and chairs are often seen as the main affordance attribute for dining activities, they are not always necessary and not always used by the participants. This condition allows more flexibility in using various spaces in the dwelling as a dining setting.

*"Sometimes I eat in the bedroom on the 1st floor. I sit on the bed or sit on the floor while watching YouTube. Sometimes I eat while sitting lesehan in the living room when I want to." – P8 (March 19th,2022)*

*"When we eat in the living room, we sit lesehan on the floor. Sometimes we use mats, sometimes we don't." – P2 (March 21st, 2022)*

Based on the mapping through the questionnaire, it is known that the other rooms used as dining settings are the guest room, living room, bedroom, and kitchen (Figure 3). Dining activities carried out in the guest room or living room are often related to the presence of a TV in that room which is used as a source of entertainment. This exemplifies the findings in the study of Roshita et al. (2021) which states that dining activities are often done

in front of the TV, displacing the traditional practice of eating together.

The choice of the guest room and living room as the setting for dining activities in the dwelling environment is also caused by the nature of the space as a place for social interaction in the dwelling (Putri, Kusuma and Riska, 2022). Meanwhile, dining activities carried out in private areas such as bedrooms occur because they are carried out as personal activities. Hence it is done in a private setting or personal space. Because these rooms were not designed initially to afford dining activities, there are changes or adjustments in the use and arrangement of the affordance attributes in these spaces that differentiate them from when they were used for their initial activities.

P8 who lives in an informal housing eats in the bedroom because there is no dining room in her dwelling. Besides, she also prefers to eat alone. She performs dining activities in her bedroom by sitting on the bed or the floor and opening the bedroom door and window (Figure 6).

*"We usually eat in the bedrooms because there is no dining room or dining table in the house, so it's up to each family members where to eat … When I eat in my room, I sit on the floor, sometimes on the bed, hehe. I open the door so the smell of food doesn't stay in the room. As for the window I usually open it only in the morning until afternoon," – P8 (April 20th, 2022)*
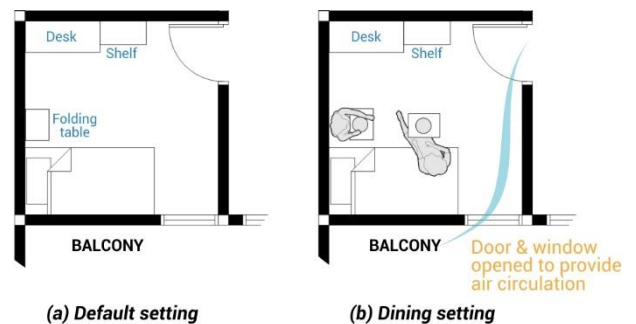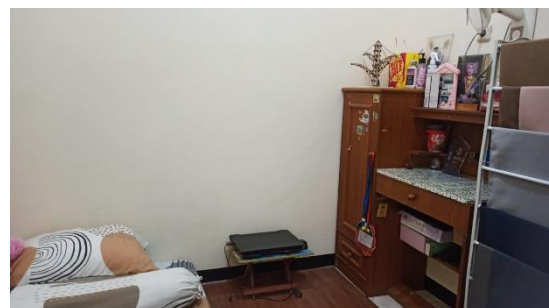


**Figure 6.** P8's Bedroom as dining setting

In P2's dwelling (informal), the guest room is used as a secondary dining setting occasionally, where it also

multipurposely functions as a setting for hosting guests, teaching courses, and other family activities (Figure 7). When used to host guests and teach, the guest room becomes a semi-public space and turns into a semi-private when used as a setting for dining activities and other activities such as relaxing and gathering with the family.

*"We can eat at the dining table or while watching TV in the guest room, which is also the living room. When we eat in the living room, we sit lesehan on the floor. Sometimes we use mats, sometimes we don't." – P2 (March 21ˢᵗ, 2022)*
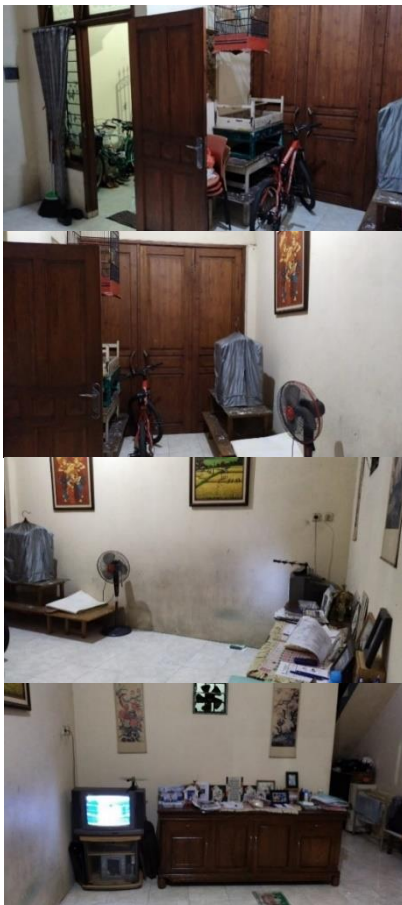


**Figure 7.** The guest room in P2's dwelling

For each activity, there is a change or adjustment in the arrangement of the furniture attributes to properly afford the activity (Figure 8). For example, since dining and other family activities are carried out in a *lesehan* manner, they require a spacious floor area, so the furniture is placed on the sides of the room.



**(a) Teaching, hosting guests**



**(b) Dining, relaxing, gathering with family**
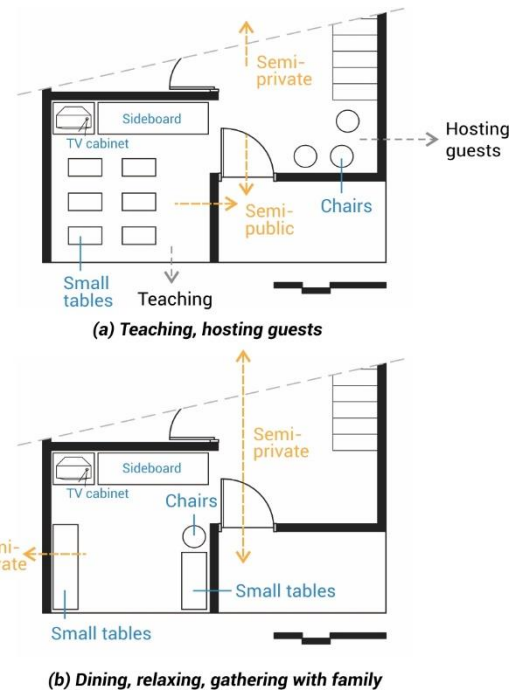
**Figure 8.** Attribute adjustment in the living room as the dining setting in P2's dwelling

P3 who lives in an informal housing uses the living room to eat because of the incompatibility of the dining room to afford dining activities for her family. P3 lives in a house with many household members. Meanwhile, in the dining room, the number of dining chairs is insufficient, so it is not feasible to afford dining activities. This condition has led to the habit of eating in the living room that is more spacious and instead using the dining room only for storing food (Figure 8).

*"In my house, it's really up to each one of us. So there's a dining table in the dining room, but we don't have to sit there and eat together at certain times … Because I have 3 siblings, we're a pretty big family. So in total, in the nuclear family, there are already 6 people. In the past, we didn't have a dining table with many chairs. The dining table may be enough, but the chairs are not. So it has always been a habit for everyone to eat together in the living room." – P3 (May 18ᵗʰ, 2022)*

**CONCLUSION**

Studies on dining activities and behavior in dwelling environments are often conducted in the fields of psychology, cultural anthropology, and public health, with limited discussions about the implications of dining activities on dwelling architectural forms. This study identifies the setting and affordance for dining activities from the experience of young generations in Indonesia. The inquiry shows that the social role of dining activity at home has decreased and shifted towards its role as

personal activities. The development of a practical lifestyle in recent times has also caused dining activities to often merge with other activities, from interaction with the household member, relaxation and entertainment, to working activities.

This study reveals that dining activities are conducted in various settings in a dwelling despite the existence of dining rooms. It also displays that the choice of space as a setting for dining activities is affected by the availability of supporting attributes, the nature of dining activities as a social or personal activity, the complementary activities, and the spatial quality of the room shaped by the lighting and ventilation. Through this study, it was also found that the Indonesian *lesehan* dining culture still influences dining activities in the dwelling where its flexibility allows dining to be carried out in various settings in the dwelling, especially in informal housing. Therefore, the existence of the dining table and chairs as affordances for dining activities are not mandatory for assembling dining settings.

Finally, as this study qualitatively investigates the affordances of dining activities in the housing environment through case studies, it has some limitations in generalizing the findings. However, this study can help to better understand the main characteristics of how dining activities are carried out in the dwelling and the essential aspects regarding the supporting affordances that can be applied in designing future housing in Indonesia.

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