

THE QUALITY OF WALKABILITY ENVIRONMENT TO SUPPORT SOCIAL  
CAPITAL

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## **DEDICATION**

This thesis is dedicated to my father, who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my mother, who taught me that even the largest task can be accomplished if it is done one step at a time.

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## ABSTRACT

As a matter of fact, one of the way to improve public health is having physical activities, and walking is the most popular, sustainable and economical form. The modern urban design model have been applied in order to achieve a more rapid urban expansion. However, the urban expansion is actually become the reason on decreasing the walkability level and quality and a very strong car-dependency in the cities. Nowadays, urban street planning and design in Malaysia given priority to the vehicle instead of people. It cannot be denied that, vehicle or automobile has become the significance travel mode in Malaysia in recent decades. This has resulted the low quality of walkability environment and caused unattractive for walking not just happened in the neighborhood but it happens in the overall country. In the present day, the value for walkability has been increase for variety of reason. It not only plays a role in pedestrian transportation which have positive influence on reducing congestion and have lower environmental impact, walkability also adding value on social and recreational aspect. Indeed, it can be said that walking is the very oldest and traditional form of transportation. In fact, walkability is one of the best way to create a healthier and sustainable living environment. Almost anyone, people from all walks of life can join and involve in this walkable environment, by swapping the automobile against walking or cycling when they are travelling from one point to another destination. Hence, this thesis will be emphasized on the application of walkability typology could be applied to practice, by analyzing the critical discourse from relevant theorist. It also attempts to discuss the benefits and challenges of walkability so that it can renew attention as an important mode of urban transport in local community. With walkable street, community are actually lives in the comfortable, convenient, healthy and sustainable places, but it is actually very hard to achieve when the urban environment is actually giving more priorities to automobile. Hence in order to achieve walkable social capital, this practice will also try to figure how's others relevant project works, which these reference projects are from different location and different situations. By linking practice and theoretic looks together, it will have a better way to implement these initiatives for future project. On the other hand, it is important to create a strategic framework that would begin to redefine the walkability to under-served the communities. Hence, these design strategies will focus on allowing the local people to take full advantages on improving the approach in connecting people, promoting public engagement and sense of neighborhood to achieve a better urban environment.

## ABSTRAK

Sebenarnya, salah satu cara untuk meningkatkan kesihatan awam ialah dengan melakukan aktiviti fizikal, dan berjalan kaki adalah bentuk yang paling popular, mampan dan menjimatkan. Model reka bentuk bandar moden telah digunakan untuk mencapai pengembangan bandar yang lebih pesat. Walaubagaimanapun, pengembangan bandar sebenarnya menjadi punca penurunan tahap dan kualiti berjalan kaki dan pergantungan kereta yang sangat kuat di bandar-bandar. Pada masa kini, perancangan dan reka bentuk jalan bandar di Malaysia memberi keutamaan kepada kenderaan daripada orang tempatan. Kenderaan telah menjadi mod perjalanan yang penting di Malaysia. Hal ini telah menyebabkan kualiti persekitaran pejalan kaki semakin rendah dan menyebabkan kurang menarik kepada orang. Pada hari ini, nilai untuk pejalan kaki boleh meningkat dengan perkara-perkara. Ia bukan sahaja memainkan peranan dalam pejalan kaki, ia mempunyai positif dalam mengurangkan kesesakan dan mempuntai kesan-kesan baik kepada alam sekitar, pejalan kaki juga boleh memberi nilai tambahan dalam aspek sosial dan rekreasi. Sememangnya boleh dikatakan bahawa pejalan kaki adalah bentuk pengangkutan yang paling tua dan tradisional. Malah, pejalan kaki adalah salah satu cara terbaik untuk mewujudkan persekitaran hidup yang lebih sihat dan mampan. Rakyat dari semua lapisan masyarakat boleh melibatkan diri dalam persekitaran yang sesuai untuk berjalan kaki dengan mengurangkan penggunaan kereta. Oleh itu, tesis ini akan ditekankan kepada aplikasi tipologi yang boleh diaplikasikan dalam amalan. Ia juga cuba membincangkan faedah dan cabaran pejalan kaki supaya ia boleh memperbaharui perhatian sebagai mod pengangkutan bandar yang penting dalam komuniti setempat. Masyarakat ada tempat yang selesa, mudah, sihat dan mampan tetapi adalah sangat sukar untuk mencapai persekitaran yang sesuai untuk jalan apabila persekitaran bandar memberi keutamaan kepada kereta. Oleh itu, untuk mencapaikan persekitaran yang sesuai untuk berjalan kaki, tesis ini akan menganalisis kerja projek yang berkaitan adalah dari lokasi yang berbeza untuk mendapatkan strategi dan mengaplikasikan strategi dalam kerja-kerja saya. Dengan menghubungkan amalan dan pandangan teori bersama-sama, ia akan mempunyai cara yang lebih baik untuk melaksanakan inisiatif ini untuk projek pada masa hadapan. Oleh itu, strategi akan fokus pada penduduk tempatan memanfaatkan sepenuhnya dalam menambah baik pendekatan dalam menghubungkan orang dan menggalakkan sosial untuk mencapai persekitaran bandar yang lebih baik.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

Walkability is defined as the degree of built environment support and encourages people walking through by providing a secure area, a high level of accessibility and connectivity to the destination of choice, and user-friendly and attractive spaces (Forsyth, 2015). Walking is the most common method of human movement and physical activity that able to reduce the number of obesity rate in today (Saelens et al., 2003). Besides that, walkability provides a lot of opportunities to the users which can give more social capital, a friendly environmental and economic benefits. The benefits of walking are beyond our imagination. Based on the scholars mentioned that walking is not only leads to a higher level of physical activities and healthy lifestyle but also create a friendly environment to the user. Walkable city also giving benefit to the families with low economic background who able to rely on walking to reach the place that they would like to go and thereby enhance the sustainability and social equity.

Another important result saying that with the high walking rate will affect the economic growth. According to the (Pérez et al., 2017), the economic growth and the healthy benefit that will encourage people to walk. They also found out that human-oriented city will improve the walkability rate in urban and higher economic benefits.

However, it is hardly to find a user-friendly street to the users in Johor Bahru. The unfriendly urban street also cited as the most critical urban issues in the city, this is because mostly of the streets are for vehicle instead of people. With the rapidly growth in the city, there will have a huge impact on the relationship between the users and the public space, especially the streets (Shuhana Shamsuddin et al., 2010). Besides that, with the unprecedented growth in the use of vehicles has caused the congestion,

air pollution problem, and higher accident rate. Currently most of the cities are putting cars as basic of the design and automatically decrease the walkability rate in cities. According to (Lee et al., 2012), a person who lack of walking in their daily lives will be more harmful compare to smoking. Therefore, walkability is very important that offer an efficient and low economic transportation mode and also increase the urban environment as well as healthy lifestyle. In this paper, we will redefine the walkability concept and investigate how to create a quality of walkability environment to support social capital.

## **1.2 Problem Statement**

While the worldwide are looking in improving the urban walkability as to encourage the citizens to walk and create a sustainable environment, Johor Bahru nowadays mostly is not walkable city and yet the streets design for vehicles instead of people.

Johor Bahru was known as a capital city and the economic centre of the state and the proposed site is located in the centre of Taman University, University of Technology Malaysia and residential area. Considering the result of site analysis, the surrounding area is not a walkable environment as it has poor pedestrian design, poor accessibility and inefficient design that can encourage people to walk. Because of that, people gradually using vehicles as main transportation instead of walking.

Besides that, walking experience as one of the critical experiences along the streets that can help to make the community turn it into an attractive street as well as encourage people to walk. Most of the people tend to choose their destination based on local facilities and attractions. In other words, people differentiate destinations based on their accessibility (Tóth & Dávid, 2010) specially they tend to travel using walking. Moreover, the diversity of walking experience that can gain from walking is quite important as this diverse experience located along the street that could create a continuity of experience to encourage local people to continue to walk. It is very important to examine the spatial experience of the pedestrian networks link to other

community to enhance the walking experience and create an urban street for people but not for vehicles.

### **1.3 Thesis Statement**

Creating a social redevelopment center as an urban node by the application of walkability architecture as a design strategy in connecting people, promoting public engagement and sense of neighborhood

### **1.4 Research Aim**

The aim is to design a social redevelopment centre and establish a walkability environment for public in order to enhance awareness of sociability, improve the sense of neighborhood and public engagement.

### **1.5 Research Question**

The research will be address into three questions:

- (a) What is the relationship between the social capital and built environment of urban street?
- (b) How to design physical elements of the urban street to encourage people to social?
- (c) How can the planning and design of urban street elements to encourage and support social interaction?

## **1.6 Research Objectives**

Towards accomplishing the objectives, the investigation is adopting the following goals:

- (a) To Investigate the relationships between the social capital and built environment of urban street
- (b) To determine the physical element of the urban street to encourage people to walk to support the social capital
- (c) To identify the planning and design of urban street elements and determinants of quality of urban street design in order to encourage people to social.

## **1.7 Scope of the Study**

The scope of the study focuses on the walkability concept implement in different reference projects and create a strategic frameworks that would redefine the walkability concept to establish a proposal improve the walkability of a place. The key elements are the street design principle, physical amenities and the activities of the public space.

## **1.8 Significance of the Study**

The study can encourage the application of walkability concept in the local community and broader the concept among the local people and to appraise the usefulness of walkability concept for local community. The research will contribute a better understanding on the walkability community which able to enhance the sense of neighborhoods, promoting public engagement and connecting the local people. The study further focuses on the idea of user-friendly street design and transit where can utilizing a combination with different material and strategies to create street for people instead of vehicles.

## 1.9 Research Methodology

The basic research framework will be separate into four stages which are identify the research problem, collecting the primary data, analyzing the data collection and conclusion. The primary data will be collected from literature review, case study, books, articles and digital publication.

The site analysis and observation also part of the research method which focuses on the issues of the walkability. In order to construct a well walkable communities, all data must be required and analyzed.

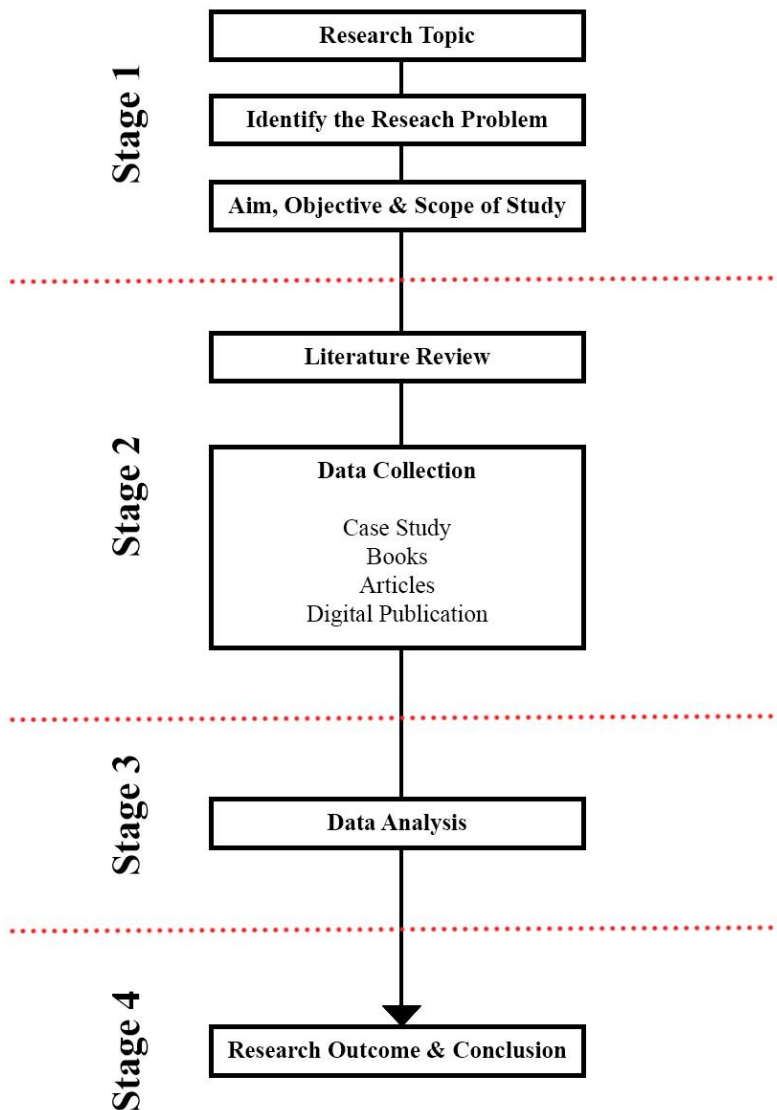


Figure 1.1 Research Flow (source: author)

## **1.10 Summary**

The first chapter covers the background study and problem of the surrounding community. The research aim, objectives and questions are determined the goals, issues and outcomes. The significance of the study will further discuss the guideline in exploring the walkability community. In order to create a successful walkability community, require more reference and reading and analyze it.



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