



## Journal of Tourism, Hospitality and Environment Management (JTthem)

Journal Website: <http://jthem.com/>  
 eISSN: 0128-178X



# URBAN PUBLIC SPACE AS SOCIAL INTERACTION SPACE: CASE STUDY IN PETALING STREET

Syakir Amir<sup>1\*</sup>, Ainina Azizan<sup>2</sup>, Rustam Khairi Zahari<sup>3</sup>, M. Zainora Asmawi<sup>4</sup>

<sup>1</sup> Department of Urban and Regional Planning, Kulliyah of Architecture & Environmental Design, International Islamic University Malaysia, Malaysia  
 Email: syakir Amir@iium.edu.my

<sup>2</sup> Department of Urban and Regional Planning, Kulliyah of Architecture & Environmental Design, International Islamic University Malaysia, Malaysia  
 Email: azizan.ainina@yahoo.com

<sup>3</sup> Department of Urban and Regional Planning, Kulliyah of Architecture & Environmental Design, International Islamic University Malaysia, Malaysia  
 Email: rustam@iium.edu.my

<sup>4</sup> Department of Urban and Regional Planning, Kulliyah of Architecture & Environmental Design, International Islamic University Malaysia, Malaysia  
 Email: zainora@iium.edu.my

\* Corresponding Author

### Article Info:

#### Article history:

Received date: 03.05.2020

Revised date: 14.06.2020

Accepted date: 15.06.2020

Published date: 15.06.2020

#### To cite this document:

Amir, S., Azizan, A., Zahari, R. K., & Asmawi, M. Z. (2020). Urban Public Space as Social Interaction Space: Case Study in Petaling Street. *Journal of Tourism, Hospitality and Environment Management*, 5 (19), 90-101.

DOI: 10.35631/JTthem.519007.

### Abstract:

Despite the fading cultural value as a Chinatown, the relationship of the society and its public space is a form of a natural phenomenon that is inseparable. The changing functions of public space in Malaysia were identified to decrease the quality of social and cultural activities in Petaling Street. Therefore, this study aims to explore urban public spaces as the main social driver in crating interaction in Petaling Street, Kuala Lumpur. The relationship between attributes of the urban public space and visitor retention were analyzed in this study. In terms of social interaction, the user activities were interrelated with the sociability of the urban space. The questionnaire survey was selected as the main medium for data collection distributed to the visitors and locals within the Klang Valley who have visited Petaling Street Chinatown. A total of 150 respondents involved and the analysis shows that street furniture does affect their preferences in an urban public space. Furthermore, the time spent by respondents will increase depending on the external factors such as weather and aesthetics. On the other hand, the internal factor that contributes to the number of visitors in Petaling Street Chinatown is their accompanying traveler which in the context of a solo traveler, the street should be celebrated with vibrancy.

### Keywords:

Visitor, Urban Public Space, Interaction, Street Furniture

## **Introduction**

Public space plays a greatest role as a catalyst for social change and provide a place for gathering different community groups (Amin, 2006; Shuhana Shamsuddin & Norsidah Ujang, 2008; Abbasian, 2016). It is a good opportunity that the presence of people in such place to generate casual interaction within them in return for mutual benefits in both generations (Yu & Kang, 2008). The concept of public space in a city can be interpreted independently by communities, according to its emphasis on public space and its culture (Kim & Sohn, 2002; Balducci & Checchi, 2009). In Malaysian culture, it is common to dine in and hang out in the outdoor for its tropical climate throughout the year. The historic culture and heritage in Petaling Street since 1881, marked the area as Kuala Lumpur's Chinatown. Other than the attraction of the place as a prominent tourist spot, locals come to Petaling Street to conduct businesses, to bargain on shopping items and to enjoy Chinese street foods. Unlike the character of in other parts of the world, Wong, the second vice president in the Malaysian Tourist Guide Council told the *New Straits Time* (28th March 2018) that had long been overrun by foreign workers especially from Bangladesh. Despite of the fading cultural value as a Chinatown, the relationship of the society and its public space is a form of natural phenomenon which is inseparable. Hence, it is still relevant for a city's public space acting as prime cultural site for social interaction.

Efforts by the authority to protect the physical inheritance of heritage buildings has put the sustainability in community development at stake in terms of social inclusion and gentrification (Golicnik & Thompson, 2010; Meng & Kang, 2016). This study aims to explore "urban public space", which is one of the main societal drivers, a space that can create interaction between multi- races in the cultural spot of Petaling Street, Kuala Lumpur. The changing functions of public space in Malaysia has caused the decrease in quality of social and cultural activities. However, community in certain area can involve in public participation process conducted by local authorities in preparing development plans. This study will be a significant endeavour in understanding the role and significance of urban public spaces towards the social development as well as the economic development of Petaling Street. Historically, this Chinatown has been the centre of attractions for locals in Malaysia to undergo businesses beginning in the year of 1881 and has become one of the prominent tourist attractions in Kuala Lumpur today. It could be a representative to contribute on the basic idea of medium for social interaction in sharing culture between locals, and even global wide. Regardless of the fading authenticity issues in Petaling Street as Chinatown, the idea of utilizing and improving urban public space are seen to solve the issue. As urban public space can naturally generate social interactions, this space will eventually trigger cultural activities happening in the area.

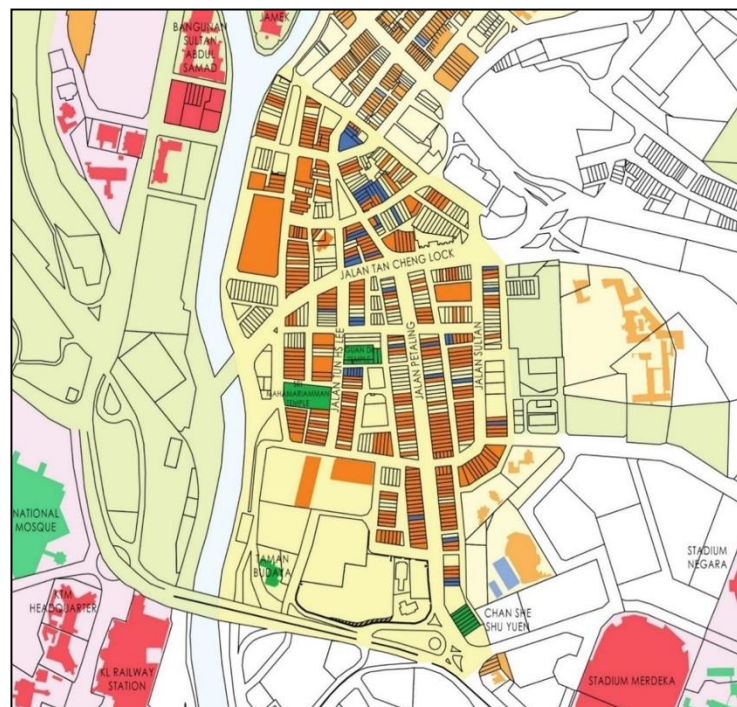
## **Literature Review**

According to Town and Country Planning Act 1976 Act 172 (2006), open space defined as any land whether enclosed or not which is laid out or reserved for laying out wholly or partly as a park, public garden, walk, sports and recreation ground, pleasure ground or as a public space. Mohd Salleh Aman, Mohd Sofian Omar Fauzee & Mawarni Mohamed (2017) believe that Malaysians have the attitude to utilize leisure time particularly during holidays, 'time after work' and outdoor activities. This informal way of generating social interaction in urban public spaces is not only practiced traditionally, but also part of essential element in the reproduction of an informal economy all over cities. For urbanists, they have long held the view that the physical and social dynamics of urban public spaces play a central role in the formation of public culture (Balducci & Checchi, 2009). The dynamics of gathering in, passing through, streets, squares, parks, and other means of public spaces, are more likely to be interpreted in terms of their impact on cultures of consumption (Yang & Kang, 2005; Cao & Kang, 2020),

practices of negotiating the urban environment (Penn & Vaughan, 1999; Reza Askarizad & Hossein Safari, 2020), and social response to anonymous others (Sabin, 1993; Staats & Hartig, 2004; Xiao, Tait, Kang, 2018). In other word, when urban public spaces are successful, they will increase opportunities to participate in communal activity (Amin, 2006).

Community activities characterize the town and one of the indications of dynamic town development, can be seen through the society activities and habits (Hillier, Penn, Hanson, Grajewski & Xu, 1993; Golicnik & Thompson, 2010). In general, a town development can be identified based on the capacity of the facilities and amenities that is provided within the town area. Therefore, it is vital to have a good provision of facilities and infrastructure (Huang, 2006) and related services (Marcus & Francis, 1998) as they are the key tools in driving the development of social and economic activities (Staats & Hartig, 2004; Kiik, 2006).

This study conducted an assessment of urban public space specifically in Petaling Street Chinatown area which is a very prominent site for cultural and heritage characters in Malaysia. The study area is located within Greater Kuala Lumpur area at the south of Peninsular Malaysia and is bordered in the northwest of Negeri Sembilan, southwest of Pahang and east of the Straits of Malacca. Most of shop houses in Petaling Street are listed under Category 2 and Category 3 of heritage buildings which have not been gazetted principally because they are not more than 100 years old, making it categorized outside the provisions of the Antiquities Act and by chance, exposing the historical district to rapid development (Shuhana Shamsuddin & Norsidah Ujang, 2008). Thus, as shown in Figure 1.1, Petaling Street is marked under 'stable area'. Petaling Street, also known as "Chi Cheong Kai", among the locals is a Chinatown located in Kuala Lumpur, Malaysia.



**Figure 1: Heritage Zone Outlined in Kuala Lumpur Development Plans 2020**

### **Methodology**

This study applied a non-experimental study approach concentrating on data collection process. A quantitative research method had been chosen to analyze the urban public spaces. In order

to obtain quantitative information for this study, questionnaire survey is used as the medium in retrieving the data. The questionnaire survey is divided into three main sections which consist of i) respondents personal profile; ii) public space attributes and iii) constitution of social interactions. This research narrowed down to the method of implementing the simple random sampling technique in which illustrates an equal chance for the population to be included in a sample. The target population selected for this research consists of the residents of housing area in Klang Valley. Klang Valley has an estimated population of 7.6 million. These population groups of residence consist of the housing area in Kuala Lumpur, Selayang, Gombak, Wangsa Maju, Setiawangsa, Ampang, Keramat, Damansara, Shah Alam, Petaling Jaya, and Subang Jaya. All these areas were selected because of their high density of population and their proximity to urban areas. The other target population for this study are the domestic and international tourists who have stayed or visited Petaling Street. Tourists are included as the target group of population because Petaling Street is one of the most visited and significant tourist spot in Malaysia. The appropriate sample size based on Desired Accuracy with Confidence Level of 95% (Cohen, Manion, Morison & Morison, 2007) estimates that this research should range between 384 to 9613 respondents. Therefore, a total of 400 questionnaire surveys were distributed to the populations residing in Klang Valley and tourists who have experienced Petaling Street.

## Analysis and Findings

### *Respondents Background*

There are 150 respondents participated in the survey. From the total of 400 questionnaire surveys distributed, 150 completed questionnaire surveys were successfully returned, collected and analyzed. Questions related to age, marital status, occupation, ethnicity, education background, spoken language and matters related to their socio-economic background were asked during the survey. The findings are reported in Table 1.2 below.

**Table 1: Respondents' Socio-demographic Profile**

Variables	Components	Frequency	Percentage (%)
Gender	Male	90	60.0
	Female	60	40.0
Age	Below 19 years old	5	3.3
	20 to 29 years old	109	72.7
	30 to 39 years old	28	18.7
	40 to 49 years old	2	1.3
	50 to 59 years old	6	4.0
Marital status	Single	127	84.7
	Married	19	12.7
	Widowed	2	1.3
	Divorced	2	1.3
Occupation	Student	105	70.0
	Government worker	6	4.0
	Private	35	23.3
	Pensioner	4	2.7
Origin	Malaysian	118	78.7
	Others	32	21.3
Origin (Others)	Australia	6	4.0

	Belgium	2	1.3
	Finland	1	0.7
	Indonesia	11	7.3
	Singapore	9	6.0
	Thailand	3	2.0
Ethnicity	Malay	109	72.7
	Chinese	14	9.3
	Indian	2	1.3
	Others	25	16.7
Ethnicity (Others)	Australian	6	4.0
	Bajau	2	1.3
	Finish	1	0.7
	Flemish	2	1.3
	Iban	2	1.3
	Indonesian	11	7.3
	Siamese	1	0.7
Education level	SPM/O Level	15	10.0
	STPM/Matriculation	10	6.7
	Certificate - college/institute	8	5.3
	Diploma	7	4.7
	Bachelor degree	93	62.0
	Master degree	13	8.7
	PHD	4	2.7
Spoken language	Bahasa Malaysia	123	82.0
	Mandarin	60	4.0
	Tamil	2	2.0
	English	98	65.8

Source: Questionnaire Survey, 2019

**Table 2: Respondents' Trip Profile**

Variables	Components	Frequency	Percentage (%)
Month of visit	January	11	7.3
	February	57	38.0
	March	41	27.3
	June	3	2.0
	July	2	1.3
	August	1	0.7
	September	1	0.7
	October	3	2.0
	November	12	8.0
	December	19	12.7
Year of visit	More than last 2 years	13	8.7
	2018	41	27.3
	2019	96	64.0
Number of visit	First time	61	40.7
	2 to 5 times	57	38.0

	6 to 10 times	13	8.7
	More than 10 times	19	12.7
Mode of transportation	Walking	9	6.0
	Bicycle	3	2.0
	Motorcycle	12	8.0
	Car	39	26.0
	Bus	12	8.0
	Train	75	50.0
Factors of visit	Recommendation	78	52.0
	Crowd-friendly space	45	30.0
	Attractive streetscapes	39	26.0
	Suitable to conduct activities	5	3.3
	Good restaurants	19	12.7
	Good accessibility	41	27.3
	Safe environment	13	8.7

Source: Questionnaire Survey, 2019

The results shown in Table 1.2 and Table 1.3 above illustrate the majority of respondents came from the age group of between 20 to 29 years old with a moderate education level of Bachelor Degree and were university students. Additionally, the origins of the respondents were majority Malaysian and the dominant ethnicity were Malay. Pertaining to the result, Varna & Tiesdell (2010) stated that domestic trips made by students and graduates are rising in popularity. In regard to the surveys, the respondents' participations were excellent. However, majority of the respondents refused to state their personal income details in the respondents' background section. This is probably due to the respondents' background as students; hence the household income information was irrelevant. As the indicator for respondents' financial stability, according to Mohamed, Bahaudin, & Omar (2010), Petaling Street and Jalan Tuanku Abdul Rahman are prominent to middle class travelers for street shopping in despite of the mega shopping complexes in Kuala Lumpur.

Next, the highest recorded month visited by the respondents were in February and March. It is believed that Petaling Street Chinatown are significant among locals in the celebration of Chinese New Year, hence has become a well-known domestic and international tourist spot during this season. Norsidah Ujang (2007) described the movements in Petaling Street as a significant difference in the energy generated by the presence of people during weekends and public holidays and the roles of occasional events and special celebration in enhancing the streets' activities. This is evident during the weekly night market in Lorong Tuanku Abdul Rahman, daily bazaar in the month of Ramadhan and Chinese New Year in Jalan Furthermore, the result indicates that almost half of the total respondents are first time visitors to Petaling Street. However, in proximity to the result, 38% of the total respondents were visiting for the second to fifth time in Petaling Street thus, it is believed that returning visitors were among the crowds spending time in this bustling street of Chinatown.

The most favourable mode of transportation used by respondents to visit Petaling Street is by train. There are variety of transportation networks crossing this area such as Light Rail Transit passing through Pasar Seni Station which located within 300m from Petaling Street and KL Monorail Transit passing through Hang Tuah Station which located within 1.0km from Petaling Street.

**Relationship between Urban Public Space Attributes and Respondents Satisfaction in Petaling Street**

**Table 3: Summary Of One-Way ANOVA Test On Respondents’ Satisfaction On Urban Public Space Attributes And Frequency Of Visit By Respondents**

<b>Satisfaction on Urban Public Space Attributes and Time Spent</b>						
<b>Test: One-way ANOVA</b>						
<b>Variables</b>	<b>F value</b>	<b>df</b>	<b>P-value</b>	<b>Decision</b>	<b><math>\eta^2</math></b>	<b>Strength</b>
Convenience to reach	3.118	3,123	0.004	Reject H <sub>0</sub>	0.101	Strong
Satisfaction on aesthetic	0.862	3,123	0.321	Fail to reject H <sub>0</sub>	0.028	
Satisfaction on cleanliness	0.613	4,122	0.509	Fail to reject H <sub>0</sub>	0.026	
Satisfaction on weather	2.929	3,123	0.006	Reject H <sub>0</sub>	0.095	Medium

Source: Questionnaire Survey, 2019

**Table 4: Summary of One-way ANOVA test on respondents’ satisfaction on urban public space attributes and time spent by respondents**

<b>Satisfaction on Urban Public Space Attributes and Frequency of Visit</b>						
<b>Test: One-way ANOVA</b>						
<b>Variables</b>	<b>F value</b>	<b>df</b>	<b>P-value</b>	<b>Decision</b>	<b><math>\eta^2</math></b>	<b>Strength</b>
Convenience to reach	4.705	3,146	0.004	Reject H <sub>0</sub>	.088	Medium
Satisfaction on aesthetic	1.005	3,146	0.392	Fail to reject H <sub>0</sub>	.020	
Satisfaction on cleanliness	2.676	4,145	0.034	Reject H <sub>0</sub>	.069	Medium
Satisfaction on weather	0.848	3,146	0.472	Fail to reject H <sub>0</sub>	.017	

Source: Questionnaire Survey, 2019

The results from the analysis in Table 3 and Table 4 above illustrate the significant mean differences for respondents’ perception of urban public space attributes based on the respondents’ frequency of visit to Petaling Street and time spent by respondents in Petaling Street respectively. In terms of frequency of visit made by respondents in Petaling Street, significant mean differences were found for convenience to reach and satisfaction on cleanliness between the groups with medium difference value. Moreover, time spent by respondents in Petaling Street, also found significant mean difference in the convenience to reach a place and the satisfaction in weather between the groups with strong and medium difference value accordingly.

Firstly, convenience to reach and satisfaction on cleanliness are the variables which present a significant difference to the frequency of visit made by respondents to Petaling Street. The convenience to reach a place is associated with the proximity of the location of work and home as mentioned by Norhafizah Abdul Rahman, Shuhana Shamsuddin, & Izham Ghani (2015). It is believed that in the circumstances of urban public space, the commute distance from public transportation stations also considered as one of the significant factors influencing users’

convenience to reach a place. Thus, the context of time spent by respondents in Petaling Street dictates that through creating a good pedestrian environment, it will provide a well-functioning public domain; invite more people to walk, stay longer and offer a variety of attractive public activities (Norhafizah Abdul Rahman, Siti Rasidah Md Sakip & Nadiyah Mat Nayan, 2016). Appleyard (1981) and Wan Ismail (2010) supported that the presence of people and activities on the street affect the liveability of the city (as cited in Rahman, N. et al, 2015).

Secondly, Carr, Stephen, Francis, Rivlin, & Stone (1992) emphasized that improving the urban features of a space such as retail mix, cleanliness, safe, attractive and entertaining environment would enhance the vibrancy of public space. Therefore, this may encourage visitors' regularity to visit Petaling Street. From the analysis, it is found that user's satisfaction on weather influences the length of engagement in public space. In the contrary, Davenport & Anderson (2005) believed that despite of the associations between leisure activity and seasonality, weather has generally not been found to be a barrier to physical activity when controlling for other potential confounders.

**Relationship between Urban Public Space Attributes and Respondents Engagement in Petaling Street**

This section elaborates the results regarding activities made by respondents in Petaling Street to the sociability of urban public space in terms of the travelling companions and interaction made. Hence, it is reported that respondents who went shopping and sightseeing are likely to travel with friends, which has more potential to increase the number of people visiting Petaling Street. On the other hand, respondents who went for working purposes are travelling alone to Petaling Street thus reducing the potential to increase the crowds. As supported by Norhafizah Abdul Rahman, et al. (2016), Malaysians are practically having close-knit relationship with their family and friends; therefore, they will feel comfortable to travel with people they have known for so long.

**Table 5: Cross-tabulation On Types Of Activity Done By Respondents and The Time Spent in Petaling Street**

Time spent	Types of activity											
	Shopping		Sightseeing		Working		Meeting people		Dining		Passing by	
	F	%	F	%	F	%	F	%	F	%	F	%
Less than 1 hour	8	57.1%	10	71.4%	0	0.0%	3	21.4%	3	21.4%	4	28.6%
2 to 5 hours	54	67.5%	51	63.8%	3	3.8%	13	16.2%	12	15.0%	6	7.5%
6 to 9 hours	6	42.9%	7	50.0%	6	42.9%	2	14.3%	2	14.3%	3	21.4%
More than 10 hours	3	15.8%	5	26.3%	7	36.8%	2	10.5%	1	5.3%	0	0.0%
<b>Total</b>	<b>71</b>	<b>56.0%</b>	<b>73</b>	<b>63.3%</b>	<b>16</b>	<b>11.3%</b>	<b>20</b>	<b>16.0%</b>	<b>18</b>	<b>13.3%</b>	<b>13</b>	<b>9.3%</b>

Source: Questionnaire Survey, 2019



Furthermore, it is believed that improvements should be made towards enhancing the sightseeing and shopping experience in Petaling Street. Table 5 above depicts the time spent by respondents to the type of activities conducted. It is clearly illustrated that the longest time spent by the respondents are in shopping and sightseeing. City centre is a popular spot for shopping activities thus the intensity of people is high especially during the weekend. It is observed that people met friends together enjoying food in restaurants or shopping together. Next, respondents who went to Petaling Street for meeting people, sightseeing and shopping has the highest possibility to generate interaction with people other than their travelling companions. It is believed that people who are on leisure such as shopping, and sightseeing will stroll around and make interaction in the street market scene in prominent tourist spots. To keep with the notion, the respondents were asked about the interaction they made with people other than their companions while visiting Petaling Street. As shown in Table 6 below, majority of the interactions made by respondents were with the shop owners in Petaling Street at 26.0%.

**Table 6: Interaction Made By Respondents in Petaling Street**

<b>Interaction</b>	<b>Frequenc y</b>	<b>Percentage (%)</b>
Customer	5	3.3
Florist	1	0.7
Hawker	1	0.7
Janitor	2	1.3
Shop owner	39	26.0
Tourist	6	4.0
Vendor	6	4.0
Visitor	1	0.7
Waitress	1	0.7
<b>Total</b>	<b>150</b>	<b>100.0</b>

Source: Questionnaire Survey, 2019

In responding to previous findings, public transportations are dominating the travel mode options made by the visitors in Petaling Street. Therefore, a prominent sculpture as a landmark that represents the identity of culture and heritage in Petaling Street would improve the legibility of the area. The sculpture was proposed to be positioned at the vehicle entrance to Petaling Street via Bulatan Merdeka. Adding to the point on public transportation, majority of respondents suggested that their main concern in improving Petaling Street to a practicable public space is highly weighted towards the public transportations. Since public transportations are most favourable in transportation mode used to arrive in Petaling Street, covered walkway should be considered in this context. Likewise, the alternative of using soft landscape such as shady trees planted along the walkways are deliberated over since natural elements tend to influence the appearance of a space. Consideration should be given to provide a specific line with shades and appropriate facilities for pedestrians or improving the quality of pavement and all related facilities to pedestrian walkways. Thus, it is to propose a 350m tree-lined pedestrian walkway connecting Pasar Seni LRT station to Petaling Street.

Providing multiple activities for urban public space 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. Safety aspect is among the concern raised by the respondents in the questionnaire. Thus, there is a necessity of plans and

actions due providing secure feeling for residents and visitors there thorough CPTED measures. CPTED measure is one of the most popular urban planning strategies for improving safety in cities. The major purpose of CPTED is to deter potential criminals by modifying urban environments.

Based on the findings, sightseeing is the dominating activity made by the visitors in Petaling Street. Thus, activity made in Petaling Street are more integrated rather than segregated, which allow lesser visual obstacles between the street's users. Therefore, the distance between activities within streets ought to be closer and visually linked to involve the street's users in either active or passive interaction. In this regard, people are affected by the physical environment through the perception process, which starts with the stimuli of sensation through the vision (Hidalgo & Hernandez, 2001). Furthermore, the study found that the time spent by respondents in urban public space were influenced by the weather in the space. Bahadori (1978) suggested that trees and shrubs are used in the Iranian architecture practice to create cooler walls for a few hours in the morning as the heat absorbed through the day. In Malaysia, it is suitable to plant vegetation on a building façade because of the hot and humid climate. The buildings suggested to plant vegetation on its façade involve buildings categorized under Category 4 of heritage buildings in Kuala Lumpur Development Plans 2020 as well as buildings that were not categorized at all.

This study has found that visitors tend to spend more time in Petaling Street when the public space attributes are pleasing to the visitors. Thus, time spent has contributed to the tendency of generating interaction between the people in Petaling Street. The essential elements are fairly fulfil by providing a clear directory and a decent tourist information booth in the area. A tourist information booth was proposed near the Pasar Seni MRT station in responding to the findings where the most preferred mode of transportation to Petaling Street is by train. Sitting area should be provided to allow the pedestrians to buffer while making a journey or visiting Petaling Street. It is suggested to consider the configuration of seating arrangements in appreciating the view and improving approachability for small communications. This is highly applicable in a street layout in which the benches are to be located along the pave way or pedestrian walkway to observe passers-by, and consequently imply the 'mere exposure' effect.

## **Conclusion**

This study has addressed the role of Petaling Street as urban public space such as the streets and food hawkers stall in making practicable social spaces. The sociability of the public space in generating activities and creating interaction can be strengthened if the public space is more accessible, cleaner, safer and appealing to the visitors. The concept of legibility was highly considered in improving this space as a consequence of increasing the number of visitors spending time in Petaling Street. It can be concluded that it is necessary for a serious attempt in creating a vibrant environment in public space within Petaling Street, which part of the result will increase the livelihood and importance of an imaginable urban space.

## **References**

- Abbasian, A. (2016). Importance of Urban Squares as Public Space in Social Life: A New Design of Fisktorget in Karlskrona City
- Amin, A. (2006). Collective culture and urban public space. *City*, 12(1), 5-24.
- Bahadori, M. N. (1978). Passive cooling systems in Iranian architecture. *Scientific American*, 238(2), 144-155.
- Balducci, A., & Checchi, D. (2009). Happiness and quality of city life: The case of Milan, the richest Italian city. *International Planning Studies*, 14(1), 25–64.

- Borowski, A. (2014). Social interactions in the public space in the context of public confidence. *International Letters of Social and Humanistic Sciences*, 25, 33–41.
- Carr, S., Stephen, C., Francis, M., Rivlin, L. G., & Stone, A. M. (1992). *Public space*. Cambridge University Press.
- Cau, J. W., & Kang, J. (2019). Social relationships and patterns of use in urban public space in China and the United Kingdom. *Cities*, 93, 88-196.
- Cohen, L., Manion, L., Morrison, K., & Morrison, R. B. (2007). *Research Methods in education*, Routledge.
- Davenport, M. A. & Anderson, D. H. (2005). Getting from sense of place to place-based management: An interpretive investigation of place meanings and perceptions of landscape change. *Society and Natural Resources*, 18, 625-641
- Golicnik, B., & Thompson, W. C. (2010). Emerging relationships between design and use of urban park spaces. *Landscape and Urban Plan*, 94(1), 38-53.
- Hidalgo M. C. & Hernandez, B (2001). Place attachment: Conceptual and empirical questions, *Journal Of Environmental Psychology*, 21,273-281
- Hillier, B., Penn, A., Hanson, J., Grajewski, T., & Xu, J. (1993). Natural movement: Or, configuration and attraction in urban pedestrian movement. *Environment and Planning: Urban Analytics and City Science*, 20(1), 29-66.
- Huang, S. C. L. (2006). A study of outdoor interactional spaces in high-rise housing. *Journal of Landscape and Urban Planning*, 78(3), 193-204.
- Kiik, Riina. *Key themes and settings of social work in Estonia*. Vol. 4. Tartu University Press, 2006.
- Kim, H. K., & Sohn, D. W. (2002). An analysis of the relationship between land use density of office buildings and urban street configuration: Case studies of two areas in Seoul by space syntax analysis. *Cities*, 19(6), 409-418.
- Marcus, C., & Francis, C. (1998). *People places: Design guidelines for urban open space*. New York: John Wiley.
- Meng, Q., & Kang, J. (2016). Effect of sound-related activities on human behaviours and acoustic comfort in urban open spaces. *Science of the Total Environment*, 573, 481-493.
- Mohd Salleh Aman, Sofian Omar Fauzee, & Mawarni Mohamed (2007). The understanding of meaning and cultural significance of leisure, recreation and sport in Malaysia towards capitalizing human resources. *Geography*.
- Mohamed, B., Bahaudin, A., & Omar, S. I. (2008). *The Evolution of Domestic Tourism in Malaysia*.
- Norhafizah Abdul Rahman, Shuhana Shamsuddin, Izham Ghani. (2015). What makes people use the street? Towards a liveable urban environment in Kuala Lumpur City Centre. *Procedia Social and Behavioral Science*, 170, 624-632.
- Norhafizah Abdul Rahman, Siti Rasidah Md Sakip & Nadiyahanti Mat Nayan. (2016). Do they feel fear without fence? *Procedia Social and Behavioral Science*, 222, 738-746.
- Norsidah Ujang. (2007). Linking activity and place attachment dimensions in enhancing the sense of place. *Alam Cipta*, 59-67.
- Penn, A., Desyllas, J., & Vaughan, L. (1999). The space of innovation: Interaction and communication in the work environment. *Environment and Planning: Urban Analytics and City Science*, 26(2), 193-218.
- Reza Askarizad & Hossein Safari. (2020). The influence of social interactions on the behavioral patterns of the people in urban spaces (case study: The pedestrian zone of Rasht Municipality Square, Iran). *Cities*, 101, 1-16
- Sabin, E. P. (1993). Social relationships and morality among the elderly. *Journal of Applied Gerontology*, 12(1), 44-60.

- Shuhana Shamsuddin & Norsidah Ujang. (2008). Making places: The role of attachment in creating the sense of place for traditional streets in Malaysia. *Habitat International*, 32, 399-409.
- Staats, H., & Hartig, T. (2004). Alone or with a friend: A social context for psychological restoration and environmental preferences. *Journal of Environmental Psychology*, 24(2), 199-211.
- Xiao, J., Tait, M., & Kang, J. (2018). A perceptual model of smellscape pleasantness. *Cities*, 76, 105-115.
- Varna, G., & Tiesdell, S. (2010). Assessing the publicness of public space: The star model of publicness. *Journal of Urban Design*, 15(4), 575-598.
- Yang, W., & Kang, J. (2005). Acoustic comfort evaluation in urban open public spaces. *Applied Acoustics*, 66(2), 211-229.
- Yu, L., & Kang, J. (2008). Effects of social, demographical, and behavioral factors on the sound level evaluation in urban open spaces. *The Journal of the Acoustical Society of Am*, 123(2), 772-783.