



PLANNING MALAYSIA:

Journal of the Malaysian Institute of Planners

VOLUME 23 ISSUE 5 (2025), Page 652 – 666

THE INFLUENCE OF URBAN SPATIAL CONFIGURATION AND PHYSICAL ENVIRONMENT OF STREET SPACE ON PEDESTRIAN BEHAVIOUR, CASE STUDY: SHAH ALAM (SACC WALK) AND KUALA LUMPUR (KASTURI WALK)

**Nadhirah Nordin¹, Ishak Che Abdullah², Imanina Alhusna Mat Setia³,
Yusfida Ayu Abdullah⁴ and Khalid Zanudin⁵**

^{1,2,3,4}College of Built Environment,

UNIVERSITI TEKNOLOGI MARA

⁵ Faculty of Social Sciences and Humanities,

UNIVERSITI MALAYSIA SARAWAK

Abstract

The global phenomenon of climate change has urged countries to take action and measures toward a more sustainable and green approach. Malaysia is one of the countries that is now slowly making its steps towards more sustainable development with a greener approach. Encouraging active transportation and providing a sufficient pedestrian environment can help reduce dependency on vehicles, further improving the environment in a sustainable manner. This research intends to study pedestrian behaviour in two different cities, Shah Alam and Kuala Lumpur, focusing on a smaller context of streets. The objectives of this study are, firstly, to study the correlation between urban spatial configuration and pedestrian behaviour. Secondly, to study the relationship between physical attributes of street space and pedestrian behaviour. Thirdly, to propose recommendations that encourage foot mobility in the research area. This research employed a mixed-method approach. The quantitative data is presented using the global (Rn) and local integration (R3) values using axial line analysis, whereas the qualitative data is used to collect Social variables represented as Necessary, Optional and Resultant (N, O, R) for pedestrian behaviour and Social-Physical variables represented as Street Element, Building Element and Landuse Element (SE, BE, LE) for physical environment. The results are then presented using descriptive analysis and behavioural mapping from direct observation based on these variables. The main findings of this research paper conclude three main findings. First, the analysis of spatial configuration using the axial lines map showed that the R3 value is higher for Kasturi Walk, predicting it as a highly accessible street to pedestrians. Second, the spatial configuration and pedestrians do have a highly significant correlation with a p-value of 0.003. Third, SE, BE, and LE are the main factors that drive the behaviour of static and dynamic pedestrian activities. As a conclusion, this study uncovered the factors influencing pedestrian behaviour in Shah Alam and Kuala Lumpur. It is fundamental that further research needs to be done with a larger sample size with more streets to establish a stronger understanding and importance of this study. This study is useful for local authorities and policymakers to improve placemaking strategies and urban design as well as establish more pedestrianised streets.

Keywords: Pedestrian Behaviour, Foot Mobility, Carbon Footprint, Placemaking, Sustainable Development Goals

¹ Corresponding author. Email: nadhirahnnordin@uitm.edu.my

INTRODUCTION

Streets are often used for placemaking due to their role as key spaces for human movement. When used this way, they become hubs of social activity, reflected in everyday actions like strolling, talking, and observing urban life (Zaidin, 2016). However, increasing urbanisation has shifted the use of streets toward vehicle traffic, raising carbon emissions, intensifying the urban heat island effect, and lowering urban quality of life. To counter this, placemaking strategies that support pedestrianised streets should be implemented to reduce car dependency and promote active transport, helping mitigate climate change impacts.

Ideally, well-connected urban streets with adequate facilities should support comfortable pedestrian use. Yet, this is not the case with SACC Walk in Shah Alam. Unlike Kasturi Walk in Kuala Lumpur, which thrives socially, SACC Walk lacks vibrancy despite having elevated walkways, good connectivity to commercial and recreational areas, and sufficient amenities provided by Shah Alam City Council (MBSA). The low pedestrian presence and limited activity raise questions about spatial factors influencing pedestrian behaviour. This study aims to explore these factors by comparing streets based on urban mobility, pedestrian flow, and connectivity.

The paper investigates how urban spatial configuration and physical street environments affect pedestrian behaviour in Kasturi Walk and SACC Walk. Its objectives are: (i) to examine the link between spatial configuration and pedestrian behaviour, (ii) to explore how the physical street environment affects behaviour, and (iii) to propose strategies that encourage walking. The findings will support recommendations for better pedestrian-friendly streets as well as contributes to the current knowledge on pedestrian behaviour and urban spatial configurations especially in the case of cities in Malaysian context which remained underexplored. The findings from this research further offers evidence-based insights for urban design and planning practice through an in-depth apprehension between the convergence of spatial and behavioural dimensions in designing pedestrian-oriented urban environments.

LITERATURE REVIEW

Physical Environment and Pedestrian Behaviour

The physical environment shapes urban form and spatial configuration through the interaction of natural features, built structures, and spatial organisation, affecting a city's function and appearance. According to Gerike, R. et. al. (2021) the built environment can be categorized as three key elements: (1) destinations and land use, (2) street scape, and (3) aesthetics and social aspects. These attributes influence pedestrian behaviour and its relationship with spatial configuration which can promote static activities that enhance social interaction and sensory experiences.

Pedestrian behaviour involves decisions and actions between two points (Yıldırım, 2023), and is categorised as static (e.g., sitting, eating, observing) or dynamic (e.g., walking, transporting goods) (Gehl, 2011; Sulaiman, 2019). Research shows that urban form and spatial layout significantly shape these behaviours (Yıldırım & Çelik, 2022). Streets should therefore be designed to support walking and ensure safety and comfort, encouraging both static and dynamic activities that foster social interaction and street vibrancy.

As vital urban spaces, streets support sociocultural life and should reflect a strong connection between physical and spatial design. Well-designed streets enhance identity, pedestrian perception, and aesthetic appeal. Pedestrian linkages, connecting various spaces such as subway stations and attractions are essential for walkability, supporting local businesses and boosting tourism (Liu, W., Yan, J., Sun, X., & Song, R., 2025) as well as integrating public transport. Tashakor (2018) identified that successful pedestrian linkages are driven by physical features that reduce disparity, promote diverse uses, visual appeal, permeability, and pedestrian-based functions. These attract people, create vibrant spaces, and foster a sense of safety and community, encouraging greater use of street spaces.

Linking Places and People

Today, street spaces are seen as shared areas that connect communities and locations within a city by promoting social interaction, mobility, and a sense of belonging (Sulaiman, 2019). Urban design and planning play a key role in linking people and places, creating environments that encourage connection and engagement.

Successful streetscapes require careful planning, especially in terms of spatial configuration, which is essential for connecting different parts of the city (Mahdzar, 2013). Well-connected streets enable smooth travel between neighbourhoods, commercial areas, parks, and public spaces (Karimi, 2012). Streets should also support pedestrians, cyclists, and public transit users for greater accessibility.

Another key factor is mixed-use development, which strengthens connections between places and boosts community interaction. Studies show that diverse land uses along streets promote walking and social activity (Seong, 2021). Higher land use mix—characterised by services, shops, and amenities—creates a more walkable and engaging environment (Roozkhosh, 2022).

Applying Space Syntax as an Analytical Approach in Planning Pedestrian Streets

The process of urban design can be enhanced through space syntax, an analytical tool that views space as a system of patterns and configurations influencing the

efficiency of urban spatial networks. It explores how the physical layout of a place affects social behaviour, walking, and interaction (Askarizad & Garau, 2024). The arrangement of buildings and spaces plays a major role in forecasting pedestrian behaviour (Roozkhosh, 2022).

Spatial configuration variables in space syntax, known as syntactical variables, are key determinants of pedestrian movement (Yıldırım, 2023). These include integration, selection, connectivity, control, and depth (Roozkhosh, 2022). Local integration (R3) and global integration (Rn) are used to measure how connected a street is—R3 for pedestrian pathways and Rn for vehicular routes (Khalid, 2020). This is part of “natural movement,” where human activity patterns reflect spatial configurations (Koohsari, 2019). Streets with high R3 are more pedestrian-friendly, while high Rn and R3 indicate potential for pedestrianisation (Khalid, 2020).

This analysis helps evaluate how urban layouts, including land use and roads, impact pedestrian behaviour at both global and local scales. Axial line maps, showing connectivity and integration values, are used to predict pedestrian movement and activity intensity by linking R3 with behavioural data.

In addition to space syntax, social and socio-physical variables provide further insight into pedestrian behaviour (Mahdzar, 2013). Social variables include Necessary (N): everyday walking tasks; Optional (O): voluntary leisure activities; and Resultant (R): spontaneous social interactions. On the other hand, socio-physical variables include land use (LE), street elements (SE), and building elements (BE). These are validated through observation, interviews, and cross-check analysis to understand how physical environments shape street activity.

Studies show cultural differences affect street behaviour. Factors supporting activity in Western contexts may not apply in Malaysia. Thus, this study examines how Malaysian street characteristics relate to user behaviour to identify features that support vibrant, user-friendly streets.

RESEARCH METHODOLOGY

This paper intends to employ a mixed-method approach to explore the relationship between the built environment and pedestrians’ social behaviour using both quantitative and qualitative approaches.

Research Area

The study area consists of two streets from different cities, selected based on several key criteria. According to previous research, streets in urban areas surrounded by commercial activities are ideal for observing pedestrian behaviour, as they attract higher foot traffic and diverse activities (Mehta, 2006). Well-connected linkages are also crucial for spatial configuration and pedestrian.

Additionally, the streets must hold commercial, heritage, and cultural value (Mehta, 2006). Kasturi Walk in Kuala Lumpur is a vibrant cultural attraction with street designs that reflect Malaysia's heritage. SACC Walk in Shah Alam embodies cultural value through artistic expression, featuring bicycle lanes, elevated walkways, colourful pavements, and decorative elements like murals and planting boxes.

Despite similar characteristics, SACC Walk lacks the social vibrancy seen in Kasturi Walk. Pedestrian presence and activity are noticeably lower, even with good connectivity and design. This highlights the study's purpose: to explore how spatial configurations influence pedestrian behaviour. The streets were chosen with consideration for urban mobility, pedestrian movement, and their connectivity.

Sampling Strategy and Data Validation

To establish the representation of spatial, functional and social characteristics in the street segments, a purposive sampling strategy is conducted to distinguish specific observation zones within the two study areas. The sample size for pedestrian observations is determined based on preliminary counts to present ample statistics and accuracy across temporal variations.

The reliability of the study findings is established through data collection which occurred on both weekdays and weekends during three specific time intervals which are during the morning, afternoon and evening. Possible bias such as subjective interpretation, time variation, environmental factors are mitigated through standard observation procedures and constant recording procedures. Furthermore, to establish consistency and accuracy in behavioural profiling, photographic and video documentation were conducted to support the validation of observed activities. These recordings were used solely for analytical verification without capturing or storing any identifiable personal information. Ethical considerations were addressed in line with standard research protocols, ensuring the participants' anonymity during the data collection and analysis. These approaches help to improve the methodology of this study and the credibility of the study findings.

Types and Methods of Analysis

There are three methods of analysis involved in this study, which are analysis of spatial configuration using axial line analysis, chi-square analysis to describe the correlation between variables, and analysis of physical attributes based on observation. Table 1 below describes the method of analysis.

Table 1: Summary of types of analyses and related details

Type of Analysis	Method of Analysis	Variables	Concept Theory and Hypothesis
1. Analysis of spatial configuration	Axial line analysis using space syntax	1. Urban spatial configuration: - Global (Rn) - Local (R3) 2. Pedestrian behaviour: - Connectivity	- To study the correlation between urban spatial configuration and pedestrian behaviour. - The higher integration of global (Rn) value means the streets are catered towards vehicles. Higher integration of local (R3) value means the streets are catered towards pedestrians. An equally high number of both integration values means the streets are still used by vehicles but have the potential to be pedestrianised streets.
2. Descriptive analysis	Chi-square test using SPSS	1. Independent variable: local integration level of the streets (R3) 2. Dependent variable: pedestrian behaviour engaging in static activities	- To study the significance of the correlation between local integration and pedestrian behaviour - The higher the local integration (R3) value, the more static activities are present, and the more pedestrianised the street is. - This analysis will determine whether these two variables are independent or dependent on each other and how significant the correlation between these two variables is.
3. Analysis of physical attributes	Observation	1. Social-physical variable (V2): land-use element (LE), street element (SE), building element (BE) 2. Social variable: - Necessary (N) – these activities	- To study the relationship between the physical environment of street space and pedestrians' static behaviour. - The presence and availability of physical attributes in a street space

Type of Analysis	Method of Analysis	Variables	Concept Theory and Hypothesis
		extend from people's use of space via walking, such as doing everyday tasks. - Optional (O) - occurs when there is a desire to participate in these activities at a suitable time, favourable place and weather, such as sitting outside and eating. - Resultant (R) – spontaneous activities emerging when people congregate in a place and socialise, such as talking or greeting. 3. Pedestrian activity depending on day & time: - Weekend & weekdays - Morning: 8 – 10 am - Afternoon: 12 – 2 pm - Evening: 4 – 6 pm	influence a pedestrian's behaviour. - Pedestrians would exhibit optional and resultant static activity that leads to social interaction and liveliness on the street.

ANALYSIS AND DISCUSSION

The results are obtained based on the three types of analysis performed while considering the related variables. Table 2 shows the summary of results based on the three types of analysis performed.

Table 2: Summary of Results based on the three analyses

Analysis	Kasturi Walk	SACC Walk
Analysis 1: Analysis of spatial configuration		
- Global Integration (Rn)	0.777	0.904
- Local Integration (R3)	3.070	1.920
- Connectivity	11.000	4.000
Analysis 2: Chi-square test		
- Local integration level of the streets (R3)	The relation between these variables was significant, $X^2 (2, N = 139) = 11.345, p = .003$. The R3 value of a street does influence the static activity of pedestrian behaviour. The higher the local integration (R3) value, the more static activities are present, and the more pedestrianised the street is.	
- Pedestrian behaviour engaging in static activities		
Analysis 3: Analysis of social and physical attributes		
i. Social-physical variable (V2)		
1. Land-use element (LE)	- Adjacent commercials and offices	- Adjacent shopping mall and complex contribute to people just passing by from across the street
2. Street element (SE)	- Decorative street element - Street light with unique features - Provision of vendor to open pop-up booths/stalls	- Decorative elements, such as painted barrels for plants - Casual street light - Provision of a bicycle lane - Provision of a seating wall but obstructed by motorcycle parking
3. Building element (BE)	- Heritage facades and building use (e.g., eateries and souvenir shop) - Provision of an unintentional seating area on a walkway	-
ii. Social variable		
1. Necessary (N)	17.26%	28.05%
2. Optional (O)	15.82%	5.03%
3. Resultant (R)	17.26%	16.54%

Source: Author's Findings

Analysis 1 using the axial lines map shows that SACC Walk has a higher Rn (global integration) value, indicating the area is more vehicle-oriented. This is expected, as the adjacent street in Shah Alam is a one-way road connecting to Persiaran Dato Menteri, with ample parking. The businesses at SACC Walk

mostly serve locals with daily needs and services. Public transport is less accessible, with only buses available and the nearest stop about 100 m away at Kompleks PKNS Shah Alam. Figure 1 illustrates the results of Analysis 1 for both streets.

In contrast, Kasturi Walk has a higher R3 (local integration) value, suggesting strong pedestrian accessibility. Its proximity to the MRT Pasar Seni Station (about 100 m away), the adjacent Central Market, and a pedestrian-friendly environment with shaded roofs and amenities attract more visitors. Parking at Central Market also enhances accessibility, especially for less mobile individuals. Figure 2 presents the space syntax results for both streets.



Figure 1: Map depicting the global integration (R_n) of both study areas for Analysis 1

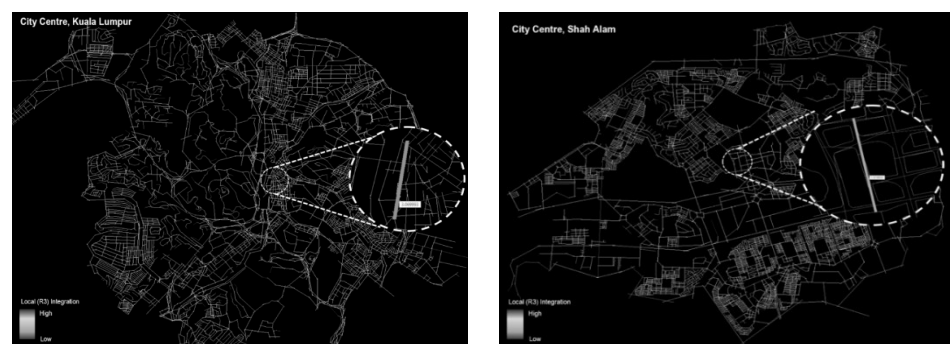


Figure 2: Map depicting the local integration (R_3) of both study areas for Analysis 1

The second analysis, a chi-square test, revealed a highly significant correlation ($p = 0.003$) between spatial configuration and pedestrian behaviour. This confirms that these variables are interdependent, with higher local



Figure 3: Surrounding environment of Kasturi Walk

variables (LE, SE, BE) in Kasturi Walk and SACC Walk to assess how physical attributes shape pedestrian behaviour.

Kasturi Walk features interactive physical elements that engage pedestrians' visual and auditory senses (Figure 3). In contrast, SACC Walk offers basic street



Figure 4: Surrounding environment of SACC Walk

integration (R3) values associated with increased static activities and greater pedestrianisation.

The third analysis explores key factors influencing static and dynamic pedestrian behaviour. It supports the theory that well-designed physical environments encourage optional and resultant static activities, fostering social interaction and street vibrancy. This analysis compares the social-physical

facilities with minimal sensory appeal, resulting in fewer activities and interactions. Despite having well-designed street elements (Figure 4), SACC Walk struggles to attract pedestrians.

Two factors contribute to the fewer pedestrian activities and interactions at SACC Walk: (1) the facilities do not encourage social interaction as

effectively as commercial activities like street vending, and (2) poor spatial configuration reduces pedestrian use. Furthermore, both streets are in commercial city centres, but their building layouts differ.

Kasturi Walk is densely built, with connected buildings and distinct façades, fostering a seamless pedestrian experience. In contrast, SACC Walk follows a planned layout where roads separate buildings, reflecting its zoning-based urban design. Moreover, the social variables under the third analysis (social-physical variables) will examine the behaviour of pedestrians who perform static activities based on three categories, which are necessary, optional, and resultant.

Table 2 shows that Kasturi Walk has more optional and static activities, reflecting a well-designed urban environment that enhances street vibrancy. In contrast, SACC Walk has a 10.76% higher percentage of necessary activities, suggesting fewer engaging elements and lower pedestrian interaction (Photos 4.9, 5.0). At Kasturi Walk, pedestrians engage in activities like window shopping, sitting, and socializing, enhancing liveliness. This supports the idea that well-planned environments encourage vibrant street life, while less engaging spaces primarily serve functional movement.

Observations reveal that Kasturi Walk attracts more pedestrians with varied activities, whereas SACC Walk sees repetitive behaviours, mostly walking between SACC Mall and PKNS Complex. On weekdays, Kasturi Walk serves office commuters in the morning but shifts to tourism and shopping later. SACC Walk is busiest during lunch hours, with people eating, resting, or smoking, but quiet in the evening. On weekends, Kasturi Walk hosts events like "KL Car Free Day" and market activities, drawing crowds, while SACC Walk remains quiet without similar attractions.

Kasturi Walk exemplifies environmental probabilism, where DBKL's initiatives such as providing seatings, vendor stalls, shaded canopies has successfully encourage pedestrian use. In contrast, SACC Walk's underutilized bicycle paths and playgrounds show that physical attributes alone do not guarantee engagement among the pedestrians.

This further highlight how spatial configuration and physical design elements influence pedestrian social behaviour. Beyond statistical correlations, the results of the study suggest that space syntax measures such as integration and connectivity play a significant role in shaping how people interact within urban spaces. This proves that spatial structure not only reflects but also drives patterns of social activity.

From an urban planning perspective, the findings emphasized the importance for more pedestrian-oriented designs that integrate spatial configuration with physical design interventions. A deeper understanding of the relationships between spatial structure and behavioural patterns could help planners anticipate how shaping street networks or public spaces might influence

social liveliness and urban vitality. Previous research by Sulaiman (2019) showed that pedestrians prefer lively environments over comfortable street conditions. This suggests planning should prioritize pedestrian movement over beautification. Local authorities must create engaging activities such as DBKL's vendor support and weekly events at Central Market which attract crowds. Proximity to public transport also matters, as many visitors use the nearby LRT station.



Figure 5: Surrounding pedestrian facilities of Kasturi Walk



Figure 6: Pedestrian amenities of Kasturi Walk



Figure 7: LRT station within 4 minutes walking distance from Kasturi Walk



Figure 8: Kasturi Walk fully pedestrianised street with shaded rooftops



Figure 9: Surrounding environment of SACC Walk



Figure 10: Surrounding environment of SACC Walk

CONCLUSION

This study has highlighted the importance of applying the space syntax analytical approach and then integrating it with the evaluation of the physical environment of the built environment when trying to understand pedestrian behaviour and movement.

If these two approaches are integrated and used to study and understand pedestrian movement and behaviour, the authorities involved or decision-makers in creating a holistic approach that does not only take into account technical matters in pedestrian behaviour, such as distance, but also takes into account their psychology, enjoyment, and fulfilment in using foot mobility. Malaysian local authorities or decision-makers can also produce a better outcome of planning for pedestrians by understanding the role of space syntax in the design process as an analysis tool that can help the selection of street selection to be pedestrianised based on the predicted pedestrian movement and behaviour. Meanwhile, the physical environment plays a role in making a street space more attractive and accommodating to pedestrians.

This study has found that urban spatial configuration has a significant correlation with pedestrian behaviour. Where it means that street pattern or spatial layout has a very significant impact on pedestrian behaviour and movement in terms of their choice of path. Meanwhile, the physical environment has an impact on the behaviour exhibited by pedestrians when they are in the street space; for example, are there more dynamic or static activities? What are the physical attribute elements that contribute more to static activities? and so on. By investigating these relationships in Malaysian cities context, this study contributes to existing knowledge related to the interrelation between spatial configuration and pedestrian behaviour which remained underexplored especially in Southeast Asian cities. Moreover, the finding of this study further offers evidence-based insights on how spatial and physical environment influence pedestrian's walking behaviour in Malaysian cities

Based on the analysis and literature reviews, this research has several recommendations to suggest a more practical approach in pedestrianising a street and studying pedestrian behaviour and how to encourage foot mobility. These are applying space syntax as an analytical approach in planning for the pedestrianisation of streets; provision of events and activities that actively involve pedestrians and local communities; provision of pedestrian linkages of urban spaces; stimulation of pedestrians' sensory experience; and provision of good urban mobility.

However, there is a limitation to this study based on the chosen methodology. Space syntax methodology is unable to take into account the perception of the city, which is a critical limitation when estimating or predicting pedestrian behaviour (Filomena, 2019). The perception of the society is a

significant indicator in determining how successful the streets are in the view of the society. Pedestrians' and business owners' perceptions, such as feeling safe, welcoming, and comfortable, should be taken into account in future pedestrian behaviour studies while considering space syntax measures.

In conclusion, this study hopes to shed light on the study of pedestrian behaviour and pedestrianised streets by emphasising a more systematic approach to identifying streets that can be pedestrianised and what initiatives can be taken to enhance the existing pedestrianised streets. In return, this will encourage and promote foot mobility towards achieving the national goal of sustainable development and sustainable city, town, and nation. Eventually, the findings of this study present a specific perspective tailored to the specific Malaysian cities, further extending the theoretical and empirical understanding of this research topic.

REFERENCES

- Askarizad, R., Lamíquiz Daudén, P. J., & Garau, C. (2024). The application of space syntax to enhance sociability in public urban spaces: A systematic review. *ISPRS International Journal of Geo-Information*, 13(7), 227. <https://doi.org/10.3390/ijgi13070227>
- Berglund, E., Westerling, R., & Lytsy, P. (2017). Housing type and neighbourhood safety behaviour predicts self-rated health, psychological well-being and frequency of recent unhealthy days: A comparative cross-sectional study of the general population in Sweden. *Planning Practice & Research*, 32(4), 444–465. <https://doi.org/10.1080/02697459.2017.1374706>
- Filomena, G., Versteegen, J. A., & Manley, E. (2019). A computational approach to 'The Image of the City'. *Cities*, 89, 14–25. <https://doi.org/10.1016/j.cities.2019.01.006>
- Gehl, J. (2011). *Life between buildings: Using public space*. Island Press.
- Gerike, R., Koszowski, C., Schröter, B., Buehler, R., Schepers, P., Weber, J., Wittwer, R., & Jones, P. (2021). Built environment determinants of pedestrian activities and their consideration in urban street design. *Sustainability*, 13(16), 9362. <https://doi.org/10.3390/su13169362>
- Karimi, K. (2012). A configurational approach to analytical urban design: 'Space syntax' methodology. *Urban Design International*, 17(4), 297–318. <https://doi.org/10.1057/udi.2012.19>
- Khalid, N. S., Raja Othman, R. N., & Marzukhi, M. A. (2020). Public spaces and gender: Testing the relationship of spatial configuration of street networks. *Planning Malaysia*, 18(14).
- Koohsari, M. J., Oka, K., Owen, N., & Sugiyama, T. (2019). Natural movement: A space syntax theory linking urban form and function with walking for transport. *Health & Place*, 58, 102072.
- Liu, W., Yan, J., Sun, X., & Song, R. (2025). Research on “Identification–Cognition–Perception” of the pedestrian spaces around subway stations near popular tourist attractions from the tourists’ perspective: A case study of Tianjin. *Land*, 14(1), 145. <https://doi.org/10.3390/land14010145>

Nadhirah Nordin, Ishak Che Abdullah, Imanina Alhusna Mat Setia, Yusfida Ayu Abdullah and Khalid Zanudin
The Influence of Urban Spatial Configuration and Physical Environment of Street Space on Pedestrian Behaviour, Case Study: Shah Alam (SACC Walk) And Kuala Lumpur (Kasturi Walk)

- Mehta, V. (2006). *Lively street: Exploring the relationship between built environment and social behavior*. University of Maryland.
- Roorkhosh, F., Molavi, M., & Salaripour, A. (2022). Accessibility, walkability, mixed land uses: Analyzing diverse districts based on space syntax theory. *International Review for Spatial Planning and Sustainable Development*, 10(4), 223–239. <http://dx.doi.org/10.14246/irspds.10.4.223>
- Seong, E. Y., Lee, N. H., & Choi, C. G. (2021). Relationship between land use mix and walking choice in high-density cities: A review of walking in Seoul, South Korea. *Sustainability*, 13(2), 810. <https://doi.org/10.3390/su13020810>
- Sharifah Salwa Syed Mahdzar. (2013). Streets for people: Sustaining accessible and sociable streets in Pasir Gudang city centre. In *Proceedings of the Ninth International Space Syntax Symposium*. Sejong University.
- Sulaiman, N., Abdullah, Y. A., & Raja Othman, R. N. (2019). Measuring attributes and behavioural patterns of street liveliness in urban area. *Planning Malaysia*, 17(10).
- Tashakor, L. (2018). Creation of a walkway: Physical features or public behaviors. *MANZAR, the Scientific Journal of Landscape*, 10(44), 40–49. <https://doi.org/10.22034/manzar.2018.76863>
- Yıldırım, O. C. (2023). Understanding pedestrian behavior and spatial relations: A pedestrianized area in Besiktas, Istanbul. *Frontiers of Architectural Research*, 12(1), 67–84. <https://doi.org/10.1016/j.foar.2022.06.009>
- Zaidin, N. (2016). Place attachment in relation to urban street vitality. *International Transaction Journal of Engineering*.

Received: 9th May 2025. Accepted: 1st October 2025