

# “On Wealth: Is It the Only Thing That Connects Us?” An Exploration of Cross-class Interaction in Low-Incomes Public Housing

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**Abstract.** Lower incomes have struggled to connect with higher-income communities due to a lack of economic capital. In addition, public housing may limit social interaction with the outside communities. However, such interactions lead to higher rates of upward income mobility for lower-income communities. This study explores “cross-class interaction”, the social interactions between low-income public housing residents and higher-income individuals, and whether factors other than wealth can influence such interactions. Eight hundred-four samples were collected from four public housings in Jakarta, Indonesia. This study found that half of the respondents already interacted with higher incomes. However, it was limited to neighbours. On the other hand, around one-third of the respondents had actively engaged in social interaction with higher incomes outside of public housing communities. The regression analysis further shows that other than wealth, the frequency of visiting public amenities and homogeneity of the public housing influence the existence and frequency of cross-class interaction.

**Keywords:** cross-class interaction, inter-group interaction, social interaction, public housing, low-incomes

## 1 Introduction

Scholars have been concerned about the segregation, polarisation, and fragmentation within our society. One of these is that there needs to be more meaningful connections and social interactions between different income levels [1,2]. In contrast, cross-class interaction (CCI) can improve the economic capability of the lower incomes. For example, as early as the 1900s, Wilson, in Dominguez & Arford [3], indicates that individuals living in slum settlements that are segregated from the rest of society tend to be socially isolated. As a result, they struggle to connect to working and high-income individuals who can provide valuable resources such as information on employment opportunities. Recent research also supported this finding, emphasising lower-income's spatial disadvantage [4,5]. Following that, low incomes often rely on each other due to a lack of economic capital [6,7,8]. While it strengthens their ‘bonding’ with each other, it may lead to exclusivity [9]. In addition, lower financial capital leads to other

problems, such as a lack of confidence [10] and negative stigmatisation [11], which might also hinder CCI.

As time passed, other challenges to CCI were also presented. For example, the development of a social mix was expected to bring both income classes closer [12]. While some studies found it was successful [13,14], others found that social mix further increased the stigmatisation and the gap between income levels [15,16]. Another challenge that was recently discussed was related to the gated communities. These communities were known for their exclusivity, increased security, and the lack of social interaction with the outside communities due to the availability of what the residents needed inside the gated housing complex [17].

While gated communities are often marketed towards the middle- and high-income levels, scholars have found that gated communities are also available for low incomes, which come in the form of social or public housing [18,19,20]. In several cases, those public housing mimics the features of those gated housing complexes. Although gated communities could be perceived as a potential threat, these studies found that CCI exists with the help of various factors, such as the existence of public amenities. However, it is worth noting that studies discussing the case of gated communities for low incomes are still relatively uncommon, especially compared to other research related to CCI, such as social mix.

In the context of Jakarta, the capital city of Indonesia has been attracting people of all income levels, including low-income families, with its job opportunities and advanced infrastructure [21]. Public housing was one of the prominent ways for the government to provide affordable housing for low-income families [22]. In terms of ownership, there are two types of public housing: owned (Rusunami<sup>1</sup>) and rented (Rusunawa<sup>2</sup>). Rusunawa is typically a high-rise flat in which each unit can accommodate up to four people, and it comes with amenities such as 24-hour security, in-house stores, and clinics. In addition, like gated communities, public housing restricts non-residents from freely entering the premises, limiting natural and coincidental social interaction with outside communities.

Scholars have found that Rusunawa provides opportunities for internal social interactions and support among residents as they live close to one another and share common spaces and resources [23,24]. However, on the other hand, there is less evidence of results for outside interaction, especially with higher incomes. Furthermore, more empirical evidence is needed in the current literature regarding the CCI of low-income communities residing in gated housing, particularly in developing countries such as Indonesia.

Therefore, this study aims to explore the CCI, such as its existence, frequency, and where it is happening in the context of public housing for low-income. Following that, the contribution of this study to the current literature is that it also investigates what factors might influence the existence and frequency of CCI. Based on that, this research aims to answer the following questions: 1. Is CCI already happening in public housing? 2. Where and how often does the CCI happen? 3. What factors contributed to the existence and frequency of the CCI?

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<sup>1</sup> Abbreviation for "Rumah Susun Milik" or can be understood as Public Housing that can be owned/purchased.

<sup>2</sup> Abbreviation for "Rumah Susun Sewa" or can be understood as Rented Public Housing.

## 2 Methods

### 2.1 Data collection

The primary data were collected from four different Rusunawa in the Jakarta Special Region, Indonesia. The Rusunawa chosen were all considered high-rise public housing, which is the current trend of public housing development in the region, and each has a different resident composition to see whether homogeneity might affect the CCI of the residents [3].

Jatinegara was chosen as the Rusunawa that is considered *homogeneous* (every unit of Rusunawa was allocated for targeted low incomes<sup>3</sup>). During the river normalisation project in 2015, many riverside slum dwellers were relocated to this Rusunawa. Following that, Pesakih was built as part of the CSR programs and is considered *heterogeneous* (open to the public<sup>4</sup>). Rawabuaya, however, is considered mixed as some residents were relocated from other Rusunawa due to a revitalisation project. The fourth Rusunawa was Pengadegan, which is also regarded as mixed as it was initially allocated for the riverside slum dwellers. Still, some of the units were also rented to the public due to managerial reasons. After data cleaning, the sample comprised 804 respondents. The survey was done between July and August 2023, with a face-to-face questionnaire as the primary data collection method.

### 2.2 Variables

This study measured basic information related to sociodemographics, such as age, gender, marriage, number of children, income, education, religion, and occupation, including the highest education in the household and the occupation of their spouse, as it is rarely considered when discussing CCI. In addition to that, this study also asked whether their children go to the same school as those with higher incomes do. Finally, the respondents' length of stay in the Rusunawa was also asked.

This study explores CCI by measuring several things. First, the respondents were asked whether they had had a CCI experience since moving to Rusunawa. Those who at least experienced such interactions but were only limited to their neighbours will then be categorised into the group "A". Those who at least experienced such interactions, including with people outside Rusunawa (non-residents), will then be categorised into the group "B".

This study adopts some important variables already used or found in similar studies. For example, Boonjubun [18] explored such interactions through qualitative interviews and found that food stalls or neighbourhood markets are essential. Following that, a public park is one of the amenities necessary for forming ties and incidental social interactions [25]. Following that, Wissink and Hazelzet [26] measured the frequency of interaction in public amenities, while Cabrera and Najarian [27] and Lestari Olivia et al. [28] measured both frequency of visiting/having interaction in such public amenities. Therefore, this study also measured the frequency of visiting using a scale from 1 to 5 (1: once a month or less, 2: two to three times a month, 3: once a week, 4: two to three times a week, 5: more than two to three times a week). In addition, the frequency and place of CCI for group B were also asked using the 10-point Likert scale.

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<sup>3</sup> Refer to those who were relocated due to governmental projects. Usually, they were coming from the same area/slum settlements.

<sup>4</sup> As long as the prospective low-income residents meet the requirements, such as having individual monthly income not exceeding certain numbers (varied for different Rusunawa).

The empirical evidence of what factors affect the forming and frequency of the CCI is still missing from the previous studies. Therefore, this study will continue and improve the previous exploration through the logistic regression analysis by combining sociodemographics and the frequency of visiting public amenities as the independent variable to explain the odds ratio of having CCI (such as belonging to group B) and its frequency.

### 3 Results and Discussion

This section will begin with the descriptive statistics of the sociodemographics of the residents, the features of the Rusunawa (especially the existence of the surrounding public amenities), and the frequency and where the CCI happened, followed by the logistic regression analysis results.

#### 3.1 Sociodemographic of the respondents

Table 3.1.1 illustrates the sociodemographic distribution between the four Rusunawa surveyed. Generally, the age distribution for each Rusunawa was similar, with all Rusunawa except Rawabuaya in their 50s. While most residents have an income of less than 4.6 million IDR, some earn more than seven million per month, which is often considered “high-income” by some of the other respondents. Because females were more likely to be available at home during the survey periods, they were more represented in the samples than males. Low incomes are known for their educational disadvantages [3,9], which was also the case in the surveyed Rusunawa. Even after considering the household’s highest education, most only had senior high school as their last education. The same also applies to their occupation. Most respondents (including their spouses) are either informal workers or unemployed. Even so, the surveyed Rusunawa are equipped with adequate facilities for the residents to manage their small businesses, even though most customers come from their neighbours within the Rusunawa.

**Table 3.1.1** Sociodemographics of the respondents.

	Jatinegara n=244	Pengadegan n=51	Pesakih n=255	Rawabuaya n=254
<b>Age</b>				
14-30	14.3%	7.8%	13.3%	18.5%
31-40	24.6%	25.5%	28.2%	35.4%
41-50	28.3%	29.4%	27.5%	22.4%
more than 50	32.8%	37.3%	31.0%	23.6%
<b>Sex</b>				
Male	26.2%	43.1%	30.6%	27.6%
Female	73.8%	56.9%	69.4%	72.4%
<b>Married</b>				
Yes	7.0%	9.8%	6.7%	6.3%
No	93.0%	90.2%	93.3%	93.7%
<b>Child number</b>				
No children	43.4%	51.0%	50.6%	37.4%
1 or 2 children	40.2%	43.1%	43.1%	52.0%
>2 children	16.4%	5.9%	6.3%	10.6%

<b>Education<sup>5</sup></b>				
Elementary	23.4% (4.5%)	11.8% (2%)	29.4% (7.5%)	13.4% (2.8%)
Junior	24.6% (9.4%)	9.8% (2%)	12.9% (7.5%)	21.7% (9.4%)
Senior	47.1% (71.3%)	60.8% (52.9%)	52.2% (69.4%)	55.5% (66.9%)
Bachelor	4.9% (14.8%)	17.6% (43.1%)	5.5% (15.7%)	9.4% (20.9%)
<b>Income<sup>6</sup></b>				
< 3million	50.8%	25.5%	52.5%	41.3%
3 - 4.6 million	30.7%	51.0%	41.2%	48.4%
4.7 - 6 million	10.2%	9.8%	5.1%	9.1%
6.1 - 8million	6.6%	7.8%	0.8%	0.8%
> 8 million	1.6%	5.9%	0.4%	0.4%
<b>Occupation</b>				
Unemployed	48.8% (21.3%)	51.0% (27.5%)	49.4% (25.1%)	49.6% (19.7%)
Informal	31.6% (41%)	29.4% (45.1%)	27.1% (36.1%)	29.1% (41.3%)
Formal	4.1% (19.7%)	3.9% (9.8%)	9.4% (16.9%)	6.3% (16.1%)
Entrepreneur	11.5% (8.2%)	9.8% (2%)	8.2% (5.5%)	11.4% (6.7%)
Office employee	4.1% (9.8%)	5.9% (15.7%)	5.9% (16.5%)	3.5% (16.1%)
<b>School with CCI</b>				
Yes	49.2%	52.9%	57.6%	47.2%
No	50.8%	47.1%	42.4%	52.8%
<b>Religions</b>				
Muslim	98.8%	74.5%	80.4%	76.8%
Others	1.2%	25.5%	19.6%	23.2%
<b>Length of stay</b>				
Less than a year	2.5%	5.9%	1.2%	40.6%
1-3 years	2.5%	60.8%	64.3%	19.3%
3-5 years	10.2%	33.3%	1.6%	40.2%
more than 5 years	84.8%	-	32.9%	-

### 3.2 Urban features of the Rusunawa

Despite the differences in resident composition (whether homogeneous, heterogeneous, or mixed), the features of the surveyed four Rusunawa have similar facilities. The ground floor of each building served as the location for public housing management offices and several commercial units, where residents could run small businesses such as food stalls and shops selling daily necessities. Following that, some small parks and children's playgrounds were also available on the ground floor, which are only limited to the residents.

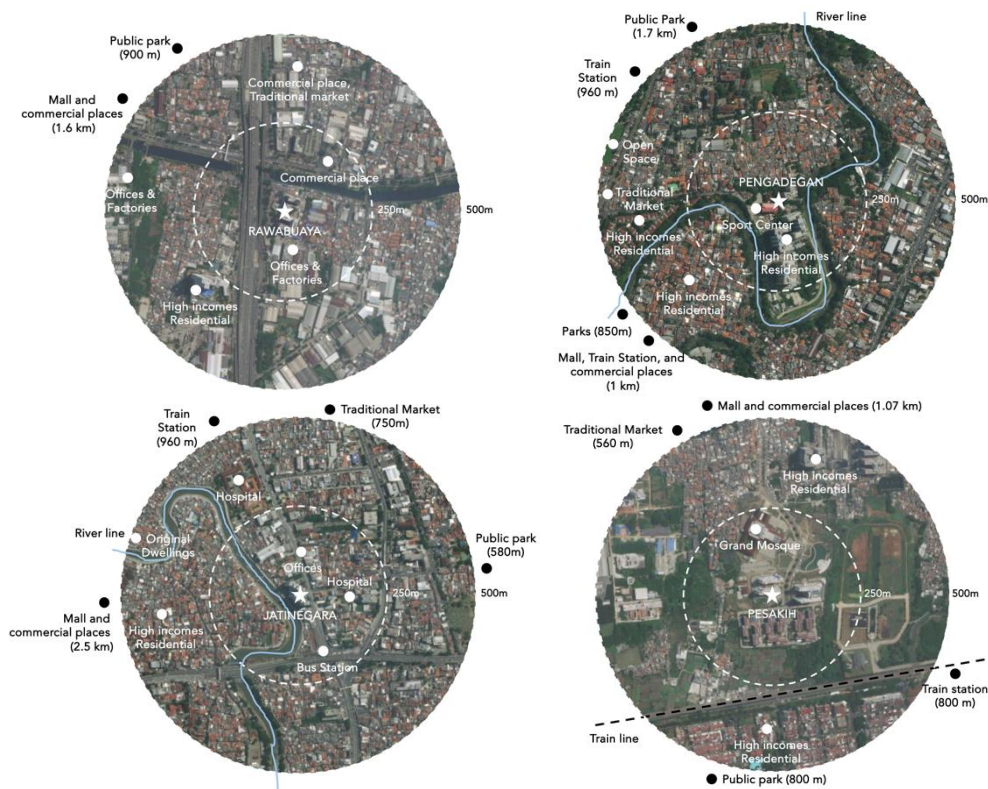
The site plan for each surveyed Rusunawa can be seen in Figure 3.2.1. Generally, each surveyed Rusunawa was located strategically or at least equipped with public transport to minimise spatial segregation, which scholars are concerned about [3,4,5]. Each Rusunawa also has unique features regarding facilities that support the forming or fostering of the CCI. For

<sup>5</sup> The number in the bracket represents the highest education in the households.

<sup>6</sup> The number in the bracket represents the occupation of the spouse.

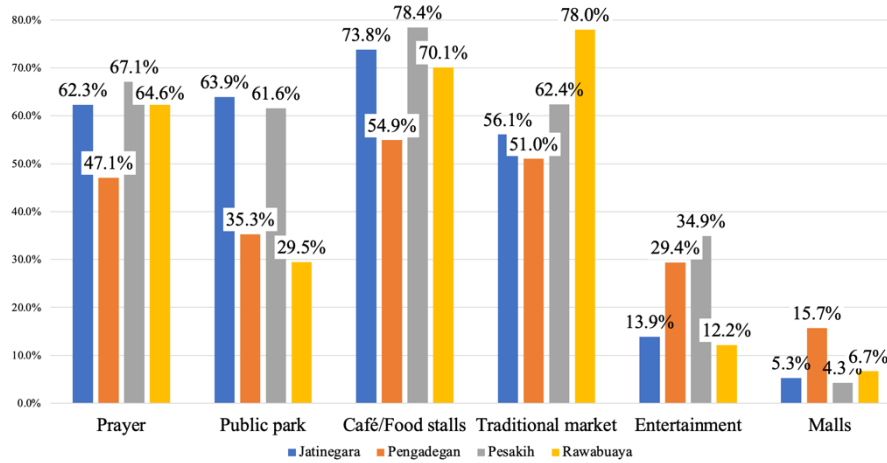
example, Jatinegara is located in an area with a high density of offices and business places. Jatinegara also has a cafeteria that the public can access. However, most customers were limited to the residents, online taxi drivers, old neighbours from their old dwellings, and technical workers from the relatively same income level.

Both Pesakih and Rawabuaya are located close to each other and in a relatively high concentration of higher-income people, translating into many commercial areas. Pesakih is also close to the Jakarta Grand Mosque and open to the public. However, according to some respondents, the frequency of its usage has declined compared to when it was first opened. Pengadegan, on the other hand, is located very close to the sports centre and some high-income residential areas. There were some recorded visits from the Rusunawa and high-income residents. While some respondents stated that they only play with themselves most of the time, this gathering can be a good opportunity for CCI.



**Figure 3.2.1.** Site plan situation four surveyed Rusunawa (top-left: Rawabuaya, top-right: Pengadegan, bottom-left: Jatinegara, bottom-right: Pesakih)

Looking at the site plan, the nearest public park from each Rusunawa is more than 500m, which was not within walking distance by the respondents' standard. On the other hand, food stalls and coffee shops are abundantly available in the surrounding areas of each Rusunawa. Some shops provide affordable prices, which can sometimes act as a hangout place for Rusunawa residents.

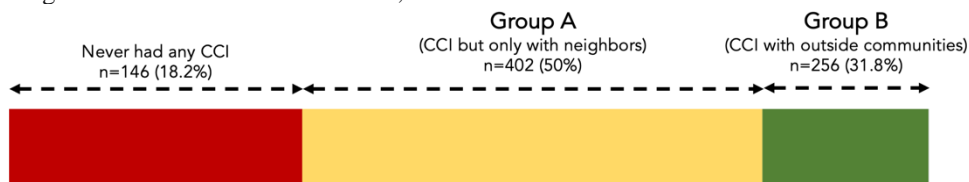


**Figure 3.2.2.** Frequency of visiting public amenities

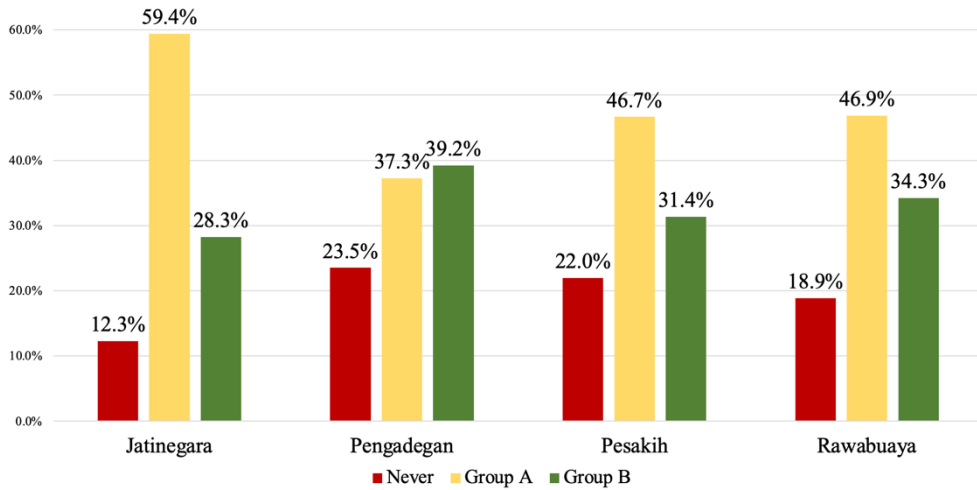
As for the frequency of visiting these facilities, the detailed distribution can be seen in Figure 3.2.2. The percentage shows the number of respondents who visit respective public amenities more than once a week. It can be seen that although varied for each Rusunawa, food stalls/coffee shops were the most frequently visited places by the respondents. However, other than that, it highly depends on the location of each Rusunawa. For example, Jatinegara’s respondents went to the park more often, while Pesakih’s respondents went to prayer facilities outside Rusunawa more often. Some respondents frequently visit their old/original dwelling place, especially Jatinegara’s respondents, as the distance is relatively close to the Rusunawa. This further proves they strongly relate to their old neighbours in the old dwelling. From these results, it can be said that even though each Rusunawa is already equipped with its facilities, respondents still visit public amenities outside Rusunawa.

### 3.3 Cross-class interaction of the residents

Consistent with the previous studies, this study also found that CCI already happened for the Rusunawa residents [18,26]. However, this study also presents additional information about the people with whom the CCI happened. Figure 3.3.1 shows the group distribution of the respondents. The majority of respondents, 50.0%, belong to Group A. The Group B consists of 31.8% of the total respondents. This also shows that 18.2% of the respondents never have CCI, even with their neighbours. Previous studies have also noted that spatial disconnect can hinder CCI [2,3,4,25]. In the case of surveyed Rusunawa, however, they are built in high-density areas with higher-income residents. Therefore, the lack of CCI could be due to other factors.

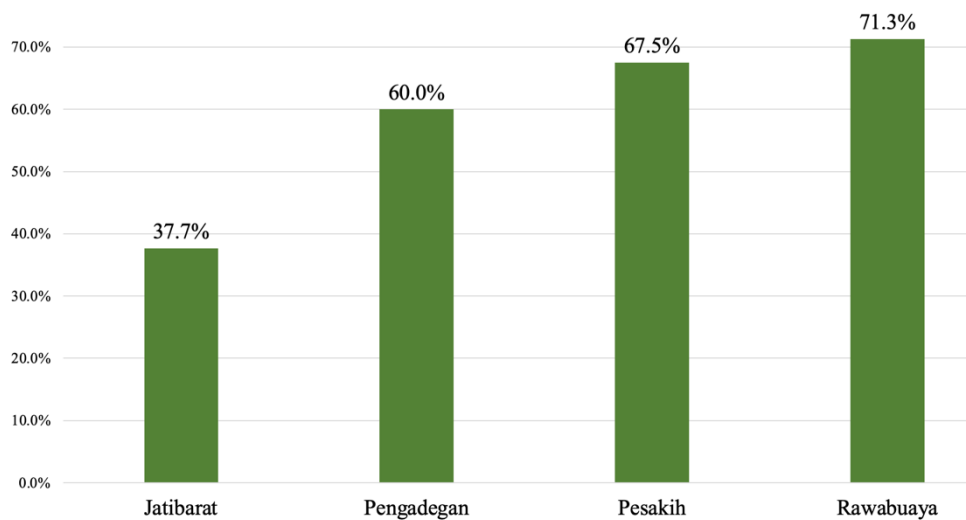


**Figure 3.3.1.** Categorisation of respondents based on grouping.



**Figure 3.3.2.** Categorisation of respondents based on the grouping by Rusunawa.

The homogeneity of the Rusunawa might affect the existence and with whom they have CCI. Figure 3.3.2 shows that Jatinegara has the highest proportion of respondents that belong to Group A while having the lowest proportion of respondents that belong to Group B. This could be because all residents in Jatinegara originally came from the same place, making it easier for them to connect with their neighbours, even when they have different income levels. However, this exclusivity could reduce their chances of forming connections with higher-income communities outside their own [3,7]. In contrast, other Rusunawa have a slightly higher proportion of respondents that belong to Group B, with Pengadegan being the highest. From this point onward, this study will focus its discussion on Group B.



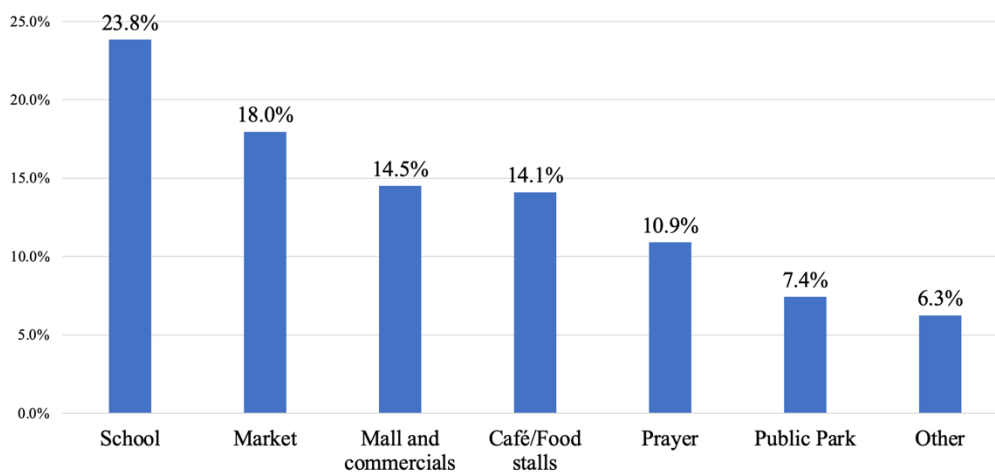
**Figure 3.3.3.** Frequency of CCI of Group B by Rusunawa, (n=256)



Figure 3.3.3 shows the frequency of the CCI with the outside communities. The percentage indicates the proportion of the respondents who answered seven or higher on the Likert scale. Consistent with previous findings, Jatinegara has the lowest proportion of respondents with a high frequency of CCI with the external communities. On the contrary, Rawabuaya has the highest proportion, followed by Pesakih. Both Rusunawa share similar urban features as both are located close to each other. Compared to other surveyed Rusunawa, Rawabuaya, and Pesakih have many shops and commercial areas surrounding them, which made it easier to have CCI with outside communities in those places.

Most of the CCI happened in the respondents' children's schools, as seen in Figure 3.3.4. The number shows where the respondents have interacted with the higher incomes the most, which means that it does not fully reflect the potential of such places. For example, the Jakarta Special Region enforces a zoning system for school admission. It means that parents' choices of schools for their children are limited to the neighbourhood in which they live. As some Rusunawa were located in an area with a relatively high concentration of high-income residents, and parents usually accompany their children to school every day, it is logical that it has the highest percentage of CCI. Outside of schools, respondents mostly have CCI in commercial places, which is logical to assume that most interaction is a vendor-client relationship, which further supports the previous study [18].

As previously mentioned, many food stalls and coffee shops around each Rusunawa are also often used for the CCI. However, some respondents said their interactions with the higher incomes did not come naturally in those shops. Instead, they knew the higher incomes elsewhere and used the shops as a meeting point. Following that, prayer facilities outside Rusunawa also have some CCI happening there. Indonesia is the biggest country with a Muslim population, and at least once a week, they have to gather in a mosque to do a mandatory Friday prayer [28]. In addition, 17 out of 29 respondents who mostly have CCI in prayer facilities were non-Muslim, as currently, Rusunawa only facilitates space for Muslim prayer activity. This leaves them no choice but to do their prayer activities outside the Rusunawa complex. Interestingly, only 7.4% or 19 respondents mostly have CCI in the park. As mentioned, this might be because the nearest public park is not within walking distance.



**Figure 3.3.4.** Frequency of CCI of Group B, (n=256)

### 3.4 Factors affecting cross-class interactions.

Finally, the data were analysed through a binomial logistic regression with the sociodemographics and frequency of visiting public amenities as the independent variables. The logistic regression will focus on finding factors influencing the odds ratio of respondents belonging to Group B (model 1), and the following model 2 will have the frequency of CCI with outside communities for Group B as the dependent variable, with those who answered seven or higher on the Likert scale categorised into 1 and the rest as 0.

Table 3.4.1. shows the results of the logistic regression analysis. For model 1, income level is positively significant. This finding supports previous studies that show that the economic capability of an individual affects CCI [3,7,9]. The descriptive statistics in the previous section discussed how schools become one of the most frequent places of CCI. The regression analysis of model 1 further supports that, in a sense, respondents with children that go into the same school as the high-income children increase the odds ratio of experiencing CCI with outside communities.

**Table 3.4.1** Logistic regression results for the first and second models

	Model 1 (n=804)	Model 2 (n=256)
<b>Sociodemographics</b>		
Age	-0.082 (0.922)	0.216 (1.241)
Male	0.169 (1.184)	-0.026 (0.974)
Married	-0.149 (0.862)	0.100 (1.106)
No. of children	<b>0.120* (1.127)</b>	-0.141 (0.896)
Education	0.058 (1.059)	0.033 (1.034)
Education (HH)	0.032 (1.033)	<b>0.531* (1.700)</b>
Income	<b>0.174* (1.190)</b>	0.301 (1.351)
Occupation (ref: unemployed)		
Informal workers	0.077 (1.080)	-0.072 (0.930)
Entrepreneur	0.238 (1.269)	-0.166 (0.847)
Formal workers	0.180 (1.197)	0.250 (1.284)
Office employee	0.131 (1.140)	0.074 (1.076)
Occupation (HH) (ref: unemployed)		
Informal workers	0.060 (1.062)	-0.758 (0.469)
Entrepreneur	0.057 (1.059)	<b>-1.359* (0.257)</b>
Formal workers	-0.224 (0.800)	<b>-1.228** (0.293)</b>
Office employee	-0.157 (0.855)	<b>-1.363** (0.256)</b>
Children go to same school with high incomes	<b>0.309* (1.362)</b>	0.264 (1.302)
Being Muslim	-0.201 (0.818)	-0.103 (0.902)
Length of stay in Rusunawa	0.162 (1.176)	-0.143 (0.866)
<b>Frequency of visiting public amenities</b>		
Prayer facilities	<b>-0.507*** (0.602)</b>	0.189 (1.208)

Public parks	<b>0.619***</b> (1.858)	0.309 (1.363)
Cafe/food stalls	-0.086 (0.918)	0.556 (1.744)
Traditional market	0.137 (1.417)	<b>0.793**</b> (2.210)
Entertainments	-0.158 (0.853)	<b>1.017**</b> (2.764)
Malls and commercials	-0.305 (0.737)	<b>1.451*</b> (4.267)
<hr/>		
Rusunawa (ref: Jatinegara)		
Pengadegan	<b>0.785**</b> (2.192)	0.469 (1.598)
Pesakih	<b>0.467*</b> (1.595)	<b>1.456***</b> (4.290)
Rawabuaya	<b>0.011**</b> (2.028)	<b>1.663***</b> (5.274)

\*: significant at 90%; \*\*: significant at 95%; \*\*\*: significant at 99%

The number shown in the bracket is the odds ratio. The same also applies to the following table.

Frequently visiting prayer facilities turned out to have a negative effect on the odds ratio of experiencing outside CCI. Findings from the descriptive statistics found that 10.9% of respondents from Group B mostly have CCI in such a place, and more than half of that number were from non-Muslim respondents. Unfortunately, there is no empirical evidence yet that can explain the negative correlation.

Looking back at where the CCI most happened, only 7.4% of respondents from Group B mostly have CCI in a public park. However, frequently visiting public parks significantly increased the odds of experiencing CCI with outside communities. It can be understood that, while public parks were not where CCI mostly happened, they are still considered reliable places to foster CCI or social interaction in general following previous studies [8,25].

Compared to Jatibarat, respondents from other Rusunawa have a better odds ratio to experience CCI with outside communities. Consistent with the findings from the descriptive statistics, Jatibarat has the lowest proportion of respondents that belong to Group B. While it might be because of the homogeneity factor, it could also be because of the location of the Rusunawa itself or other factors. Pesakih can be considered a hundred per cent heterogeneous compared to other surveyed Rusunawa. However, the odds ratio was lower than Pengadegan, regarded as a mixed Rusunawa.

Looking at the second model, factors that influence the existence of CCI did not affect its frequency. For example, income level affects whether the respondents have ever experienced CCI with outside communities but does not affect the frequency of such interactions. It can be interpreted that having higher income helps the respondents make the first contact with the higher incomes, but beyond that, it depends on other things. Following that, the occupation of the respondent's spouse is significant and has a negative correlation. It means that if the respondent's spouse was unemployed, it increases the frequency of the CCI. Generally, an employed spouse would expand the social network. The second model was split into two models analysing different genders to understand this phenomenon better.

The additional analysis results can be seen in Table 3.4.2. It was found that the spouse's occupation was only significant in the model with female samples. It means that for female respondents, if their husbands were unemployed, it increased their odds ratio of having more frequency of their CCI. Following previous studies, wives are encouraged to help their husbands bring money to the family when they are unemployed [29,30]. In this case, it means frequently dealing or interacting with the higher incomes. In addition, the frequency of visiting traditional markets, entertainment, and malls is also significant for models with female samples. This could

mean that it was not the frequency of going to such public amenities that mattered per se but more about the wives doing business-related activities in those facilities.

**Table 3.4.2** Logistic regression results for first and second models

	Model 2a (male) n=78	Model 2b (female) n=178
<b>Sociodemographics</b>		
Age	-0.260 (0.771)	0.288 (1.333)
Married	2.563 (2.970)	-0.013 (0.987)
No. of children	<b>-0.630*</b> (0.533)	-0.139 (0.870)
Education	0.199 (1.221)	-0.090 (0.914)
Education (HH)	0.401 (1.493)	<b>0.649*</b> (1.914)
Income	0.211 (1.236)	0.401 (1.493)
Occupation (ref: unemployed)		
Informal workers	1.516 (4.556)	-0.582 (0.559)
Entrepreneur	-1.074 (0.342)	-0.034 (0.967)
Formal workers	2.359 (1.583)	-0.333 (0.716)
Office employee	-0.880 (0.415)	0.613 (1.846)
Occupation HH (ref: unemployed)		
Informal workers	-1.042 (0.353)	-0.793 (0.453)
Entrepreneur	-0.399 (0.671)	<b>-1.767*</b> (0.171)
Formal workers	-0.422 (0.656)	<b>-1.520*</b> (0.219)
Office employee	-0.862 (0.422)	<b>-1.618*</b> (0.198)
Children go to same school with high incomes	<b>1.470*</b> (4.350)	0.213 (1.237)
Being Muslim	0.253 (1.288)	-0.533 (0.587)
Length of stay in Rusunawa	-0.608 (0.544)	-0.022 (0.979)
<b>Frequency of visiting public amenities</b>		
Prayer facilities	0.284 (1.329)	0.076 (1.079)
Public parks	<b>2.069**</b> (7.914)	0.127 (1.135)
Cafe/food stalls	0.906 (2.474)	0.550 (1.733)
Traditional market	-0.728 (0.483)	<b>1.193**</b> (3.298)
Entertainments	1.723 (5.602)	<b>1.252**</b> (3.499)
Malls and commercials	0.679 (1.972)	<b>2.449**</b> (1.579)
<b>Rusunawa (ref: Jatinegara)</b>		
Pengadegan	-0.393 (0.675)	0.550 (1.733)
Pesakih	-0.463 (0.630)	<b>1.816***</b> (6.146)
Rawabuaya	-0.423 (0.655)	<b>2.240***</b> (9.396)

### 3 Conclusion

This study presented the results of the CCI exploration in the context of public housing for low-income. A total of 804 samples from four different Rusunawa with different resident compositions were analysed through several methods. The analysis produced three main findings. First, as with the previous studies, this study also found that interaction between different income classes already existed [26,28], considering that the lower incomes live in a gated housing style in the form of public housing / Rusunawa [18]. However, this study also found that the gap between income classes exists even inside the public housing complexes, given that some residents have yet to interact with their higher-income neighbours. Though Rusunawa is 'exclusively' allocated for low-income individuals, the residents' income levels are varied, creating an income gap in the Rusunawa communities.

Second, except for Jatinegara, the frequency of CCI with outside communities can be considered relatively high. While no definitive evidence is presented in this study, there is a possibility that homogeneity might have something to do with it following previous studies [3]. Future research should investigate the effect of residents' composition/homogeneity with a more comprehensive analysis. Following that, most of the CCI happened in schools, primarily because of the school zoning system enforced by the government, which brings different income classes together. The regression analysis, on the other hand, found that frequently visiting public parks increases the chance of experiencing CCI but does not affect its frequency. In other words, the public parks around the surveyed Rusunawa can facilitate the encounter of the different income classes, but it does not stimulate social interaction between them.

Finally, this study found that wealth was not the only thing that unites different income classes. Consistent with previous studies, visiting public parks helps form a connection between them [8,25]. Following that, government policy in the school zoning system can be considered a considerable intervention in bridging income classes. While such a policy is somewhat controversial among the residents of the Jakarta Special Region (especially the high-income communities), the low-income communities would be disadvantaged further in forming social ties with higher incomes. In addition, urgent situations such as having an unemployed husband could also increase the frequency of the CCI, which is also supported by previous studies [29,30]. Thus, it can be understood that while wealth can help form a connection to higher incomes, in some cases, lacking wealth might also do the same thing.

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### References

- [1] Alesina, A., Baqir, R., & Easterly, W.: Public goods and ethnic divisions. *The Quarterly journal of economics*, 114(4), 1243-1284. (1999)
- [2] Fischer, C. S., & Mattson, G.: Is America Fragmenting?. *Annual Review of Sociology*, 35, 435-455. (2009)
- [3] Dominguez, S., & Arford, T.: It is all about who you know: Social capital and health in low-income communities. *Health Sociology Review*, 19(1), 114-129. (2010)
- [4] Yang, T. C., Chen, I. C., Kim, S., & Choi, S. W.: Differential investments and opportunities: How do neighborhood conditions moderate the relationship between perceived housing discrimination and social capital?. *Social science research*, 72, 69-83. (2018)
- [5] Brakarz, J., & Jaitman, L.: Evaluation of slum upgrading programs: literature review and methodological approaches. (2013)

- [6] Browne-Yung, K., Ziersch, A., & Baum, F.: "Faking til you make it": Social capital accumulation of individuals on low incomes living in contrasting socio-economic neighbourhoods and its implications for health and wellbeing. *Social Science and Medicine*, 85, 9–17. (2013)
- [7] Falk, I., & Kilpatrick, S.: What is social capital? A study of interaction in a rural community. *Sociologia Ruralis*, 40(1), 87–110. (2000)
- [8] Mullenbach, L. E., Larson, L. R., Floyd, M. F., Marquet, O., Huang, J. H., Alberico, C., Scott Ogletree, S., & Aaron Hipp, J.: Cultivating social capital in diverse, low-income neighborhoods: The value of parks for parents with young children. *Landscape and Urban Planning*, 219. (2022)
- [9] Flint, J., & Kearns, A.: Housing, neighbourhood renewal and social capital: The case of registered social landlords in Scotland. *European Journal of Housing Policy*, 6(1), 31–54. (2006)
- [10] Hamilton, K.: Low-income families and coping through brands: inclusion or stigma?. *Sociology*, 46(1), 74-90. (2012)
- [11] Chaskin, R. J., & Joseph, M. L.: Social interaction in mixed-income developments: Relational expectations and emerging reality. *Journal of Urban Affairs*, 33(2), 209-237. (2011)
- [12] Arthurson, K., Levin, I., & Ziersch, A.: Social mix, '[A] very, very good idea in a vacuum but you have to do it properly!' Exploring social mix in a right to the city framework. *International Journal of Housing Policy*, 15(4), 418-435. (2015)
- [13] Levy, D. K., McDade, Z. J., & Bertumen, K. D.: Effects from living in mixed-income communities for low-income families: A review of the literature. (2016)
- [14] Méreiné-Berki, B., Málovics, G., & Creţan, R.: "You become one with the place": Social mixing, social capital, and the lived experience of urban desegregation in the Roma community. *Cities*, 117, 103302. (2021)
- [15] Galster, G. C., & Friedrichs, J.: The dialectic of neighborhood social mix: Editors' introduction to the special issue. *Housing Studies*, 30(2), 175-191. (2015).
- [16] Thurber, A., Bohmann, C. R., & Heflinger, C. A.: Spatially integrated and socially segregated: The effects of mixed-income neighbourhoods on social well-being. *Urban Studies*, 55(9), 1859-1874. (2018)
- [17] Roitman, S., & Recio, R. B.: Understanding Indonesia's gated communities and their relationship with inequality. *Housing Studies*, 35(5), 795-819. (2020)
- [18] Boonjubun, C.: Also the urban poor live in gated communities: a Bangkok case study. *Social sciences*, 8(7), 219. (2019)
- [19] Borsdorf A, Hildalgo R and Vidal-Koppmann S.: Social segregation and gated communities in Santiago de Chile and Buenos Aires: A comparison. *Habitat International* 54(1): 18–27. (2016)
- [20] Enriquez MA.: The effects of voluntary exclusion.: Gated communities in Chihuahua Mexico. Master Thesis, Technische Universität Berlin. Germany. (2017)
- [21] Andrea, E. P.: Study on impact of urbanization and rapid urban expansion in Java and Jabodetabek megacity, Indonesia. (2015)
- [22] Dewi, M. S., Hartono, D. M., Setyo, S. M., & Kustiwan, I.: Analytical Hierarchy Process for Decision Making in Managing Slum Area. *Int. J. Eng. Res*, 6(04). (2017)
- [23] Bunawardi, R. S., Suzuki, Y., & Yuasa, H.: Diversity and utilization of public space in Rusunawa Mariso, Makassar–Indonesia. *Journal of Asian Architecture and Building Engineering*, 15(3), 433-440. (2016)
- [24] Yuliasuti, N., Syahbana, J. A., & Soetomo, S.: The Role of Community Institutions 'Rukun Tetangga' in Social Housing, Indonesia. *International Journal of Humanities and Social Science*, 5(10). (2016)
- [25] Mazumdar, S., Learnihan, V., Cochrane, T., & Davey, R.: The built environment and social capital: A systematic review. *Environment and Behavior*, 50(2), 119-158. (2018)
- [26] Wissink, B., & Hazelzet, A.: Bangkok living: Encountering others in a gated urban field. *Cities*, 59, 164-172. (2016)
- [27] Cabrera, J. F., & Najarian, J. C.: How the built environment shapes spatial bridging ties and social capital. *Environment and Behavior*, 47(3), 239-267. (2015)
- [28] LESTARI OLIVIA, M., Adiarto, J., & Gabe, R. T.: A post-occupancy evaluation study of a mixed-income gated community in Cibubur, West Java, Indonesia. *Urbani izziv*, 30(2), 95-104. (2019)

- [29] Ningrum, W. T. P., & Mas'udah, S.: Family conflicts and the violence of unemployed husbands against their wives acting as the main breadwinner. *Sosiologi Dialektika*, 16(1), 76-85. (2021)
- [30] Rudhumbu, N., Du Plessis, E. C., & Maphosa, C.: Challenges and opportunities for women entrepreneurs in Botswana: revisiting the role of entrepreneurship education. *Journal of International Education in Business*, 13(2), 183-201. (2020)