

Research Article

Public Places and Spaces and Social Urban Interaction (A Case Study of Johor Bahru, Malaysia)

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Abstract

The different usage of public places and spaces in urban areas is the focus of this study. It concentrates on the use of public places and spaces in Wong Ah Fook located in Johor Bahru city centre. The study is going to examine the way that different people utilize public places and spaces to examine how social interactions vary by age, gender or place. Moreover, this study investigates on the physical qualities of public places and spaces in the case study. The consideration of findings is on their relation of policies due contested and shared places, safety and security, interactional relationships, and the managing of public places and spaces. Regarding the aim of this study, two methods approaches which consist of questionnaire and observation approaches is undertaken. Therefore, nine types of existing public places and spaces that considered representative of the public places and spaces of the case study as whole are carried out. In addition, due data analysis, this study investigates on SPSS software and snapshots about public activities on study area for analyzing the data of questionnaire and observation respectively. As result, most well-known and active public places and spaces from the most to least are identified. Moreover, lack of facilities and elements due decreasing interactional tasks and factors which encourage people visiting each chosen public places and spaces are revealed. In addition, the duration of visiting public places and spaces for users and their favorable times to visit there are investigated.

Keywords: Public Space, Public Place, Urban Interaction, urban communication

1. Introduction

The presence of people in the place is a good opportunity for casual interaction among them which will lead to mutual benefits for both generations. In addition, the activities in public places and spaces with many characteristics and aspects that occur in such places are desirable and that could be the place for people to meet and enjoy themselves. Creating those activities in the public places can provide an environment for users to contribute as self-activity or third party activity (those activities that do not belong to or is not initiated by person). For example, places that users can have social and commercial activity such as meeting are a significant part of everyday life. People rely on them for such daily activities such as traveling, shopping and interaction with friends and relatives. Besides, Layne (2009) states that well designed urban public outdoor places can be valuable in providing safe and healing environments for social interactive activities between people. Forming the core of social life and community wellbeing, public places can provide a wealth of new and challenging venues for improving interpersonal relationships between different

age groups. Now the questions are whether the public places and spaces, specifically in this research, are good venues for casual interactions between people there? What could be the probable reasons of public places and spaces' failure or success in promoting and encouraging or declining and discouraging the interaction among users? Dose built environment play a role on the interaction? Questions about the probable role of the built environment on peoples' behavior have been repeated several times by researchers in the field of built environment, behavior and design. Yet there is not a clear answer to reject or accept the role of built environment on people's behavior. Therefore in most cases, design or environment and behavior research studies emerge from a question relating to the physical environment and how people feel, see, understand, or interact with that environment (Layne, M.R., 2009). Hence, it is investigated in this study how built environment affect or influence interaction among users as well as similarities and differences between their perceptions, preferences and needs of public places and spaces to find their interactive needs and mutual preferred urban spaces. This is also worthy of note that there is limited knowledge about the probable role of the built environment in supporting interaction in developing countries. In an effort to fill this gap, this study

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investigates users perception and preferences of public places and spaces which support their social needs simultaneously in the developing city of Johor Bahru located in Malaysia. On the other hand, the public places and spaces must be attractive and it can be designed to meet the different needs of different groups. In this case, Routledge (2009) argued that if the public spaces are very attractive one can, on a day with nice weather; expect the group of public space visitors to make up the majority of people in the public space. Moreover, Neil (2002) highlighted that Public place can have many forms and functions, and can be categorized into a hierarchy of open space including (neighborhood), district, regional and icon open spaces. Within the suburban setting, open space is often found in the form of local or neighborhood parks that provide for regular local use with infrastructure such as children's play equipment, informal ball kicking space and public tables and benches. The best public spaces are often having node of activity complemented by areas for rest and people watching. The case study for this project will be on the public places and spaces in Jalan Wong Ah Fook. With some seating allow for natural surveillance and create environment one that a person can enjoy.

1.1. Relationship between the Built Environment and Social Interaction

The built environment can be structured to encourage or discourage social interactions. To exemplify simply, hallways tend to discourage social interaction, while circular rooms tend to encourage social interaction (Shah, R.C., and Kesan, J.P., 2010). The idea that social interaction can be in some way encouraged by physical design is not new. There are several authors who write articles in this field and clarify some design principles which can promote social interaction. Jane Jacobs (1961) is one of those who advocate this notion. In *Death and Life of Great American Cities*, she affirms that street life and close relationship between the street and the activities in and around the house bordering the street are important features contributing to the quality of cities. Moreover, she states that ordinary life on footpaths, around doorways and on the steps in front of houses is a very important factor for knitting houses and households together into communities. Furthermore, she argues that the number of casual public contact at a local level contributes to the public identity of people, a web of public respect and trust, and satisfaction of personal or neighborhood needs. Moreover, Whyte (1980) carries out a study of social life in small urban spaces. In his study, he describes a close connection between qualities of city space and city activities and clarifies how simple physical attributes can improve the use of city space and make healthy places that people like in cities, places that contribute to happiness, places that can bring out smile. He introduces the important design factors that enhance people's social experience in an urban setting, things that should not be surprising but they are such as sitting areas, sun, wind and water as well as food. Features of streets adjacent to the urban space, desirable places for everyone, effective

capacity and presence of other people are other important factors in enhancing social experience in an urban settings. In addition, in *Life between buildings*, Gehl (1987) discusses the quality of people's life in outdoor spaces as well as the need for human contact through informal meetings and outdoor activities. Gehl argues that qualities of outdoor space are related to the types of outdoor activities in public spaces. Therefore, he introduces three categories of outdoor activities which require different quality of the physical environment: necessary activities, optional activities and social activities. For example, the occurrence of optional activities depends largely on the quality of the physical environment and that of necessary activities depends least on the quality of the physical environment. However social activities occur whenever necessary and optional activities are given better physical condition in public space. Gehl also points out that it is possible for physical design to influence the way people use public space, the duration of individual activities and the development of certain activities. Furthermore, there are several landscape studies about physical qualities in residential areas that contribute to residents' social interaction or sense of community. Lund (2002) argues that a pedestrian environment increase the opportunity for interaction among neighbors. Besides, Kim and Kaplan (2004) affirm that pedestrian networks and natural features of open spaces play a particularly important role in social interaction among residents and creating a sense of community. The finding of the research of Sullivan (2004) points out that the presence of trees and grass is related to the use of outdoor spaces, the amount of social activity that occur within them and the proportion of social to non-social activities. In this regard, Harry (1985) in research of maintaining the spirit of place reveals that the environment can influence social interaction. But when the intensity of social contact increases, the relative importance of environmental differences diminishes, while socio-demographic characteristics of residents become more important. The results of his study conclude that the more casual the relationships among neighbors the greater the effects of the neighborhood environment. While the social relationships are more personal, the more socio-demographic factors play a role in the relationship. His studies go on to show that casual forms of social interaction, such as waving and chatting are greater in dense areas than in sparse areas. Briefly put, the aforementioned research conducted by several researchers and written by several authors indirectly affirm the probability of the influence of the built environment on social interaction. Put differently, as Michelson (1975) remarks, "there is little feeling these days that environment determines what people do, whether they want to or not. The perspective is very much more one of opportunity, rather than determinism" (Michelson, W., 1975). Environmental determinist perspective has major weaknesses. According to Franck (1984) these weaknesses can be divided into four categories as follow:

1. Exaggerating the influence of the physical environment by ignoring or underestimating the influence of other factors.

2. Assuming that the physical environment has only direct effect on behavior.
3. Portraying people as passive in the environment behavior relationship by ignoring the role of human choice and goals.
4. Always assuming that the environment is a given and immutable entity and neglecting the process of creating and modifying environments.

To sum it up, as Saarloos et al. (2009) states, human behavior depends on the environment in which it takes place, while in turn people also influence the environment by their presence and activities. As part of the environment, people behave in response to both physical and social settings. In fact, every individual not only adapts to his or her physical and social environment but also makes up part of the social environment of other individuals. Since one of the aims of this study is investigation of the public places and spaces attributes, as a result those attributes may have probable role in promoting casual intergenerational interaction among people.

1.2. Problem statement

Public places and spaces should be designed in the way to reach human leisure with comfortable sit-outs, shading and well-design walkways for pedestrians to provide an attractive space and sense of invitation for users. Unfortunately, some public places and spaces in Johor Bahru do not present a sense of inviting to attract people for sitting and rest due to congestion even on the pedestrian walkways, lack of proper sit-outs, pollution and absence of well-landscape open space and street lights. Thus, this study aimed to figure out the reasons for inactivity of some streets and public places and spaces in Wong Ah Fook to improve its quality by providing recommendations due public interaction there.

2. Research Methodology

This part explains the outline of the research methods and procedures for this study. The research is dealing with the quality of activities and users' interaction issues relating to the study area. Therefore, both quantitative and qualitative methods are employed by using 50 participants as study subjects. The research adopted three techniques to gather both qualitative and quantitative data: [1]. Questionnaire survey, [2]. interview, [3]. Observation. Analysis of data will be done using SPSS software and the qualitative analysis.

3. Case study

Johor Bahru, the capital city of the state of Johor, has its area defined within the Inner Ring Road-1124.97 areas of land extending from the inner ring road to Jalan Abu bakar - Jalan Tun Dr Ismail. Its dense development and clearly by defined streets, make up of major and minor roads, that leads to the Johor Bahru waterfront is accessorized with high commercial and government institutional activities.

The capital city has a strong iconic building, Sultan Ibrahim building on Bukit Timbalan that currently houses the state Administration. Skyscrapers clustered within the city center houses banks, regional offices and large corporations; especially those along Jalan Tun Abdul Razak, Jalan Wong Ah Fook and Jalan Ttus. The low scale development dominated by traditional shop houses and retail outlets of high pedestrian activities, are found in the southern part along Jalan Meldrum, Jalan Segget and Jalan Ibrahim. The study area is defined by Jalan Tun Abdul Razak in the east, Jalan Persiaran Tun Lanang in the south, Jalan Bukit Timbalan in the west and Jalan Suleiman in the north.

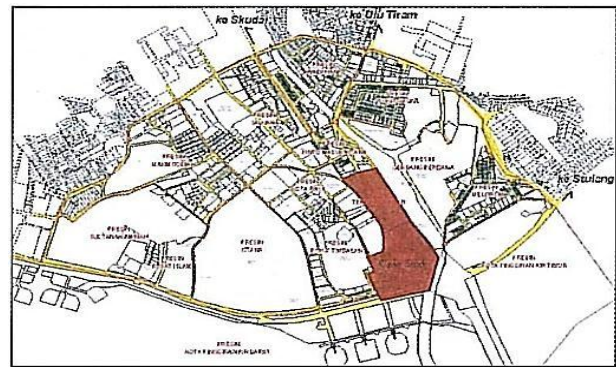


Figure 1: Boundary Study Area (Source: Source: Majlis Bandaraya Johor Bahru)

3.1. Existing Condition of Jalan Wong Ah Fook

Recently, Jalan Wong Ah Fook turned as a major one-way road and one of the best-known roads in the state. The street also is one of the most famous business and Commercial Street. The street is the outlet of the most around street, becomes daily overcrowded. The shopping, the tourism and the both pedestrian, automobiles movement as well as bus station service are the daily activities feature within street. Other feature is the wide of the street width so are the sidewalks beside it. The different buildings shape which built beside it as shop houses and new height raise buildings as mega buildings. All these features produce a unique street in city center.

3.2. Public places and spaces at Study Area

Regarding the aim of this study the following public places and spaces in study area are identified:

- 1) Shop Houses area
- 2) Masjid India
- 3) Mariamman Temple (Hindu temple)
- 4) Chinese Temple
- 5) Sultan Ibrahim Building (Bukit Timbalan)
- 6) Menara Public Bank Building in Johor Bahru
- 7) City Square (tallest building)
- 8) The Sungai Segget River area
- 9) The wide side-walk between building edges to the street curb

4. Analysis

This section will address the analysis's outcomes of the Objects consisted of 50 respondents. A survey tool was

created to determine the important usages of public spaces in Jalan Wang Ah Fook, the physical qualities of public spaces in the study area and the reasons and the factors influencing it. To discover the symbolic value of study area, the quantifiable researches and the qualitative interviews were adopted. At the first, Data were collected by filling-out the survey forms. As mentioned survey questions are divided into three parts. The Socio-demographic background is composed of variables that may affect the common space, such as gender, age. Respondents differ in functional, cultural and social characteristics. Among 50 respondents, between male and female using the public space, female registered as the majority (56%) of users of public space in Jalan Wong Ah Fook and the distribution of participants according to their age. The majority of the participants' age was 19 to 25 with percentage 42%.

4.1. The respondents' familiarity with public places located at Jalan Wong Ah Fook

People go to the places that are familiar with or at least know where they are. On the other hand, those places which are memorized by users concern as places with significant identifications to make users use them. Due estimating the most distinctive public places and spaces and the amount of people's familiarity with mentioned public places, respondents were asked to specify that do they know those mentioned places in Jalan Wong Ah Fook. As shown in figure 2, City Square is the most well known public place for users. On the other hand, sidewalk between buildings and street curb is the less notable place for users. Regarding the information from this part of analysis, City Sauer (98%), Hindu Temple (68%), Public Bank Building (66%), Chinese Temple (62%), The Sungai Segget River (56%), Masjid India (50%), Shop houses areas (42%), Sultan Ibrahim Building (38%) and sidewalk between buildings and street curb (32%) are registered from the most well-known places to least. As next step of analysis, this study is going to evoke which places have most usage for respondents as public places and spaces.

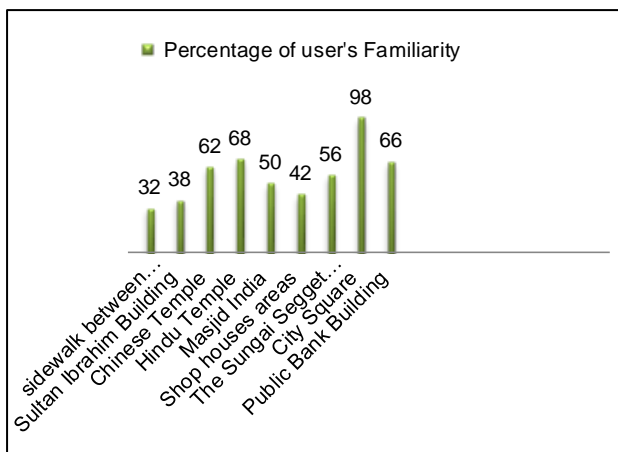


Figure 2: Amount of users' familiarity with public places

4.2. The respondents' usage of public places

The amount of people' participation in the public places and spaces identifies how active those places are. Thus, active public places can be recognized by estimating the amount of users' participation there. To this aim, respondents were asked to clarify that are they using mentioned public places. As specified in figure 3, City Square is the most active public place for users. On the other hand, sidewalk between buildings to street curb and Hindu Temple is the less active public place for users. Regarding the information from this part of analysis, City Sauer (98%), The Sungai Segget River (38%), the sidewalk between buildings and street curb and Public Bank Building (26%), Shop houses areas (24%), Chinese Temple (20%), Masjid India (18%), Sultan Ibrahim Building (16%) and Hindu Temple (14%) are respectively registered as active places from the most to least.

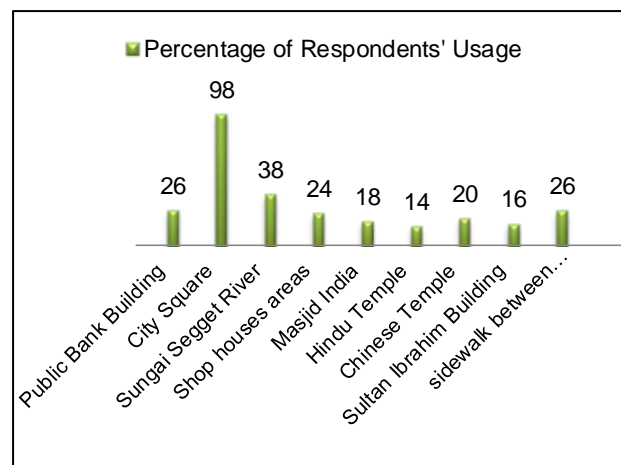


Figure 3: Amount of public places and spaces activities

4.3. The important activities in Jalan Wong Ah Fook' public places and spaces

A good city offers a wide choice of beautiful optional activities, and because so many people are present in the city, there are many people to experience watch and speak to. According to Jacobs (1961, 1993) and Gehl, (1987), the importance of paying attention to social structure and people will directly influence activities and behaviors. It is indeed vital to relevant activities in public places which encourage people to participate in them. One of the most predominate forms of current public space behavior is recreational shopping. Shopping and eating food plays a significant role in attracting the people to come to the public space whether to buying or just to enjoy by watching. In addition, urban public space plays a crucial role as catalyst for social transformation and provides gathering places for various social gropes. Furthermore, they can enhance belongingness and collective identity. Therefore, social interacting in public space such as gathering is one of the main reasons for the users to spend their leisure time with families and friends. And gathering activities could compass activities such as, taking relaxing,

listening and watching nature. In order to evoke the main activities in the study area, respondents were asked to specify their activities in mentioned public places and spaces. Figure 4 highlights important activities in Wing Ah Fook Street as perceived by the respondents. Important activities in this public space include spending time, meeting friends, shopping, and eating food, banking and praying. Thus, the results of notable activities in each mentioned public places are as follow:

4.3.1. Public Bank Building

Respondents clarified that spending time (0%), meeting friends (6%), shopping (0%) and eating food (0%) are not appropriate activities in public bank building and its surrounding area. On the other hand, 50% of interviewed respondents mentioned that banking is the main activity for them in public building bank and its surrounding area.

4.3.2. City Square

Shopping is the favorite activity in city square. On the other hand, banking registered as the less favorite activity. Regarding the information from this part of analysis, shopping (88%), eating food (72%), spending time and meeting friends (52%) and banking (20%) are respectively registered as favorite activities from the most to least.

4.3.3. Sungai Segget River

Spending time is the favorite activity in Sungai Segget River. On the other hand, shopping registered as the less favorite activity. Regarding the information from this part of analysis, spending time (24%), eating food (20%), shopping (10%), meeting friends (12%) and banking (0%) are respectively registered as favorite activities from the most to least.

4.3.4. Shop houses areas

Eating food is the favorite activity in Shop houses areas. On the other hand, shopping registered as the less favorite activity. Regarding the information from this part of analysis, eating food (16%), spending time and meeting friends (8%) and shopping (6%) are respectively registered as favorite activities from the most to least.

4.3.5. Masjid India

Respondents clarified that except meeting friends (10%), spending time (2%) and shopping (0%) and eating food (0%) are not appropriate activities in Masjid India and its surrounding area. On the other hand, 30% of interviewed respondents mentioned that praying is the main activity for them in Masjid India and its surrounding area.

4.3.6. Hindu Temple

Respondents specified that except meeting friends (6%), spending time (2%) and shopping (0%) and eating food

(0%) are not appropriate activities in Hindu Temple and its surrounding area. On the other hand, 10% of interviewed respondents mentioned that praying is the main activity for them in Hindu Temple and its surrounding area.

4.3.7. Chinese Temple

According to respondents' idea, meeting friends (4%), spending time (0%), shopping (0%) and eating food (0%) are not appropriate activities in Chinese Temple and its surrounding area. On the other hand, 20% of interviewed respondents mentioned that praying is the main activity for them in Chinese Temple and its surrounding area.

4.3.8. Sultan Ibrahim Building

Meeting friends is the favorite activity in Sultan Ibrahim Building and its surrounding area. On the other hand, eating food and shopping are registered as the less favorite activity. Regarding the information from this part of analysis, meeting friends (12%), spending time (6%) and shopping and eating food (0%) are respectively registered as favorite activities from the most to least.

4.3.9. Sidewalk between buildings and street curb

Spending time is the favorite activity in sidewalk between buildings and street curb. On the other hand, shopping is registered as the less favorite activity. Regarding the information from this part of analysis, spending time (18%), meeting friends (16%), eating food (12%) and shopping (2%) are respectively registered as favorite activities from the most to least.

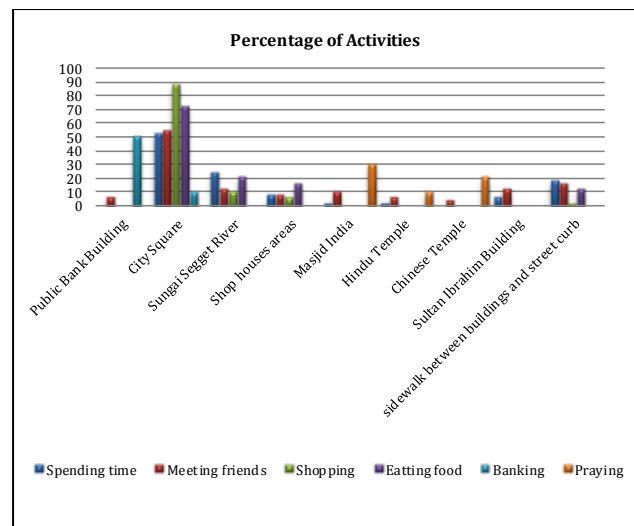


Figure 4: Amount of activities in public places and spaces

4.3.10. Time frequency and favorable time for visiting public places

This section concentrates on time frequency that users come to public places and their favorable times for visiting those places. Estimating time frequency of visiting public

places and spaces can be concerned as other method to validate active places in study area. It means the places which are visited more in a week are more active. On the other hand, comparing the results from previous section of public places and spaces activity's estimation and results from time frequency estimation helps this study to get more accurate results due finding most active public places and spaces in study area. In addition, most comfortable and safe times for users to visit public places can be obtained by understanding their favorable times for visiting public places. For the first part, respondents were asked to specify their time frequency for going to public places. The results are shown in figure 5 as follow:

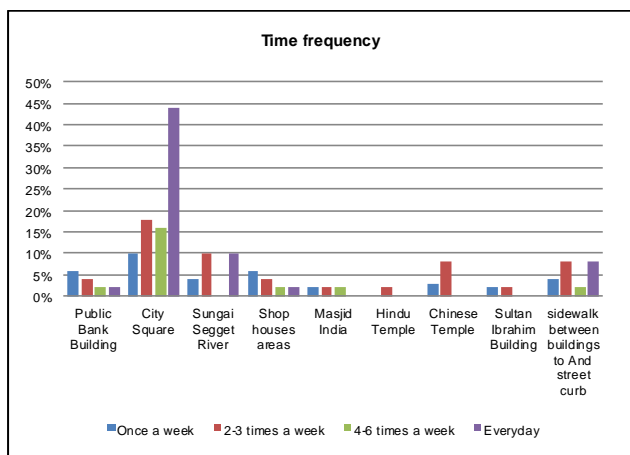


Figure 5: Time frequency of using public places and spaces

As mentioned, one place is more active if it was visited more in a week. Using the mathematical procedure, amount of public places' activities are estimated. As first, the duration of visiting the public places were given the following weights: 4 was used to label "everyday", 3 was used to label "4-6 times a week", 2 indicated a "2-3 times a week", 1 was used for "once a week" and 0 was used for "less than once a week". To assume the given weights as coefficients and multiplying them to the percentage of respondents who use public places in each specific time, there would be unique value for each chosen time in a week. As conclusion, by summing all calculated values, the amount of public places' activities are estimated. Table 1 shows the measurement of active public places based on their visiting time frequencies and table 2 shows the results of all calculations:

As can be seen from table 2, the most active public places based on their visiting time frequency are specified. The results indicate that City Square is the most active public place for users. On the other hand, Hindu Temple is the less active public place in study area. Regarding the information from this part of analysis, City Sauer (270), The Sungai Segget River (64), the sidewalk between buildings and street curb (58), Public Bank Building and Shop houses areas (28), Chinese Temple (19), Masjid India (12), Sultan Ibrahim Building (6) and Hindu Temple (4) are respectively registered as active places from the

most to least. On the other hand, as mentioned in previous part of analysis the most active places in the case study were as follow:

Table 1: active public places based on their visiting time frequencies and how it is measured

Properties of public places measurement	Measurement	Example (City Square)
Time frequency of visiting public places	$\alpha = \sum_{m=1}^n \beta m * \gamma m$ $\alpha = \text{amount of public place's activity}$ $\beta = \text{given weight (coefficient)}$ $\gamma = \text{the percentage of users visiting public place in specific time}$	$\alpha = (4 * 44) + (3 * 16) + (2 * 18) + (1 * 10) + (0 * 12) = 176 + 48 + 36 + 10 + 0 = 270$

Table 2: Active public places based on their visiting time frequencies

Time frequency's measurement of using public places			
No		Measurement procedure	Amount of activity
1	Public Bank Building	$(4 * 2) + (3 * 2) + (2 * 4) + (1 * 6) + (0 * 86)$	28
2	City Square	$(4 * 44) + (3 * 16) + (2 * 18) + (1 * 10) + (0 * 12)$	270
3	Sungai Segget River	$(4 * 10) + (3 * 0) + (2 * 10) + (1 * 4) + (0 * 76)$	64
4	Shop houses areas	$(4 * 2) + (3 * 2) + (2 * 4) + (1 * 6) + (0 * 86)$	28
5	the Masjid India	$(4 * 0) + (3 * 2) + (2 * 2) + (1 * 2) + (0 * 94)$	12
6	the Hindu Temple	$(4 * 0) + (3 * 0) + (2 * 2) + (1 * 0) + (0 * 98)$	4
7	Chinese Temple	$(4 * 0) + (3 * 0) + (2 * 8) + (1 * 3) + (0 * 89)$	19
8	Sultan Ibrahim Building	$(4 * 0) + (3 * 0) + (2 * 2) + (1 * 2) + (0 * 96)$	6
9	sidewalk between buildings to And street curb	$(4 * 8) + (3 * 2) + (2 * 8) + (1 * 4) + (0 * 30)$	58

1)City Sauer 2) The Sungai Segget River 3 and 4) the sidewalk between buildings and street curb and Public Bank Building 5) Shop houses areas 6) Chinese Temple 7) Masjid India 8) Sultan Ibrahim Building 9) and Hindu Temple

By comparing the results from this section and previous section, it can be concluded that there is reliable overlap between the results from both sections and it proves the accuracy and reliability of this part of analysis.

For the second part, respondents were asked to mention the most favorable times for them to visit public places. As shown in figure 6, most of the users prefer "morning" as favorable time to go to Public Bank Building (20%), the sidewalk between buildings to street curb (12%) and Sultan Ibrahim Building (10%). In addition, they revealed that "noon (lunch time)" is the appropriate time for going to city square (30%) and Sungai Segget River (13%). Moreover, "early afternoon" for Masjid India (6%) and "evening" for Shop houses areas (8%), Hindu Temple

(8%) and Chinese Temple (8%) are registered as most favorable times for respondents. On the other hand, "night" time was the less favorable and uncomfortable time for users to go to public bank building (0%), Sungai Segget River (2%), shop houses areas (2%) and the sidewalk between buildings to street curb (4%). In addition, "early afternoon" and "night" for city square (10%), "noon (lunch time)" and early afternoon for Hindu Temple and Chinese Temple (0%) and "early afternoon" for Sultan Ibrahim building (0%) was the less favorable and uncomfortable time for users to visit.

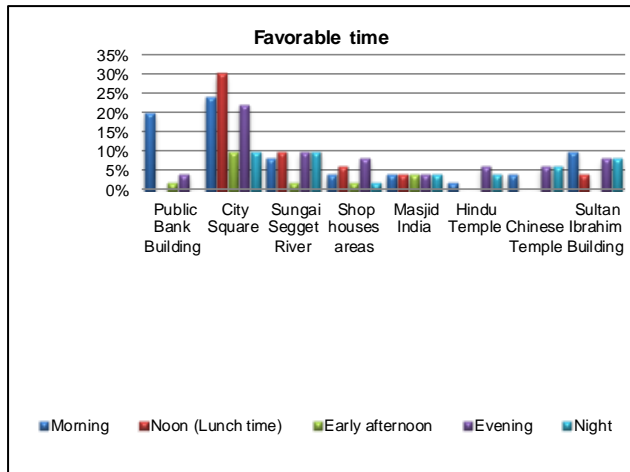


Figure 6: Favorable time for using public places and spaces

4.3.11. Social and Physical Qualities in Public Places

Regarding the aim of this study, understanding the factors and reasons for using public places in study area is one of the main concerns of this study. Facilities and amenities are most significant components for providing excellent quality within the public space. Moreover, safety and comfort are considered as significant components in the public space and they have an influence on public space's usage and satisfaction (Giles-Corti et al., 2005). In addition, beauty of the place and public interaction among people provide the feel of safety and the reason for people for going to public places. Therefore, facilities, safety, public interaction and the beauty of the place are chosen as social and physical factors to estimate the importance of them in chosen public places and spaces for users. To this aim, respondents were asked to choose one or more of mentioned factors as the reasons that make them go to public places.

As shown in figure 7, public interaction is registered as the main social and physical factor for respondents to go to city square (62%), shop houses areas and Masjid India and Hindu temple (10%) and Chinese temple and Sultan Ibrahim Building (12%). In addition, respondents specified the beauty of the place for the Sungai Segget River (18%) and facilities for Public Bank Building (18%) as the main social and physical factor. On the other hand,

safety is registered as less significant social and physical factor for users to go to city square (32%), Sungai Segget River (4%), Shop houses areas (2%), Sultan Ibrahim Building (2%) and the sidewalk between buildings to street curb (2%). In addition, beauty of the place for Public Bank Building (0%) and facilities for Masjid India (4%) and Chinese Temple (0%) are recorded as less significant social and physical factor for users.

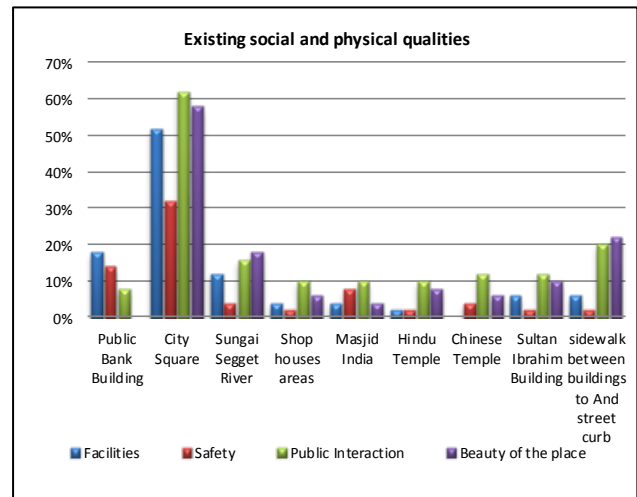


Figure 7: Existing social and physical qualities in public places and spaces

4.3.12. Respondent's opinion due interactional tasks in public places

Besides understanding the main factors which encourage people coming to public places, it is necessary to realize their idea and agreement to have interaction with others and also their efforts due improving interactional tasks in society. To this aim, respondents were asked to answer questions by mentioning their agreement with each of them. The first question was about their opinion to interact with people and participating in public activities. 66 percent of respondents answered positively to this question and the rest (30%) disagreed. The second question was about their opinion due necessity of encouraging interaction in public Place. 80 percent of respondents agreed by the necessity of encouraging interaction in public place and the rest (16%) disagreed. The third question was about the informal activities in street area and their idea about it. 66 percent of respondents were comfortable with such activities in the street and they agreed to have those activities in the street but the rest (32%) disagreed. The last question was about respondents' idea due promoting integration by designing public spaces. As seen from the table 3, 74 percent of respondents agreed with that idea and 20 percent of the disagreed.

4.3.13. Lack of facilities in public places and spaces

The public places and spaces in Johor Bahru occupy a strategic location. Because it is in the centre of the city and there are informal activities in this place besides surrounds

by malls and shops. These features of the place make it more attractive to many people for visiting this location and spending their leisure time. Moreover, the facilities

Table 3: Respondents opinion due interactional tasks in public places

Respondents opinion due interactional tasks in public places			
No		Agree	Disagree
1	Opinion To Interact With People And Participating In Activities	66%	30%
2	Opinion Due Necessity Of Encouraging Interaction In public Place	80%	16%
3	Do You Like Informal Activities In Street Area	66%	32%
4	Opinion Due Promoting Integration By Designing Public Spaces	74%	20%

such as shades, pedestrian walkways and natural elements make users feel comfortable when they are hanging around and spending their times in public places. As one of the aims of this study, the lack of mentioned facilities in each chosen public places is undertaken. To do so, respondents were asked to specify lack of which facilities is their reason to feel uncomfortable in public places. As shown in figure 8, lack of an appropriate shades in Sungai Segget River (30%), Shop houses areas (24%), Masjid India (19%) and Hindu Temple (16%) is mentioned as a significant problem for users in study area. Moreover, lack of natural elements for public bank building (18%) and city square (46%) and lack of pedestrian walkway for Chinese Temple (12%), Sultan Ibrahim Building (16%) and sidewalk between buildings and street curb (34%) are registered as main problems for users in study area. On the other hand, lack of natural elements in Sungai Segget River (10%), Shop houses areas (16%), Masjid India (16%) and Hindu Temple (6%) are scored by users as less important problems in study area. In addition, lack of pedestrian walkway for public bank building (12%) and lack of shades for city square (16%), Chinese Temple (9%), Sultan Ibrahim Building (8%) and sidewalk between buildings and street curb (18%) are registered by users as less notable problems in study area.

4.3.14. Lack of social and physical factors in public places

Although lack of facilities such as shades, pedestrian walkways and natural elements destroy interactional tasks, the lack of social and physical factors also have serious effect due destroying the interaction in public places. Therefore, this section is going to evoke those factors by employing information from literatures and researches on social and physical factors in public places. Thus, factors such as safety, sense of belonging as social and multiple activities, different physical abilities and interpersonal engagement as physical factors are selected. Due understanding the importance of each mentioned factors on chosen public places, respondents were asked to specify lack of which mentioned factors make them

uncomfortable for being in public places. As can be seen figure 9, safety are mentioned by respondents as the main

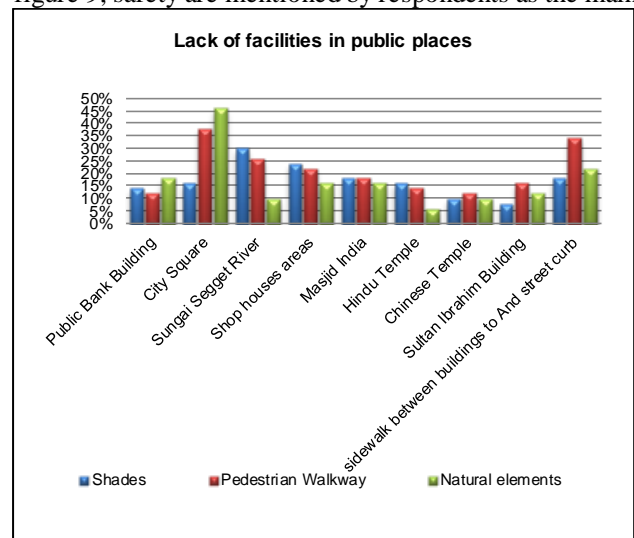


Figure 8: Lack of facilities in public places and spaces

deficiency for Public Bank Building (16%), Sungai Segget River (42%), Shop houses areas (26%), Hindu Temple (22%) and sidewalk between buildings to And street curb (56%). Moreover, lack of sense of belonging for Chinese Temple (10%) and lack of multiple activities for City Square (62%), Masjid India (22%) and Sultan Ibrahim Building (26%) are mentioned as the main deficiency by respondents. On the other hand, lack of different physical abilities in Chinese Temple (2%), Shop houses areas (2%) and Hindu Temple (0%) are scored by users as less important factors in study area. In addition, lack of interpersonal engagement for public bank building (12%), city square (12%), Sungai Segget River (6%), Masjid India (4%), and Sultan Ibrahim Building (4%) and sidewalk between buildings to street curb (8%) are registered by users as less notable problems in study area.

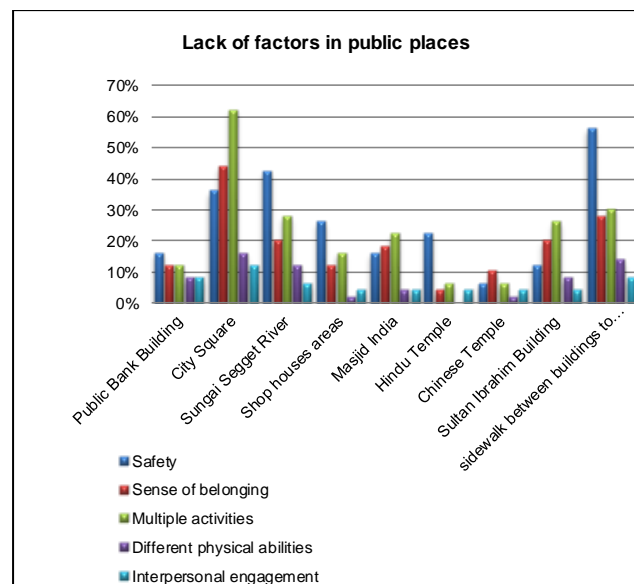


Figure 9: Lack of factors in public places and spaces

4.3.15. Significant frequencies of factors in public place

For the last part of analysis, respondents were asked to rank five mentioned social and physical factors in previous part respectively to specify the important sequence of mentioned factors for them. As consequence, safety (76%), sense of belonging (4%), multiple activities (36%), different physical abilities (42%) and interpersonal engagement (60%) are chosen by respondents respectively as their first, second, third, fourth and fifth choices.

5. Conclusion and recommendation

As result, respondents were mentioned safety as their main concern when they move to public places and most of them were interested to have interaction to others. They agreed to encouraging interactional tasks by designing public places and even informal street's activities in the study area. Besides, City Square, Hindu Temple, Public Bank Building, Chinese Temple, The Sungai Segget River, Masjid India, Shop houses areas, Sultan Ibrahim Building and sidewalk between buildings to street curb were respectively registered from the most well-known places to least. In addition, City Squarer, The Sungai Segget River, the sidewalk between buildings and street curb, Public Bank Building, Shop houses areas, Chinese Temple, Masjid India, Sultan Ibrahim Building and Hindu Temple are respectively registered as active places and spaces from the most to least. As clarified in aforementioned results, although some public places and spaces are well-known by users, they are not as active as other public places and spaces with less popularity. For instance, Hindu Temple is registered as the second well-known place by users but it recorded as less active place in the study area or the sidewalk between buildings to street curb is registered as less well-known public place but it is recorded as third active public place for users. Thus, it can be concluded that the sidewalk between buildings to street curb can be more active by increasing its distinctiveness or people's awareness about it. As consequence, this study is going to provide a profile for each chosen public places in study area with resulting their strength and weakness due improving interactional tasks. The results of each nine chosen public places and spaces are represented as follow:

5.1. Public Bank Building

Public bank building was recorded as the third notable and active public place by respondents. In addition, banking was the main reason and morning was favorable time for people to visit public bank building. Besides, facilities in public bank building are mentioned as motivation for users to visit there. On the other hand, lack of natural elements and safety is the social and physical factors that made people feel uncomfortable there.

5.2. City Square

City square was registered as the first well-known and active public place by respondents. In addition, shopping

was the main reason and noon (lunch time) was favorable time for people to visit city square. In addition, public interaction in city square is specified as motivation for users to visit there. On the other hand, lack of natural elements and multiple activities is the social and physical factors that made people feel uncomfortable there.

5.3. Sungai Segget River

Sungai Segget River was chosen as the fifth well-known and second active public place by respondents. Therefore, users' unfamiliarity to this public place concerns as one reason to reduce the amount of activity there. In addition, spending time was the main reason and noon (lunch time) was favorable time for people to visit Sungai Segget River. Thus, this place is considering as recreational place for users in study area. Besides, beauty of Sungai Segget River is mentioned as motivation for users to visit there. On the other hand, lack of shades and safety is the social and physical factors that made people feel uncomfortable there.

5.4. Shop Houses Areas

Shop houses areas were recorded as the seventh well-known and fourth active public place by respondents. Therefore, users' unfamiliarity to this public place concerns as one reason to reduce the amount of activity there. In addition, eating food was the main reason and evening was favorable time for people to visit shop houses areas. Thus, this place is considering as eating place for users in study area. Moreover, public interaction in shop houses areas is mentioned as motivation for users to visit there. On the other hand, lack of shades and safety is the social and physical factors that made people feel uncomfortable there.

5.5. Masjid India

Masjid India was specified as the sixth well-known and sixth active public place by respondents. In addition, praying was the main reason and early afternoon was favorable time for people to visit Masjid India. Besides, public interaction in Masjid India is mentioned as motivation for users to visit there. On the other hand, lack of pedestrian walkway and multiple activities is the social and physical factors that made people feel uncomfortable.

5.6. Hindu Temple

Hindu Temple was specified as the second well-known and eighth active public place by respondents. It manes although Hindu Temple is known by many people, the amount of mentioned activity is not considerable. In addition, praying was the main reason and evening was favorable time for people to visit Hindu Temple. Besides, public interaction in Hindu Temple is mentioned as motivation for users to visit there. On the other hand, lack of safety is the social and physical factors that made

people feel uncomfortable there. It means this place have serious problem due making people feel safe and secure.

5.7. Chinese Temple

Chinese Temple was specified as the fourth well-known and fifth active public place by respondents. In addition, praying was the main reason and evening was favorable time for people to visit Chinese Temple. Besides, public interaction in Chinese Temple is mentioned as motivation for users to visit there. On the other hand, lack of pedestrian walkway and sense of belonging is the social and physical factors that made people feel uncomfortable there.

5.8. Sultan Ibrahim Building

Sultan Ibrahim Building was chosen as the eighth well-known and seventh active public place by respondents. In addition, meeting friends was the main reason and morning was favorable time for people to visit city square. Thus, this place is considering as a landmark for users in study area. Besides, public interaction in Sultan Ibrahim Building is mentioned as motivation for users to visit there. On the other hand, lack of pedestrian walkway and multiple activities is the social and physical factors that made people feel uncomfortable.

5.9. Sidewalk between Buildings to Street Curb

Sidewalk between Buildings to Street Curb was chosen as the ninth well-known and third active public place by respondents. Therefore, users' unfamiliarity to this public place concerns as one reason to reduce the amount of activity there. In addition, spending time was the main reason and morning was favorable time for people to visit Sidewalk between Buildings to Street Curb. Thus, this place is considering as recreational place for users in study area. Besides, beauty of Sidewalk between Buildings to Street Curb is mentioned as motivation for users to visit there. On the other hand, lack of pedestrian walkway and safety is the social and physical factors that made people feel uncomfortable.

It can be concluded that a better public places is one that gives great opportunities for optional and social activities. Furthermore, the liveliness in public places relies very much on the quality of spaces as public domain, and whether they are welcoming the users, to stay, sit and enjoy the place and its activities. There is a necessity for serious attempt to create livelier environment in the public space which in turn increase the attractiveness and the importance of an imaginable city. Moreover, analysis section revealed that lack of safety is registered as one of the serious issues for people in study area. Therefore, there is a necessity of serious effort for urban developer to concern about safety issues in study area. In addition, respondents mentioned the lack of natural elements and shades several times for public places as factors which make them uncomfortable in the study area. Thus, there is a need of more concern due providing

greenery and shades in mentioned public places. After all, the main effective factors of interactional tasks for public places in study area can potentially resolve to achieve the objectives. Accordingly, the analysis chapter has totally considered each chosen public places in Jalan Wang Ah Fook based on the demographic analysis.

According to the finding of analysis section, the following recommendations are prepared due improving the quality of public places in study area:

- 1) Regarding the analysis section, Sungai Segget River, shop houses areas and Sidewalk between Buildings to Street Curb are public spaces that were not well known for users. Therefore, there is a need of plans and actions to improve people awareness about mentioned public places. In addition, respondents mentioned safety as serious problem that make them uncomfortable in Hindu temple and all three mentioned places. Thus, there is a necessity of plans and actions due providing secure feeling for residents and visitors there.
- 2) Providing shadows in Sungai Segget River and shop houses area to protect the residents and the pedestrian from sun and rain should be necessary to ensure more convenience and comfort will be achieved that will attract more people to come and stay longer in this places.
- 3) In terms of appropriate pedestrian walkways for Masjid India, Chinese Temple, Sultan Ibrahim Building and Sidewalk between Buildings to Street Curb, consideration should be given to provide a specific line with shades and appropriate facilities for pedestrians (for those places without pedestrian walkway) or improving the quality of pavement and all related facilities to pedestrian walkways (for those places with pedestrian walkway).
- 4) Providing multiple activities for city square, Masjid India and Sultan Ibrahim Building could increase the attractiveness, activity and liveliness of them. Therefore, multiple activities should be provided such as shopping stalls inside or around them, a place for wheelchairs and disable people and places for people to seat and enjoy watching around with appropriate shades and so on.

References

- Layne, M.R. (2009). Supporting Intergenerational Interaction: Affordance of Urban Public Space. PHD Thesis. *North Carolina State University*, Raleigh, North Carolina.
- Routledge (2009). *Communication as culture*. London, UK: p. 331–47.
- Neil (2002). Scholarly article Public Space.
- Shah, R.C., and Kesan, J.P. (Sept 2010) How Architecture Regulates. Retrieved on September, 3 http://www.governingwithcode.org/journal_articles/pdf/how_architecture_regulates.pdf
- Jacobs, J. (1961). *The Death and Life of Great American Cities*. (1969). Toronto: *Randon House and New York: Modern Library*.
- Whyte, W.H. (1980). *The Social Life of Small Urban Spaces*. (1985) .Washington, D.C. *The Conservation Foundation*.
- Gehl, J. (1987). *Life Between Buildings: using public space*. (1987). New York: *V Nost Reinhold*.

- Lund, H. (2002). Pedestrian Environments and Sense of Community. *Journal of Planning Education and Research*. Volume (21), 301-312.
- Kim, J., and Kaplan, R. (2004). Physical and Psychological Factors in Sense of Community New Urbanist Kentlands and Nearby Orchard Village. *Environment and Behavior*. Volume (36), 313-340.
- Sullivan, W., and Kuo, F.E. and Depooter, S.F. (2004). The Fruit of Urban Nature Vital Neighborhood Spaces. *Environment and Behavior*. Volume (36), 678-700.
- Harry, G. L. (1985). *Maintaining the Spirit of Place*, PDA Publishers Corporation, Arizona, USA.
- Michelson, W. (1975). Behavioral research methods in environmental design. *Stroudsburg* : s.n. 307 p
- Frank, K., A. (1984). Exorcising the Ghost of Physical Determinism. *Environment and Behavior*. Volume (16), 411
- Saarloos, D., and Kim, J.E., and Timmermans, H. (2009). The Built Environment and Health: Introducing Individual Space-Time Behavior. *International Journal of Environmental Research and Public Health*. Volume (6), 1724-1743.
- Giles-Corti et al., 2005 B. Giles-Corti, M. Broomhall, M. Knuiman, C. Collins, K. Douglas et al. Increasing walking: how important is distance to, attractiveness, and size of public open space? *American Journal of Preventive Medicine*, 28 (2005), pp. 169–176.