

# The Value of Living in an Inner-City Settlement: A Study of Physical and Psychological Aspects of Attractiveness in Kampung Ketandan, Surabaya

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都心居住区に住むことの価値  
-スラバヤ市カンポン・ケタンダンにおける魅力の物理的・心理的側面に関する研究-  
The Value of Living in an Inner-City Settlement: A Study of Physical and Psychological Aspects of Attractiveness in Kampung Ketandan, Surabaya

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In Surabaya, Indonesia, kampung has supported more than 60% of urban housing needs. However, not every kampung can attract people to live in it. Some kampungs even had a declining population, while the changes in demography, lifestyle, and other aspects may affect life in the kampung and will probably harm the very existence of the kampung itself. Thus, this paper aims to observe how the inhabitants of an inner-city kampung value their life in it, what factors affect their choice of living place, and how these may affect the survivability of the kampung. This research employed a quantitative method through a questionnaire survey, and the result was analyzed with SPSS. The result shows that despite having a population decline, Kampung Ketandan is not necessarily vacant because its attractiveness is bound to the physical value for the migrant workers and the long-term residents. At the same time, psychological value acts as the anchor that will attract them to stay.

*Keywords: inner-city, neighborhood attractiveness, housing, kampung, Surabaya*  
都心、近隣の魅力、住宅、カンポン、スラバヤ

## 1. Introduction

The UN report on world population shows that by 2050, 68% of the world's population will live in urban areas. Meanwhile, 50% of the area will be urban. According to World Urbanization Prospects [1], the agglomeration of urban areas, which invites various economic activities, impacts the suburban and surrounding rural areas. The percentage of Indonesia's population living in urban areas reaches more than 70%. It has also been observed that changes in the composition of the population living in urban areas are not only influenced by the formation of new urban areas but also by the movement of people from rural areas to urban areas [2].

One of the areas affected by urbanization and urban

development is kampung. In Surabaya, kampung has supported more than 60% of urban housing needs [3]. Today, a kampung serves not only the needs of Surabaya citizens but also migrant workers. With the rise of the service and trade sectors, the number of migrants is increasing. Thus, more housing is required for them. For migrants, living in a kampung allows them to provide for their needs because most kampungs are adjacent to the center of activities and provide good accessibility [4].

A kampung, in the case of Surabaya, held an important role because it keeps the city's identity and memory [5] – especially the inner-city kampungs. However, these areas are prone to be abandoned and experiencing a decline in quality. According to Cody and Fong [6], the deterioration in the inner-city area is caused by various factors, such as building age, shifting priorities within heritage discourse, deferred maintenance, or increased pressures. This is in line with Steinberg [7], who stated that inner cities became

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valuable for land uses other than housing. Economic pressures led to the elimination of the older housing stock.

To survive, a *kampung* must be able to adapt. The characteristics of the *kampung*, both in its flexibility and ability to become a temporary/transient settlement, do not necessarily match the preferences and needs of potential users. Not every *kampung* was able to attract people to live in it. Some *kampungs* even had a declining population since their inhabitants moved out to another part of the city. The millennial generation, part of this user demographic, also brings unique lifestyles and preferences. Furthermore, a *kampung* is influenced by the urban lifestyle, and the *kampung* spaces are transformed to accommodate the new needs due to this lifestyle [8].

The concern with *kampung* today is also much more regarding the current situation faced by *kampung*, its suitability with current needs and lifestyle, and its integration with the city development. Shirleyana et al. [9] observed *kampung*'s resilience to discover how it may cope with daily or small-scale chronic risks and possibly large-scale disasters. Setijanti et al. [10] revisited an inner-city *kampung* to find how it has managed the unrestrained expansion of its surrounding commercial area. Ernawati [11] studied how urban vulnerability may affect the *kampung* and the community living within.

The changes in demography, lifestyle, and other aspects may affect life in the *kampung* and will probably harm the very existence of the *kampung* itself. Thus, this paper aims to observe how the inhabitants of an inner-city *kampung* value their life in it, what factors affect their choice of living place, and how these may affect the survivability of the *kampung*.

## 2. Literature Review

### 2.1 The *kampungs* of Surabaya

Research about *kampung* has a significantly wide range considering the complexity and the many crossings of fields and subjects that may come to it. From the late 1980s until the early 2000s, research about *kampung* ranged from the definition [12] [13] and characteristics [14] and the improvement of *kampungs* to the topics of slum and squatter *kampungs*.

*Kampung* refers to a term for vernacular urban settlement widely used in Java. It is slightly different from the Malay word “*kampong/gampong*,” which refers to the village in a rural context. In Surabaya, a *kampung* is closely related to the neighborhood in a district. The formal border does not necessarily define its boundaries. Ford [13] described *kampung* as an unplanned, primarily low-income residential

area that has gradually been built and serviced. Silas [15] also explained *kampung* as the result of the transformation of the small village-like settlements, which remain unique and have now become an integral part of towns and cities throughout Indonesia. The high density with minimal infrastructure is the characteristic of the *kampung* that earlier gives the impression of a slum area.

Based on the actors' migration and mobility backgrounds, the *kampungs* of Surabaya can be divided into three types: the indigenous *kampung*, the migrant *kampung*, and the instant *kampung*. The indigenous *kampungs* are those which existed since the pre-colonial era. They were established around the old regency of Surabaya, today's Alun-Alun Contong area [16]. The inhabitants of these *kampungs* were indigenous people [17]. The migrant *kampungs* were established by the foreigners who came to trade in Surabaya but later settled and built their encampment. This encampment was becoming permanent and transformed into a settlement. As their population grew, they would eventually require expanding their settlement area. Thus, in-migration occurred. The Dutch took over the indigenous settlement and later moved eastward to the current city center. The organic structure of the old settlement was reorganized and formalized. At the same time, the unoccupied old Dutch settlement was inhabited by the Chinese and Arabs. Meanwhile, the evicted indigenous were moving further to the outskirts. This local migration was a recurring event, encouraged by the population change and the city's development.

The third type is the instant *kampung*, which emerged from a different but related situation. The houses became vacant when the local migration occurred in the indigenous and migrant *kampung*. They allowed the migrant workers from the surrounding area, such as Madura, who work as coolies or workers at factories and warehouses, to occupy these houses. Instant *kampung* also appeared during the independence and revolution period. With the war, more workers were needed in the artilleries and other war efforts, thus increasing the population significantly.

The dynamics and events surrounding the wars affected the population of Surabaya. By the end of 1946, Surabaya's population had fallen from 618,000 to 219,000, and a large proportion of the remainder was European, Chinese, and Arabic [18]. However, when the revolution was gradually ending, the residents of Surabaya who had been displaced began to return. Unfortunately, their houses were destroyed by war. Residents who lost their homes began to occupy land and empty places left by Europeans. By 1949, Surabaya's population had proliferated to 928,000. This increase indicates



that the people migrating to Surabaya are not only returnees but also new migrants. They build makeshift housing in places they can find with minimal resources. From 1950 to 1960, dozens of new kampungs were formed in Surabaya. They stood on public lands, private lands, graveyards, the banks of the river, and other vacant lands. These forced occupancies were the forming of the instant kampungs.

## 2.2 Population Decline in Inner-City Kampungs

Currently, the population decline in Surabaya is a slight issue because the demography statistic shows an increase of 3.94% from 2010 to 2020 (Surabaya Statistic Bureau, 2021). However, looking at an exact number for each subdistrict, it is notable that some areas had a significant population increase while others declined. The increase was mainly in the newly developed west and east Surabaya area, while the inner-city subdistricts experienced a considerable decline. This situation is illustrated in Figure 1.

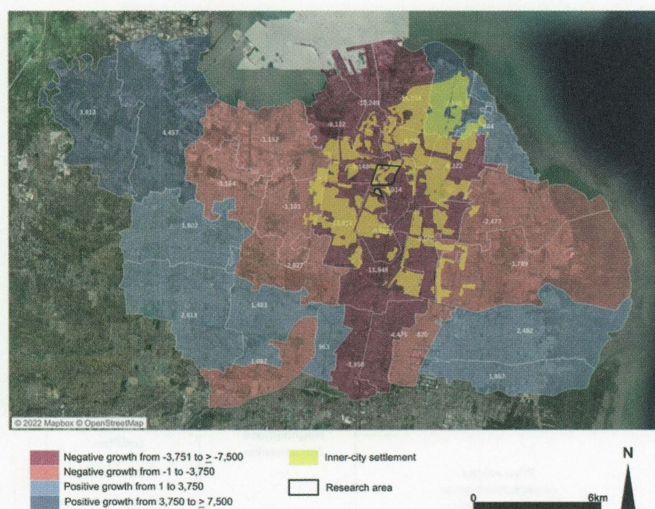


Figure 1. Inner-city kampungs marked in the yellow shade (Shirleyana, 2019) imposed on the population growth map of Surabaya.

## 2.3 Study Context: Kampung Ketandan

Kampung Ketandan is located at the heart of the business and commercial center of the Tunjungan area in Surabaya. It is one of several kampungs which was encroached upon by the new development of its surrounding. However, its physical property as a low-rise, high-density settlement – properties that are associated with kampung – is retained.

Kampung Ketandan was at first a Chinese cemetery that served the needs of the Chinese merchants when the earlier cemetery in the northern part no longer fulfilled their needs. A small community already lived in the area when the cemetery was built. The Surabaya map dated in the 1920s shows that the [9]cemetery area was reduced and transformed into a

residential. On its periphery, service buildings were built. It was the earliest form of instant kampung that existed during the colonial era. This occupation and transformation practice was intensified due to the aftermath of independence and post-independence war. The occupation of the cemetery and newly built kampung was a common phenomenon in Surabaya [19].

Today, Kampung Ketandan is recognized as a historic landmark of Surabaya. This kampung and several others have been appointed as tourism kampungs. Its importance is also on its capability to support the community living inside and the migrant workers in the surrounding area. Because it is at the heart of the Surabaya commercial area, it also faced the threat of rapid development. Some parts of the kampungs have been affected, but the core settlement area and the community withstand. Figure 2 shows the map of both kampungs as the studied area, while Figure 3 shows the current situation in the kampung.

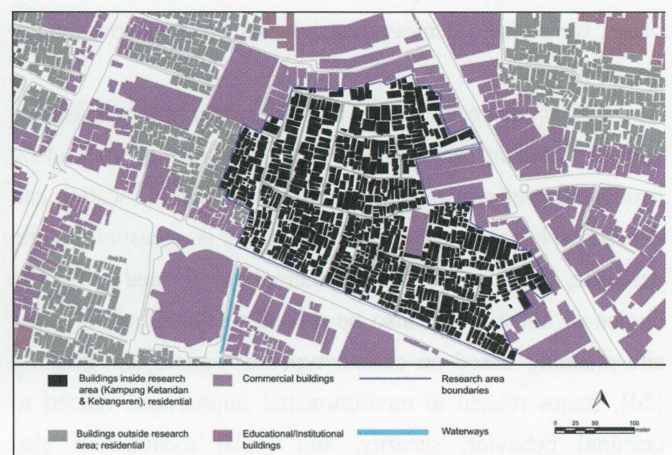


Figure 2. The map of Kampung Ketandan as the studied area (Source: Author, traced from Surabaya Municipality, Tunjungan Area Detailed Spatial Plan (2015))

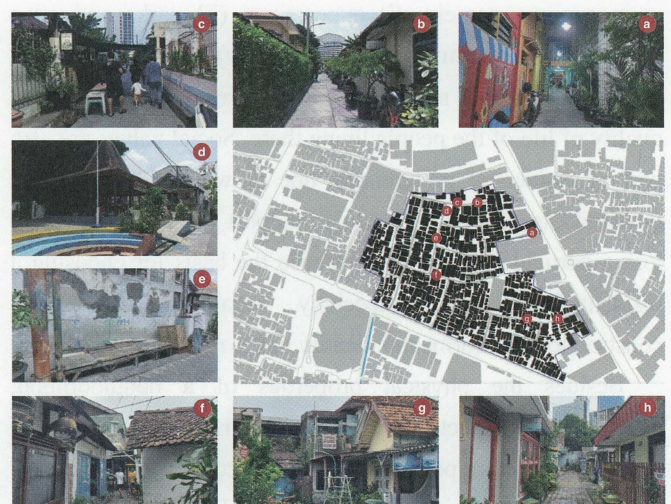


Figure 3. Current situation of Kampung Ketandan



## 2.4 Neighborhood Attractiveness

Neighborhood attractiveness is closely related to users' preferences and place attachment. User preferences are related to the determinants that weigh their decision in choosing a house. Place attachment, especially in a community context, will determine how an individual is connected to their local social networks (bonds) and the interactions which occur with them. Various relevant assessment tools and tools were developed to read user preferences in choosing houses.

Consideration of housing selection is also associated with affordance. Affordance here is not about a person's economic capacity to reach a certain type of housing but is directly related to what aspects residents want to realize – which can be reached – by the housing they live in. This aspect makes the goals and activities of residents the focus of consideration [20]. A case study in Hukou, China, even shows how a person's residence status and position as a migrant affect his expectations and preferences in housing [21]. In place attachment, the three predictors affecting a person to their place were socio-demographic, social, and environmental predictors [22].

Not only from the user's point of view, physical aspects and the housing environment are also part of measuring residential preferences. The choice of residential location can depend on how attractive the environment is, measured by the aesthetic, comfort, and social interactions formed [23]. The choice of housing can also be related to space, privacy, and site planning based on certain types of houses and housing [24]. Issues related to environmental impressions related to criminal behavior, security, and social dysfunction also influence housing preferences [25].

The intrinsic attractiveness of that environment influences preference for a residential setting. Mallach [26] states that the value of comfort in an environment can be assessed from six main aspects, namely: (i) appearance, (ii) parks and open spaces, (iii) economic opportunities, (iv) transportation, (v) shopping, and (vi) school. These features will improve the quality of life of the people living there. Social values are also part of residential preferences, one of which is access and proximity to relatives for social support [27]. The desire to join a particular social circle is also the basis for choosing a residential location, especially regarding the social construction that forms the identity of the residential area [28].

Besides the physical properties of a neighborhood, psychological aspects may also affect how the value of a neighborhood is perceived. An instrument to measure neighborhood cohesion was proposed by Buckner [29]. In this instrument, eighteen items showed a certain degree of

neighborhood attractiveness and psychological sense of neighborhood. Mouratidis and Poortinga [30] measured neighborhood cohesion from the helpfulness among the inhabitants and their closeness to their neighbors. The sociodemographic, physical, and psychological studies have provided a basis for determining what items will be included in the measurement of attractiveness to living in the kampung.

## 3. Method

### 3.1 Research Framework

Figure 4 shows the research process and how the quantitative method is suitable to answer the research objective. The questionnaire was constructed based on the theoretical framework. The survey data were analyzed using factor analysis, correlation analysis, and multiple regression analysis to find the most and least contributing factors that attract people to live in a kampung.

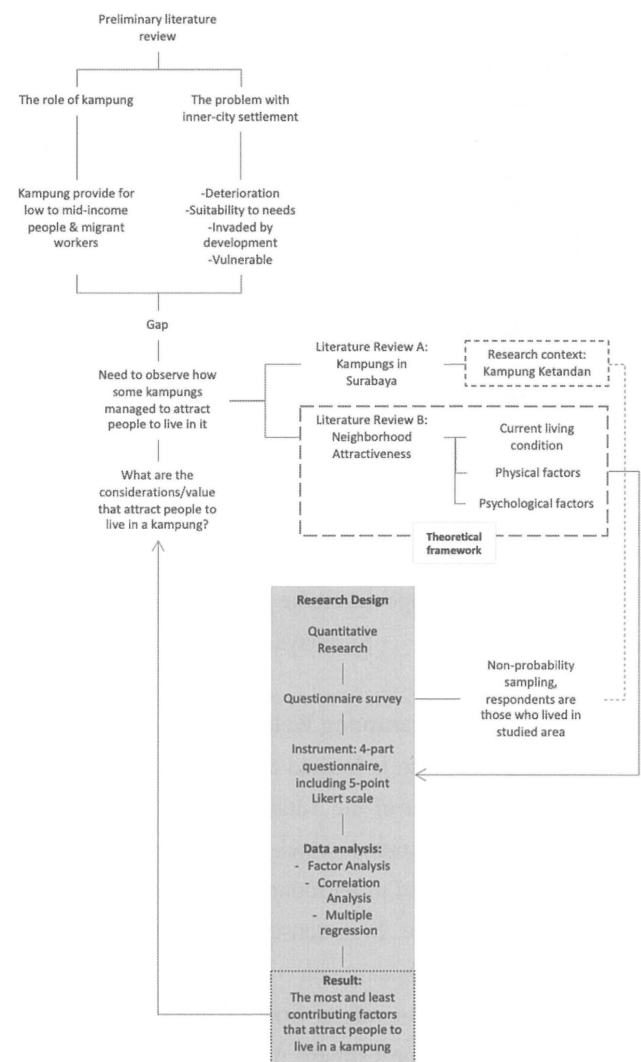


Figure 4. Research framework

### 3.2 Data Collection

The data for this research was gathered using a field

survey questionnaire. The samples chosen were limited to those who live in either Kampung Ketandan or Kampung Kebangsren. Respondents' characteristics were limited to those above 18 years old, considering they were of adult age and most likely to live independently and have their first job.

The questionnaire was based on several prior discussions with the head of the kampung and an expert in the housing and settlement field. This information was synthesized with the literature review. The result was a four-part questionnaire, which consisted of the following:

1. Respondents' information
2. Economic and occupation information
3. Current living situation
4. Attractiveness variables\*
5. Psychological aspects\*
  - a. Neighboring
  - b. Psychological sense
6. Physical aspects\*
  - a. Openness
  - b. Social proximity
  - c. Neighborhood and housing design
  - d. Accessibility

\*) Questions in Likert-scale type

## 4. Findings

### 4.1 Respondents' Characteristics

From the field survey, 200 respondents were able to answer the questionnaire. However, only 189 data were valid to be analyzed. The statistical frequency of respondents is shown in Table 1. Most of the respondents were 18-25 years old, single, employed, with a monthly income of less than IDR 1.200.000 (USD 77). This data shows that Kampung Ketandan is affordable for the entry-level income group.

Table 1 The statistical frequency of respondents

No.	Item	Group and percentage
1	Age	<b>18-25 (33%)</b> 26-35 (25%) 36-45 (12%) 46-55 (15%) 55 and above (14%) N/A (1%)
2	Marriage status	<b>Married (38%)</b> <b>Single (54%)</b> Widowed/divorced (8%)
3	Employment status	<b>Employed (55%)</b> Retiree (2%) Housewife (29%) Student (5%) Unemployed (7%)
4	Income range	<b>Less than IDR 1.2mil (46%)</b> IDR 1.2mil – 4.2mil (41%) IDR 4.3mil – 5.9mil (10%) IDR 6 mil and above (3%)

The primary data were processed using SPSS 28 to answer the research question. This program was chosen for its convenience and accuracy. The first step after finishing the data input was checking the samples' validity and normalcy. From this step, 9 data were filtered out. The next step was to assess the 32 items in the questionnaire by using factor analysis. From the factor analysis, three factors were expected as a result. Each factor will be computed using a suitable tool to find how each is associated with the attractiveness variable.

### 4.2 Factor Analysis

Three factors with eigenvalues exceeding 1 were identified as underlying the twenty-nine questionnaire items, as shown below. These factors contributed to 53% of the variance in the questionnaire data.

Table 2 Factor analysis result

Code	Item Description	Loadings		
		Factor 1 <sup>a</sup>	Factor 2 <sup>b</sup>	Factor 3 <sup>c</sup>
ATD-3	My current living space of this house is sufficient	.841		
ATD-2	Attractive neighborhood appearance	.808		
ATP-3	The neighborhood is physically safe and secure	.760		
ATD-1	Housing cost or good value	.749		
ATA-3	Convenient accessibility to and from the kampung	.732		
ATO-2	Lots of recreation opportunities	.720		
ATA-2	Close to work or school	.701		
NCP-7	I like to think of myself as similar to the people who live in this neighborhood	.678		
NCP-8	A feeling of fellowship runs deep between me and other people in this neighborhood	.574		
ATO-1	Openness and spaciousness	.573		
ATP-1	I live close to family and friends by living in this kampung	.567		
ATP-2	I am familiar with this area	.513		
NCN-4	I believe my neighbors would help me in an emergency		.881	
NCP-2	The friendship and associations I have with other people in my neighborhood mean a lot to me		.841	
NCP-1	I feel like I belong to this neighborhood		.841	
NCN-3	I borrow things and exchange favours with my neighbors		.789	
NCN-2	If I needed advice about something I could go to someone in my neighborhood		.647	
NCP-3	If the people in my neighborhood were planning something I'd think of it as something we were doing rather than they were doing		.594	
NCP-9	Living in this neighborhood gives me a sense of community		.539	
NCN-1	I regularly meet and talk with my neighbors		.519	
NCP-4	I think I agree with most people in my neighborhood about what is important in this neighborhood		.509	
DEM-3	Ownership			.817
DEM-2	Residence period			-.623
DEM-1	Residence status			.520

The three factors acquired in this analysis were used as a basis for the correlational analysis to find how each factor may contribute to the attractiveness of living in the kampung. The first factor, which accounted for 43.6% of the variance,

was grouped as the physical factor. It contains items related to the physical aspect of the neighborhood, including the housing design (sufficient space, neighborhood appearance, and value of price), accessibility (convenience and closeness to workplace/school), openness, and proximity (close to family, sense of navigation, and safety/security). Two items were originally grouped in psychological aspect, coded NCP-7- and NCP-8. However, these items are acceptable to be included in this group because it could mean that the inhabitants will feel safe and secure if they live with a similar group of people who live in a similar house. It could also show that physical proximity relates to how a feeling of fellowship was formed in the inhabitants.

The second factor, which accounted for 5.7% of the variance, consisted of the psychological aspect of living in a neighborhood, including neighboring activities (meeting and talking, exchanging help and favors, and taking advice) and the psychological sense of living in a neighborhood (friendship, camaraderie, and sense of community). Lastly, the third factor, which accounted for 4.4% of the variance, consisted of the residence record and ownership, including ownership of the residence, residence period, and residence status. Considering a large number of question items to be tested to the dependent variable, the factor analysis was used to aggregate - in this case, average - the items with high loadings for each factor and use these composite variables in further research.

The three factors were then tested to the attractiveness variables, which consisted of three basic questions:

1. whether the respondents were attracted to living in the kampung,
2. whether they want to leave the kampung when given a chance, and
3. whether they plan to live in this kampung for a long time.

These questions were tested to find their reliability. Cronbach's alpha for this set of questions was .43, which was unacceptable. A closer examination of the questionnaire item-total statistics indicated that alpha would increase to .65 if question 2 were removed. This item asked whether participants "given a chance, would like to move out of the neighborhood." This question might be ambiguous since it has no direct relationship to answering why the respondents were attracted to living in the kampung. Consequently, this question was dropped from the questionnaire, and all subsequent analyses are based on the responses to the remaining questions.

### 4.3 Factor 1: The Physical Factor

The first factor consisted of 12 items from the questionnaire; ten were related to the physical aspect, while the other two were associated with the psychological aspect. After the making of this construct, Cronbach's alpha was run. The alpha for the twelve items was .93, indicating that the items would form a scale with good internal consistency reliability. This value was also below 0.95, meaning there should be no concern about the questions being redundant.

Afterward, this group of variables was aggregated to find the average value to form a composite physical factor variable for each participant. The average value was also measured for the other variables used in the correlation analysis. The correlation analysis for Factor 1 applied bivariate Pearson's analysis. The bivariate correlation between the two variables was positive and strong,  $r(189) = .661$ ,  $p < .001$ . Before calculating  $r$ , the assumptions of normality and linearity were assessed and found to be supported. Visually inspecting a scatterplot of "attractiveness" against "physical factor" confirmed that the relationship was linear.

Table 3 The correlation of attractiveness with physical factor

		Attractive ness	Factor 1 Physical	<i>M</i>	<i>SD</i>
Attractive ness	Pearson Correlation	1	.661**	1.7016	.48117
	Sig. (2-tailed)		<.001		
Factor 1 Physical	Pearson Correlation	.661**	1	1.8565	.46877
	Sig. (2-tailed)	<.001			

\*\*. Correlation is significant at the 0.01 level (2-tailed).

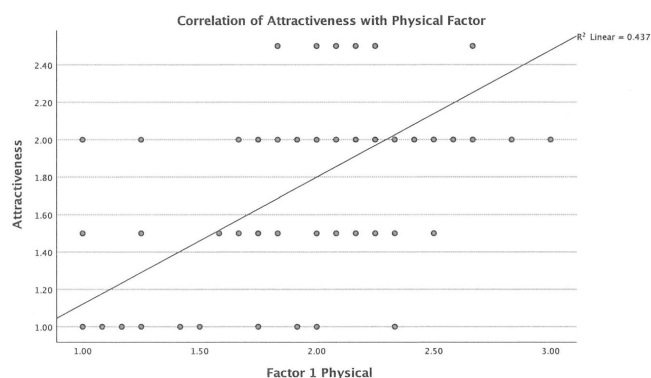


Figure 5. Scatterplot of the correlation of attractiveness with the physical factor

### 4.4 Factor 2: The Psychological Factor

The psychological factor was constructed from 9 items from the questionnaire that were related to the neighboring and psychological senses of living in the neighborhood. The



Cronbach's alpha for the items was .93, meaning the items have good internal consistency reliability. This group of variables was also aggregated to find the average value to form a composite physical factor variable for each correspondent. A correlation was computed to investigate if there was a statistically significant association between attractiveness and psychological factor. The attractiveness variable was not skewed (skewness = -.35), nor does the psychological factor (skewness = -.35). Considering the results in the initial analysis about the normality of distribution and linearity were not violated, this analysis used bivariate Pearson's analysis. The bivariate correlation between the two variables was positive and strong,  $r(189) = .63$ ,  $p < .001$ .

Table 4 Correlation of attractiveness with the psychological factor

		Attractiveness	Factor 2 Psychological	<i>M</i>	<i>SD</i>
Attractiveness	Pearson Correlation	1	.630**	1.7016	.48117
	Sig. (2-tailed)		<.001		
Factor 2 Psychological	Pearson Correlation	.630**	1	1.8272	.49855
	Sig. (2-tailed)	<.001			

\*\*, Correlation is significant at the 0.01 level (2-tailed).

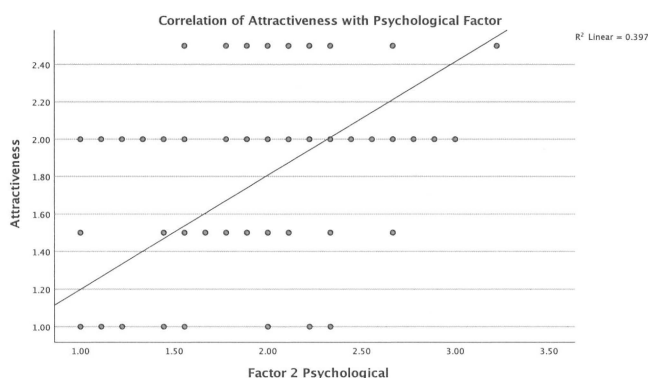


Figure 6. Scatterplot of the correlation of attractiveness with the psychological factor

#### 4.5 Factor 3: Residence Status and Ownership

The last factor consisted of three items from the questionnaire. This set of questions was related to the residence record and ownership of the respondent, including the ownership status, residence period, and residence status. These three variables were nominal-type data, meaning Cronbach's alpha was not calculated. Simultaneous multiple regression was conducted to investigate the variance that can be accounted for the attractiveness of living in the kampung by residence status, residence period, and ownership status.

Before the analysis, several assumptions were evaluated. First, the boxplots indicated that each variable in the regression was normally distributed but was not free from univariate outliers. Second, Mahalanobis distance (Mahal. distance = 17.54) exceeded the critical  $\chi^2$  for  $df = 3$  (at  $\alpha = .001$ ) of 16.26. To fix the problem, the outlier data were sorted out. The relatively high tolerances for both predictors in the regression model indicated that multicollinearity would not interfere with our ability to interpret the outcome of the multiple regression analysis. The means, standard deviations, and intercorrelations are in Table 6.

The combination of variables to predict attractiveness from the three predictor variables was statistically significant,  $F(3,185) = 8.87$ ,  $p < .001$ . The beta coefficients are presented in Table 7. The residence status significantly predicts attractiveness when all three variables are included. The adjusted  $R^2$  value was .13. This indicates that 13% of the variance in attractiveness was explained by the model. According to Cohen (1988), this is a medium or typical effect.

Table 5 The means, standard deviations, and intercorrelations

Variable	<i>M</i>	<i>SD</i>	residence status	residence period	Ownership
Attractiveness	1.7037	.48327	.341*	-.111	.222*
Predictor variables					
residence status	1.1746	.38064		-.387*	.448*
residence period	3.1852	.90659			-.518*
ownership	1.9153	1.05348			

\* $p < .01$

Table 6 The beta coefficients of residence record and ownership factor

Variable	<i>B</i>	<i>SE B</i>	<i>b</i>	<i>t</i>	<i>p</i>
residence status	.401	.100	.316	4.020	<.001
residence period	.039	.044	.073	.885	.377
Ownership	.054	.039	.118	1.396	.164
Constant	1.006	.223			

\*Note:  $R^2 = .13$ ,  $F(3,185) = 8.87$ ,  $p < .001$ ,  $f^2 = 0.14$

## 5. Discussion

From the data processed, it can be said that the three factors (physical, psychological, and living conditions) are highly associated with the attractiveness of living in the kampung. Of the three factors, the physical factor brought the highest effect. Not only by the effect value but this was also proven by the

value of the high loading from the factor analysis (Table 2). It shows that the physical aspect was the most considered one. The psychological force also supported this benefit from the neighboring and the conviviality in the kampung. As an additional consideration, the residence record and ownership of the inhabitants would also affect the consideration of living in the kampung.

### 5.1. The conveniences of living in a kampung

This research divided the physical aspect into four groups: openness, social proximity, neighborhood, housing design, and accessibility. The factor analysis shows that the items with higher loadings came from the design aspect, which consists of the adequacy of living space, value/price appeal, and the neighborhood's appearance.

The living space in Kampung Ketandan was varied. It came in the form of boarding houses with room sizes of 12 – 21sqm, multifamily houses shared with other families, or single-family houses of various sizes. However, the size or spaciousness of space is entirely subjective regarding the personal sense of adequacy. It may depend on the number of occupants, their income, or employment status [31]. It may also relate to how the inhabitants configure the living space and manage the efficient usage of each room [32]. Figure 7 shows the types of dwellings in this kampung.

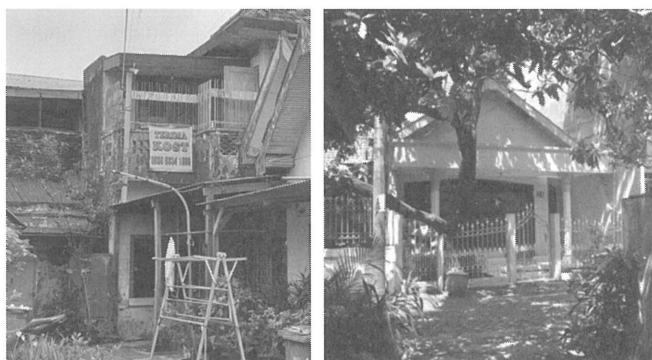


Figure 7 Boarding house (left) and single-family house (right) in Kampung Ketandan

Based on the questionnaire result, value/price appeal was agreed by 87.5% of those who lived with less than USD 95 monthly income. It shows that kampung could still accommodate people with early-stage income, despite their age and marital status. In this phenomenon, Silas [33] explained the development of the house through actual building processes over time and how the occupants utilize it to improve their human quality dynamically. The inhabitants have a certain degree of freedom in controlling their resources to improve their houses, eventually enhancing their

productivity.

The appearance of the kampung was also an essential variable in determining the attractiveness of living in a kampung. In Surabaya, there were many initiatives to improve the physical condition of a kampung. Begin with the Kampung Improvement Program to ensure the adequacy of essential services; the initiatives have evolved to improve the neighborhood appearance, such as greeneries, cleanliness, and so far as the safety and security of the kampung. The appearance quality of Kampung Ketandan is illustrated in Figure 8.



Figure 8 The appearance of Kampung Ketandan

Other factors that determined the attractiveness of living in kampung related to the physical aspect were social proximity, openness, and accessibility. Social proximity means that by living in this kampung, they lived close to their relatives, in a familiar place, and with a sense of security. According to Benninger [34], the neighborhood space is a domain where women and children are secure, where young girls can relax out of doors, fearless of careless glances and thoughtless comments. In an urban village, it is the "eyes of the street" that provide protection and reassurance.

Openness in kampung was also one of the pulling factors. It ensures that the inhabitants have equal access to direct sunlight and greeneries. It means that, although the kampung was somewhat crowded and stuffy, there was a chance to have fresh air. When one cannot afford the greeneries in their house, they can be well provided in the public area of the kampung,

as shown in Figure 9. The location of this kampung also brought benefits to the inhabitants regarding access to a recreational facility. The main streets surrounding this kampung - Tunjungan and Embong Malang Street - were lively. Especially in Jalan Tunjungan, there were many regular events at night and on weekends. There were also city parks within 5 km that were easily reached from this kampung.



Figure 9 Open space and greeneries inside the kampung

The last category in this group is accessibility. It included the convenience of access to and from the kampung and its closeness to where the inhabitants work or learn. Kampung Ketandan and Kebangsren were in the city center, enabling their inhabitants to go around the city. From the field survey, 45% of the employed or at-school respondents could access their workplace or school in less than 15 minutes. 42% were within 15 to 30 minutes, and only 13% had 30 minutes of travel time. By their means of transport, 20% of these respondents were on foot to reach their workplace or school, while 67% used motorcycles. Although it was easy to ride public transport through the bus stops surrounding this area, it was not a common choice. The physical factor appreciated by those who lived in this kampung outweighed the other factors. This value was the most crucial consideration in choosing Kampung Ketandan as their living space.

## 5.2. Psychological attachment within the community

Psychological factors came from two indicators categories: neighboring and psychological sense. Neighboring is related to any activities and conducts that may enhance the relationship with other inhabitants in the neighborhood. Meanwhile, the psychological sense was an inward reflection of one's sense of being a part of a community in the neighborhood.

The findings reflected that the neighboring indicators that came first were the helpfulness of the inhabitants. The “gotong-royong” (mutual help) culture is a part of daily life in Indonesia, and it can be found in this kampung. According to Leitner and Sheppard [35], kampung life is sociable, convivial, and based on expectations of mutual aid. The next indicator was the exchange of favors and advice among the inhabitants. This characteristic was also an accurate depiction of conviviality strongly associated with kampung. The psychological sense in this research was as crucial as the neighboring conduct. One's feeling of being an integral part of a community might help them to live in the neighborhood. From the factor analysis, the indicators of this variable that were highly associated with other variables were friendliness, the sense of belonging, and the feeling of being involved in a common purpose (Figure 10).



Figure 10 The social life of the residents

An illustration that describes the strength of neighboring conduct and the psychological sense was when an initiative from the municipality and UCLG was conducted in this kampung in 2016. The municipality was beginning to appoint Kampung Ketandan as a heritage kampung. The first step was to find the strength and uniqueness of the kampung and decide what infrastructure would help them achieve a better living. During the participatory planning process, representatives from every group that lived in the kampung, including the youth association, the elderlies, the religious representatives, the neighborhood association, and the women association. The plan was disseminated to the inhabitants when a decision was made, and the infrastructure plan was approved. The decision was to renovate the public space. During the implementation, the inhabitants – those who were able – were involved directly in the process. Children and women helped in any way they could fill their roles. This illustration shows that although the psychological aspect is not as dominant as the physical aspect in determining the attractiveness of living in a kampung, it has a role in keeping the inhabitants willing to stay in the



kampung.

### 5.3. Residence status and ownership and the motivation to live in the kampung

The residence record and ownership were the last factors that affected the attractiveness of living in Kampung Ketandan. Although there were five indicators that contributed to the attractiveness, only residence status, residence period, and ownership showed their effects. The residence status, divided by resident and non-resident, was the most significant indicator among the three. The less considerable indicator was ownership, where the respondents were grouped as owners, occupants, long-term/short-term tenants, and boarding house tenants.

From the field survey, 82.7% of the respondents were residents, and 17.3% were non-residents. Among the residents, 91.7% were willing to stay in the kampung for a long time. At the same time, 90.9% of the non-resident respondents also had the same tendency. This number shows that the attractiveness of living in kampung was sensed by both groups equally. Based on their ownership status, the five groups can be generalized into two main groups: owners and non-owners. The owners filled 39.7% of the respondents, and the rest, 61.3%, were non-owners. While 94.7% of the owners were willing to live in the kampung for a long time, 89.6% of the non-owners were also keen to stay. The slight difference in the percentage raised the question of how vital ownership of a house is to live in a kampung, which was not yet addressed in this research. The field observation also showed that there were empty houses and land offered to be sold or leased, and further observation in this matter was not covered in this research either.

## 6. Conclusion

Despite having a population decline, Kampung Ketandan is not necessarily vacant because its attractiveness is bound to the physical value for the migrant workers and the long-term residents. Kampung, rooted as an informal and marginal settlement, has gradually evolved into an alternative dwelling. The physical aspect was an essential factor that attracted people, especially when the space was deemed adequate for the activities and the price they paid was suitable for convenient access. It is also necessary to underline the importance of the psychological aspect as the anchor that will make the inhabitants stay. Having a good connection with others who live in the same area with similar circumstances will enhance the possibility of having a better life in the kampung. The same goes when one can gain a sense of

belonging and develop trust with other community members.

This research has given insight into the factors that may attract people to live in the kampung. However, the findings in this research were limited to well-maintained kampung, such as Kampung Ketandan and Kampung Kebangsren, where their physical aspects act as the main pulling factor. In Surabaya, many other inner-city kampungs were not as “lucky” as Kampung Ketandan, where there is a decline in population and an increase of vacant houses, and the less maintained kampung and kampungs that were at risk of disappearing due to the rapid development of the city. Another survey in different inner-city kampung was necessary to generalize better the attractiveness of living in the kampung.

Kampung Ketandan was once “born” from the necessity of instant living space in the bustling city of Surabaya. It was a desperate act to find a living space with minimum resources. Migrants – those who consider finding a better living – moved into this area, a common activity that can be seen until today. However, it was no longer necessarily so. To live in a kampung could also be a choice that was affected by the attractiveness and benefits that can be found. The capability of Kampung Ketandan to accommodate and attract its inhabitants, both residents, and non-residents, shows a range of flexibility to fulfill its role as a transient space in the future – a role of which kampung was defined.

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