

Comparative Study of Student Apartment's Facilities: Louvin and Pacific Garden Apartment

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Housing is one of the basic need of human along with foods and clothes as old Javanese proverb. Every year the demand of housing is getting higher linear to the growth of population. The condition of land limitation has forced housing to grow vertical. The student also demanded the housing near to their university to shorten the campus trip. Nowadays, many developers have built vertical housing near the campus area respond to this demand with several typical student facilities. This research purpose is to compare two student apartments for responding to the typical student space demand in housing. Site observation and internet data compilation were performed to collect data. Literatures review and comparative study were operated to analyse and conclude the research. The results shown the similarity in location and communal facilities, and different approach in the room facilities design.

Keywords: Student apartment, Housing, Facilities, Comparison study

1. INTRODUCTION

Clothes (*sandang*), Food (*pangan*) and Housing (*papan*) are three basic need or primary demand of human to survive in this world. Those demands must be fulfilled to bring biological and physical satisfaction (Larasati, 2012). Maslow (1943) stated that the housing as part of physiological needs because housing can bring physical support of human and Goble (1987), emphasized that housing was highly related of keeping the human existence, so human will provide this needs first rather than other needs.

Nowadays, in big cities, housing has surpassed its ideal land area and convert open space into settlement and house complex. That inevitable situation has brought degradation in the living environment. Answering those problems, many experts suggest vertical housing with more sustainable development approach (Murbiantoro

et al., 2009). Sustainability in housing has been world concern brought regulation for a new housing project in big cities shall be vertical and consider the surrounding environment (Junaidi, 2000).

Between 1981 and 1999, Indonesia has 25.000 units of apartments and predicted will be a large increase in quantity that reaches four times or 380%. The bigger number of apartments also followed by the diversity in the market that needs to be targeted by developers. The student has specific criteria to choose their housing. Location and price might be the top priority for them. Still, space efficiency, comfort, safety, and facilities also become a consideration for them and their parents in choosing the housing criteria (Ibrahim, 2008). According to Chiara (1986) apartment as a house shall be facilitated with bedroom, bathroom, living room and kitchen that can be shared or privately owned and Neufert (2002) stated more

tolerable description with sentences “facilities that derived from local regulation and contextual needs”.

The location of student apartments couldn't be far from a student's center of activities where is a university campus. Furthermore, they need more educational environments to support their graduation goal. (Hajar et al., 2012). The facilities were not the priorities but this section shown specific demand for student related to their educational activities. This condition has been the main idea of this research. This research purposed to compare two student apartments for responding to the typical student space demand in housing. The result has shown facilities demanded by the student and provided by apartment developer in this comparative study.

2. LITERATURE REVIEW

2.1 The Classification of Apartment

The Definitions

The apartment is housing which has horizontal and vertical single unit separation. It can be lowrise or highrise building with standardized facilities (Neufert, 2002). While Chiara (1986) described as a house which facilitated with bedroom, bathroom, living room and kitchen that can be shared or privately owned. Regarded to the both statements, an apartment can be low or high rise building as long as having a private unit which having certain rooms and separated horizontal-vertically.

Indonesia government through constitution no. 20 the year 2011 has declared more wide definition as “apartment is multi-floor housing which built and structured as many functional units on each horizontal and vertical space, and having communal space on shared land”. Those three definitions can be resumed that apartment is a multi-floor housing that having private units and communal space. So, apartments must have private and public space which maintained by the dwellers.

The Functions

Several apartment functions mentioned by Chiara (1984) and Badan Standarisasi Nasional (2006) by:

- a. Primary function: vertical housing

which facilitated with space to do the routine activity of sleep, eat, social interaction, hobby stuff, works, etc

- b. Secondary function, for the dweller's comfort:
 - Sport: fitness centre, aerobic gym, pools, etc
 - health: medical clinic, drugstore, etc
 - Commercial: minimart, restaurant, salon, etc.
 - Child space: daycare, playground, etc
- c. Tertiary function, complementary division of maintenance like admins, marketing, security, cleaning service, etc

From the three functions of the apartment, we assumed that apartment must have private units, communal space and maintenance/service room.

The Dwellers

There are five types of apartment dwellers, and these criteria are becoming the market for the developer to buy their units. According to the Indonesia standard of Badan Standarisasi Nasional (2006):

- a. Family
The dweller consists of father, mother, and children. This family apartment shall have two until four bedrooms and equipped with balcony to interact with the outside environment.
- b. Bachelor
The dweller usually single person or shared with a friend. The usage of this apartment generally for work and rest only.
- c. Businessman
They usually have another house, and this unit was bought for controlling their business near to the office or project site
- d. Senior citizen
It's a new type of apartment in Indonesia but already built in America, China, Japan for facilitated their senior citizen with more accessible housing and controlling monitor.
- e. Student

They usually live in this apartment because of their educational activities and build near to the campus

The object of the study is the student apartment but not limited to student dwellers only. The condition in Indonesia, which has many parent cant give their child-free to live by themselves, may bring family dweller or bachelor dweller type into student apartment type.

The Unit Types

There two types of apartment unit in Indonesia according to the provided room (Akmal, 2007).

1. Studio
This unit only has one room. This room functioned as a living room, bedroom, and kitchen without partition. Maybe just the bathroom that being separated by a wall. This unit usually small-sized and dwelled by a single man or couple without a kid.
2. Multi-room
The room was divided like a typical home, which usually has a living room, kitchen, dining room, bedroom in separation. The size is related to the quantity of the room. Later, the discussion will be described as one bedroom and two bedrooms according to the compared student apartment.

2.2 Apartment Requirement: Minimal Requirements

Related to human activities at their home, apartment at least provide a place to sleep, eat, work, seat, bath, excretion, washing, and cooking. The space study showed that 9m2 is the standard for a man to do their activity, and the ceiling must higher than 2,8m Badan Standarisasi Nasional (2006). The requirement of a healthy home from Indonesia government also mentioned that the apartment should have access to natural ventilation, and natural lighting which affected the humidity level, sufficient temperature and psychological comforts.

2.3 Supporting Facilities

Related to human activities in their neighbourhood, apartment needs to provide indoor and outdoor of supporting facilities like a

sports arena, playground, circulation trail, parking, open space, garden, etc.

2.4 Student Apartment Specification

Private Facilities

Student apartment facilities generally were derived from the typical apartment. The private facilities are the apartment units which having minimal space of 9m2 per man. Student demand a unit with a place to sleep, eat, work, seat, bath, excretion, washing, and cooking. Then, a single room with a bathroom or single room with shared bathroom can be the economic version of student apartments.

Communal Facilities

Students need a shared space for study, social interactions, shopping their living stuff and leisure. However, the customization of space regarded to student need can bring more satisfaction (Hasanain, 2008). Both the private and communal facilities have carried out the student demand in several customizations for each character of students. Further studies shall be performed to explain which kind of customization to be provided, but this study only gives a comparison between existing student apartments.

3. METHODOLOGY

The qualitative method was performed to observe and explain the student apartment's facilities comparison. Direct site observation and internet data compilation were operated to collect data. Literature study and case/comparison study can be combination set as narration to prepare basic knowledge and insight for research (Harsritanto, 2018) Literature study was conducted in resuming an underlying theory to establish and explain the parameters of the compared objects. Comparison study as the main operation of this research being performed to show the diversity and similarity in facilities of student apartments.

3.1 Compared Objects

The Louvin student apartment at Jatinangor and Pacific Garden apartment was chosen because both of them were located in strategic place of multiple universities. They were built at the satellite city of metropolitan, which assumed as a

similar environment to be compared with the same parameters (Harsritanto, 2018). The Louvin apartment built at Jatinangor, West Java. The area has five prominent universities around, such as ITB (Institut Teknologi Bandung); Unpad (Universitas Padjadjaran), IPDN (Institut Pemerintahan Dalam Negeri) and Ikopin (Institut Manajemen Koperasi Indonesia). Jatinangor itself was developed as the new satellite city of Bandung Raya (Bandung city, Bandung Regency, Bandung Barat Regency, Cimahi city and Sumedang Regency) since 1989 which has educational character by West Java Governor decree. The Pacific Garden apartment built at Campus Town, Alam Sutera, South of Tangerang. This satellite city has become the campus of Binus (Bina Nusantara University), UBM (Universitas Bunda Mulia), and SGU (Swiss German University). Alam Sutera is an integrated property which becomes the satellite city of Jabodetabek (Jakarta, Depok, Tangerang and Bekasi) since 1993 and Campus Town is the educational area of Alam Sutera.

3.2 The Parameters

The comparison parameters were set by literature study of apartment standards, regulation and facilities. There are six main parameters of facilities will be compared, as location, site area, apartment type, unit area and quantity, private facilities, communal facilities.

4. THE COMPARISON STUDY

Louvin and Pacific Garden Student apartment are located on the educational district of satellite city. Both of them were built with three towers, several facilities and next to the main street (see figure 1 and 2). The similar form has become one of the reasons to be compared. Regarded different city of each apartment may bring un same result in the process; the comparison will be focused on the facilities that are provided by the apartment for the student demands.



Figure 1: Louvin Student Apartment
(Source: <https://apartmen-louvin.com/>)



Figure 2: Apartment Pacific Garden Campus Town
(Source: <https://pacificgarden.co.id>)

4.1. Location of the Apartment

As described above the locations were educational area and near to big campus in Indonesia. This shown that proximity to the university as the main criteria of student apartment was provided by the developers well.

4.2. Land Area and Type of the Apartment

Louvin with 12790m² and Pacific Garden with 14000m² has brought similar developer consideration to build three highrise towers. The high price of the land drives the optimizing of floor area development, so the opens space still can be provided between the towers (Murbiantoro, 2009).

4.3. Unit Area and Quantity

Both apartments provided two types of unit, as the studio and two bedrooms (see table 1). We can

point out that Pacific garden has the larger type of studio on the corner (16m² different from the small studio) and Louvin has a similar size of each studio with 23-24m² (see figure 3). According to the man space standard (Badan Standard Nasional, 2006), the 16m² different is almost 2-man space which allocated for balcony for swimming pool views (see figure 4 and 5). However, the Pacific Garden has more quantity of unit rather than Louvin. It is shown that diversity

in the unit may bring more satisfaction to the dwellers (Hasanain, 2008). The extra space inside and balcony can be functioned as a private or public facility according to the dweller needs. This condition brings more freedom rather than Louvin, which has the same type of layout for three of the studios.



Figure 3: Studio Louvin Apartment



Figure 4: Standard Studio



Figure 5: Corner Studio

4.4. Private Facilities

The design of the private unit in Louvin is using a variety of material (in the bathroom and main room) that responded from the water sparks on the bath activities. However, the Pacific garden using the no variation on the material of tile, gypsum and painted plaster wall (see table 1). The difference usually brought by dweller to match their mood (Akmal, 2007) maybe become the precedent of making the pacific garden design.

4.5. Communal Facilities

Students need a shared space for sport, study, social interactions, shopping their living stuff and leisure. Both apartments have shared study facilities, meeting places, sports facilities and parking. The Louvin installed sports area, such: swimming pool, skate and track, climbing wall, gym and Pacific Garden installed: swimming pool, gym and jogging track. Both have provided sports area to attract the dweller to keep healthy as a secondary function of the apartment, for supporting study and work, both provided coworking space. But Louvin has digital library section to keep an update of the dweller references. For social interaction, the Louvin only provide Amphitheatre, while the pacific garden has café, BBQ site and food centre.

Table 1: The comparisons

Parameters	Louvin Apartment Jatinangor	Apartment Pacific Garden	Discussion
Locations	Education area of Jatinangor Near: ITB, UNPAD, IPDN and IKOPIN	Campus town at Alam Sutera Near: Binus, UBM, SGU	Both at education zone and near to university campus
Land area	12.790 m ²	14.000 m ²	The land area and the apartment type were similar with around of 10.000m2 and three-tower apartments
Apartment type	High-Rise Apartment	High-Rise Apartment	
Unit area	Studio A: 23,68 m2 Studio B: 23,49 m2 Studio C: 24,57 m2 2BR: 67,445 m2	Studio Standard: 21,9 m2 Studio Corner: 37,2 m2 2BR Standard: 43,8 m2 2BR Corner: 51,1 m2	Similar unit area

Unit quantity	1.729 unit	3.016 unit	The Pacific Garden has double unit than Louvin
Facility			
Private facility	Lantai: Homogeneous tile (primary), ceramic (bathroom) wall: painted brick (primary), ceramic (bathroom) ceiling: Gypsum (main), triplex (bathroom)	floor: Homogeneous Tile 60×60 ceiling: Gypsum wall: painted plaster	The private facilities were classified by the room price
Communal Facility	Swimming pool, Cycling Track, Digital Library, Co-Working Space, Skate Park, Amphitheatre, Climbing Wall, Gym	Swimming pool, Co-working space, Food Center, Cafe, Fitness Center, Jogging track, BBQ site, Atrium, Parking lot	Both have shared study facilities, meeting places, sports facilities and parking

5. CONCLUSION

The results shown the similarity in proximity location toward campus, unit area and communal facilities, and different approach in the room facilities design. The need of study space was on private area of room units, but social interaction for study together can also being facilitated by coworking space and atrium/amphitheater as trend nowadays. Student also need sport facilities in their apartment.

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