

SMALL TOWN COMMUNITY SOCIAL INTERACTION IN PUBLIC SPACES

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*This thesis is exclusively dedicated to my beloved father, mother, siblings,
wife and son*

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ABSTRACT

Interaction of people in public spaces of a multi-ethnic urban community can generate cohesion. In turn, this social action within a neighborhood leads to a harmonious community and simultaneously promotes national unity. This issue is relevant in towns of Peninsular Malaysia with multi-ethnic population of Malay, Chinese and Indian. However, there is a lack of studies that look at the interaction between these ethnic groups in public spaces such as parks, squares and playfields. This study investigates the relationship between physical attributes and utilization of public spaces and its effects on social interaction among users in multi-ethnic urban community in Malaysian towns. Survey questionnaires and interviews were conducted to elicit responses from users of parks, squares and playfields within Batu Pahat town in Johor, Malaysia. A total of 378 respondents participated in the survey and 34 respondents were interviewed in three study sites. The data were analysed using descriptive statistics, Rasch Measurement Model and Structural Equation Model. The questionnaires and interviews elicited three main parameters which were socialization, quality of the setting attributes and attractiveness of experiences on public spaces. It is found that the Malays utilized urban square and playfield more than the Chinese and the Indians because they frequently visited the night market. The Chinese utilized the park more than the Malays and Indians because they wanted to engage in jogging and walking due to aesthetics of the parks. The Indians were the least attracted to the urban park, urban square and playfield because they perceived that the qualities and activities of the space were not reflective of their cultural values. The results revealed different degree of public space utilisation and perceived interaction among the different ethnic groups. It uncovered that most of the visitors like to meet and interact more with family members in the park and square, while they preferred to be with their friends from same ethnicity in the playfield. The attributes such as aesthetic nature, security system, lighting and cleanliness in public spaces attracted more people to visit public space and contributed to positive social interaction. Therefore, the study concludes that public spaces with adequate attributes are avenues for diverse multi-ethnic of public users to meet and socialize.

ABSTRAK

Perpaduan masyarakat khususnya secara sosial dapat dipupuk melalui interaksi diantara pelbagai kaum di ruang awam. Interaksi sosial ini dilihat mampu melahirkan komuniti yang harmoni sekaligus memupuk perpaduan negara. Isu ini relevan dalam konteks Semenanjung Malaysia yang terdiri daripada pelbagai kaum seperti Melayu, Cina, India dan lain-lain. Walau bagaimanapun, kajian yang meneliti interaksi diantara kaum di ruang-ruang awam seperti taman, dataran dan padang permainan adalah amat terhad. Justeru itu, kajian ini dilakukan untuk meneliti hubungan diantara ciri-ciri fizikal sesebuah ruang serta penggunaannya dan kesannya terhadap perpaduan masyarakat khususnya bagi komuniti bandar di Malaysia yang terdiri daripada pelbagai kaum. Menggunakan pendekatan ‘mixed method’, kaedah soal selidik dan juga temu ramah telah dijalankan terhadap pengguna-pengguna ruang, dataran dan taman permainan di kawasan Pekan Batu Pahat, Johor, Malaysia. Sejumlah 378 responden melalui kaedah soal selidik dan 34 responden telah ditemuramah di tapak kajian. Kemudian, data yang dikumpul dianalisa melalui statistik deskriptif, menerusi *Rasch Measurement Model* dan *Structural Equation Model*. Berdasarkan temu ramah dan soal selidik, berjaya menemui tiga parameter utama kajian; iaitu perpaduan, kualiti kepada atribut tempat dan akhir sekali daya tarikan yang terdapat pada satu-satu ruang bandar awam tersebut. Hasil penemuan kajian mendapati bahawa responden berbangsa Melayu lebih banyak menggunakan dataran bandar dan padang-padang permainan berbanding bangsa lain adalah kerana mereka ingin mengunjungi pasar malam. Manakala, jika dibandingkan dengan responden berbangsa Melayu dan India, majoriti responden berbangsa Cina menggunakan taman untuk aktiviti senaman dan berlari anak kerana tarikan estetika taman. Bangsa India pula paling kurang menggunakan kemudahan-kemudahan ini kerana mereka berpandangan kualiti dan aktiviti yang ada tidak melambangkan nilai-nilai budaya mereka. Keputusan ujian mendapati terdapatnya perbezaan dari segi penggunaan ruang dan interaksi diantara pengguna berbeza kumpulan etnik. Didapati kebanyakan pengguna ini tampak lebih memilih untuk bergaul dan berinteraksi bersama ahli keluarga sendiri di kawasan taman dan juga dataran, manakala mereka memilih untuk bermain bersama rakan-rakan sebangsa di padang permainan. Walaupun begitu, atribut sesebuah ruang seperti nilai estetika tinggi, sistem keselamatan dan pencahayaan yang bagus mampu memberi impak positif kepada pergaulan sosial dan perpaduan antara kaum. Akhir sekali, kesimpulan dari kajian ini mendapati bahawa ruang-ruang awam yang mempunyai atribut yang mencukupi mampu menjadi platform bagi pergaulan pengguna pelbagai kaum lantas menguatkan perpaduan dan silaturrahim antara mereka.

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CHAPTER 1

INTRODUCTION

1.0 Introduction

Public spaces play a crucial role in supporting social interactions between people in every society. Public space promotes multiculturalism among people of different social backgrounds. The distribution of public spaces and the ease of access to such spaces are supportive of social functions in urban community (Barbosa et al., 2007). Different types of public spaces such as urban parks, square, streets and gardens provide opportunities for group of people from different backgrounds to socialize and interact. The significance of attraction to public space could be a good indicator of prospects of social contact among ethnic groups and neighbors which also turns such places into livable and active spaces (Golicnik and Ward Thompson, 2010). The quality of public spaces attracts people to utilize public spaces and promote socialization among users. Thus, people frequently visit public spaces for social enjoyment and physical activities.

Development of public space is not restricted to improving the town and aspects of urban life, but also about inculcating the social aspects of city and town life that include people's satisfaction, experiences and perceptions of the quality of their everyday environment utilization in urban community (Peters et al., 2010). For example, different experiences and perceptions of public space play an important role in affecting people's sense of belonging, interaction with the community and the right to space to use (Philipp et al., 2000). In addition, social community is undeniably a part of the social public space where the key aspects of the social

environment and characteristics occur in such place. Plus, it is a place where people usually enjoy the natural environment, and engage with variety of activities and interact with one another. The activities in public spaces can help to create a pleasant surrounding for people to associate with and engage in social activities during their leisure time. For instance, the social interaction among ethnic groups could be leading them to share their socialization activities in public space (Peters et al., 2010). Other studies have evaluated the impact of public spaces on leisure activities and examined the leisure performance of different ethnic groups (e.g. Juniu, 2000; Peleman, 2003; Stodolska and Yi, 2003; Yücesoy, 2006). According to Joseph (2011), Azwar and Ghani (2009), Chiesura (2004) and Verheij et al. (2008), public spaces such as parks and square provide physical, social, peaceful, tranquil and beautiful places to be utilized by residents from a multicultural background. Therefore, public spaces are one of the important outdoor environments essential for daily use.

Today, public space is emerging to be one of the most significant spaces in the urban area. Public space typologies are multipurpose, as it offers social and natural benefits to residents in the neighbourhood (Denzin and Lincoln, 2003). Besides, public spaces that help to enhance the image of the town and city, provides a good quality of an urban neighborhood. Furthermore, residents utilize public space for recreation, gathering, enjoyment and interaction with family members or friends. This research studied the factors that influence the utilization of public spaces in the town leading to the social interaction of the urban community that creates social cohesion among ethnic groups in Batu Pahat, Malaysia. In Batu Pahat town, the types of public spaces that exist are urban parks, square and playfields which offer ethnic groups the opportunity to use the public spaces and interact with one another. From the literature review, factors that influence people's utilization of public spaces and promote social interaction and cohesion with others are socialization, quality of place, attractiveness and experiences (Peters et al., 2010). The presence of these factors which attract people to utilize the public space for leisure, result in community bonding. Therefore, public space utilization usually refers to the interactions between various ethnic groups that utilize the places together and communicate with other cultures to learn and be shared in the urban community.

1.1 Research Background

Public space is one of the significant places in the cities and towns. This is likely because they promote interaction between the citizens from different multi-ethnic groups (Lofland, 1998; Fainstein, 2005). Appropriation of spaces can lead to more connections to these spaces and more opportunities to interact and further, to socialize. According to Peters et al. (2010) suggested that all ethnic group cultures feel the need to utilize public space for relaxation; the majority of users utilize public space with their family or friends. Thus, people frequently prefer to utilize public spaces in urban community with the multi-ethnic groups that lead them to communicate with others and create social interaction with friends and neighbours (Teig et al., 2009).

Urban public space is categorized based on the different functions for the urban community and how leisure can motivate feelings of comfort. This is likely because during leisure time people tend to be more free that lead them to choose what they want to do and with whom. According to James et al. (2009) public spaces are perceived as important parts of the neighbourhood that provide opportunities for residents to interact in the urban community. Urban parks and playgrounds fulfill a variety of social and psychological needs of the residents that lead them to communicate in public spaces (Ngesan et al., 2013). Many people have become afraid to utilize public spaces in the evening and at night especially when they are unfamiliar with the place and feel unsafe to interact with others. People need to be encouraged to enjoy public spaces. In turn, leisure time in public space can generate effects such as higher levels of confidence or satisfaction in a place that people feel to interact with other communities and feel comfortable. When public space becomes insufficient and unsatisfactory for community interaction, the recreational significance of the public space users from numerous parts of the society needs to be given extra consideration (Oguz, 2000).

All occupants of public spaces listed attractive landscapes of the public spaces such as satisfying landscape and visual elements, proximity to water, and peaceful environment as the primary reasons to utilize public space. In doing so,

these positive feelings from people are of significance that leads people to engage in social interaction with the community. The feeling of leisure in public spaces helps to develop positive feelings and create a sense of attraction to public space and interaction in such community.

Public space attracts people to spend leisure time and leads to social interaction; perhaps offer a communal focus to communities and neighbourhoods. Lack of environmental quality settings and maintenance can offer the impression that public spaces are possibly unsafe and in turn reduce visitation rates (Coles and Bussey, 2000; (Williams and Green, 2001). In fact, many researches on human and the environment have promoted in recent decades that existing knowledge of different society demands for using public space has been inadequately considered (Travlou et al., 2008). During their leisure time in public spaces, people tend to observe a diversity of users when they engage socially or physically in the activities. These activities will attract them together to participate and communicate with each other which possible to build their relationships based on their need of features at the public space. However, people tend to engage with the people who can be trusted and prefer to interact with people who share the same ethnic group compared to different ethnic background during their public space utilization.

People who are interested in spending leisure time in an outdoor environment are more likely to utilize public space. It could lead to promote a sense of interaction in that place to create social cohesion with others who also utilize the place, such as individual or group community. In Malaysia, Ali and Nawawi (2006) found that outdoor spaces such as urban parks, square, playfields and pedestrian walkway promote social interaction, contact and a sense of belonging in the public space because they involve engagement and exchange between individuals, family members and friends. Thus, recreational public spaces such as parks, urban square recreation grounds and gardens in urban community areas has long been noted for their function to social and physical benefits (Mansor, 2011). Therefore, public space is probably among the vital features in towns and cities.

This research studied the properties and attributes of public spaces among three ethnic groups that can promote social interaction and cohesion in Batu Pahat town, Malaysia. The concern of this study is on three ethnic groups, Malays, Chinese and Indians who utilize public spaces and the attributes of the public spaces perception that lead the three ethnic groups to associate with utilization rate. In addition, the factors affecting the utilization of public space in Malaysia within different cultural backgrounds are investigated. Therefore, the reasons for utilizing public spaces obtained from three ethnic groups such as socialization, quality setting of place, experience attractiveness and social interaction among one another leads them to generate social cohesion.

Urban public spaces can facilitate social interaction by making a place for social gathering for different ethnic groups in Malaysian towns. In turn, in every town there are a variety of public spaces such as gardens, urban parks, square recreation grounds and playfields. The position, activities, physical characteristics and functions of different types of public spaces influence the way people used the places (Makinen and Tyrvaenen, 2008). For example, in Denmark it was found that the significant increase of public space utilization for social interaction and cohesion was because people expected that this will have a positive effect on the physical activities of a large part of the population (Aarestrup et al., 2007). This research focuses on multi-ethnic groups to explain factors for encouraging people to utilize public spaces for leisure activities with each other. Comparing the use of public space with other ethnic group's recreation and activities, it becomes important that public space needs to fulfill the needs of people from different multi-cultural backgrounds (Schipperijn et al., 2010).

In urban setting in Malaysia, public spaces in towns such as gardens, urban square recreation grounds, parks, river corridor, playfields, neighborhood open space and street movement play an important role in public's daily life. It means that these types of public spaces provide a recreation environment for residents and enable them to gather and interact with one another. In addition, it provides a place where people visit public spaces and utilize different facilities and perform activities to rejoice with family and friends. Therefore, this research explores the significance of

public space utilization and ethnic groups' interaction that can generate social cohesion in the Batu Pahat town, Malaysia.

Public space is a social center; it is the place where everybody goes and spends their leisure time. It is a place to meet people and establish relationship with others perhaps from similar or dissimilar ethnic groups. In addition, public spaces are important places for the various ethnic groups in Malaysia. This is likely because the public is allowed to engage in positive cultural interactions in conjunction with national celebration activities namely Malaysia National Day, family day, and religious celebration days including daily activities during the weekdays and weekends. However, it means that public spaces such as urban parks, square recreational spaces, playfields and any places that bring people together and interact characterize a range of properties that attract them to communicate and build relationship with each other.

Beckley (1994) explains that social cohesion is the level of which a geographical place achieves urban community in the sense of shared values, cooperation, and interaction. Furthermore, social cohesion is highest when different groups interact together to promote social and cultural objectives. Social cohesion enhances outdoor relaxation with activities such as going to public spaces as well as spending leisure time and socializing with others. Social cohesion is achieved through social interaction providing the basis for bonds between individuals, and promoting trust towards others. People engage with leisure in public spaces that promote social skills because leisure activities among different multi-ethnic groups involve social interaction. In turn, people engage in their leisure activities and communicate with others to build a relationship and strengthen the bond with friends, family and acquaintances. Therefore, spending leisure time with others affects people relationship and cohesion and it is important because it helps in the acquisition of social cohesion among multi-ethnic groups.

Public spaces offer opportunities for people from different cultures to relax and enjoy outdoor environment in free spaces (Peters et al., 2010). Interactions with different groups help individuals interchange cultural values and gain acceptance to

enjoy meeting and seeing another group which can lead to social interaction and build friendship in the public spaces. Hence, public spaces are important because people view that outdoors spaces could encourage multi-ethnic groups to interact and communicate in the town that are provided with public spaces cater the user's needs. Public spaces that work as everyday outdoor environments for town residents who prefer to utilize these spaces and are usually encouraged to interact with different cultures. It is also assumed that public spaces act as the third important place after home and work place or school (Mansor, 2011). Therefore, public spaces serves as a friendly place in the town and city and influence the development of urban community. Public space attracts multi-ethnic groups from different backgrounds that lead them to share cultural values and encourages interaction in the urban community.

1.2 Problem Statement

Nowadays there are many public places provided for people, so that they get to spend their leisure time outdoors, and have a comfortable environment to socialize with other ethnic groups living within the same neighbourhood. However, the focus on community in public spaces is central and more prioritized than the individual and group interaction (Kaplan and Kaplan, 2005). Therefore, some extent of research is required to understand and clarify the kinds of activities promoted in public spaces in the neighbourhood so that they may attract more people to utilize these spaces and promote social interaction among multi-ethnic group. The quality of life and availability of quality public spaces could be attributed to have a bearing on its use (Lee and Maheswaran, 2010). The environmental setting and quality of physical attributes of outdoor spaces most definitely play an important role in encouraging people to utilize the public spaces. This aspect includes the issues of maintenance and availability of the facilities, plus the variety of activities that affect the multi-ethnic groups' need of the public spaces such as urban parks, square recreation grounds, and playfields. Places under construction contribute to a perceived sense of lack of security and safety and as such were not utilized and were less likely to be visited. Lack of the use of different public spaces by different multi-ethnic groups for

recreational and leisure activities to the extent that such spaces were not fully utilized. Therefore, people choose to use public spaces not only for its features, but also the condition of those attributes and features.

Most part Asia apart from cities and towns in Singapore have few public space and those in place are poorly maintained and thus attract low number of visitors (JPBD, 2006; Pitakasari et al, 2010). Jamirsah et al. (2013) studied public spaces in Malaysian towns and cities and revealed that they are given less consideration and maintenance, hence, are rendered unattractive. In addition, in Malaysia researchers have given little attention to the public space such as parks, and playing grounds. This situation has led to the decline in social interaction and cohesiveness in Malaysian community. Parallel to this, surveys by local authorities show presently people have less friends in comparison to past decades (Jamirsah et al., 2013).

The growth of indoor games and social media has rendered outdoor bonding difficulty. In addition, Mutz (2007) added that connections in social setup are diminished through geographic differences that cause segregation and division. Even though, the trend show growth of parks in Malaysia, little is known about the ways the multi-ethnic community uses those spaces (Ali and Nawawi, 2006). The nonexistence of sufficient information regarding the use of public space by people of various ethnic backgrounds in Malaysia, from one of the research questions in which this thesis attempts to answer.

Malaysia possesses unique features such as population of many ethnicity, religions and languages. The country consists of three ethnic groups; Indian which is 7%, Chinese are 24% and Malay are 55% (Department of Statistics Malaysia, 2012). Marzbali et al. (2014) stated that the focus of many studies is the patterns of interaction in such multi ethnic society. Previous studies revealed little social cohesiveness in communities with multi-ethnic and multi-racial setup (Costa and Kahn, 2003; Putnam, 2007). Rasidiet al. (2012) studied characteristics of public space design and its contributions to the level of interaction among people in multi-ethnic residents in Malaysia. This view is supported by studies from European

perspectives (Gijssberts et al., (2012), which revealed an inverse relationship between ethnic diversity and contact level among neighbors.

However, addressing community relationships as in this study is especially important for countries such as Malaysia because of the diverse religious and cultural background of its population. The evidence suggests that the three multi-ethnic groups have their own cultures, beliefs, norms and values, which have a great impact on the development of personal behavior (Yusof, 2006). A study in Kelantan, Malaysia, examined the social network between Muslims and Buddhists and suggested that the possible disruptive element in the interactions between the two groups is trivial religious issues (Alwi and Rashid, 2011).

Nobaya et al. (2003) studied patterns of interaction among Malays and Chinese living in a residential area of Kuala Lumpur and found out that though there is existence of a natural interaction but Chinese residents make extra efforts to integrate compared to Malay neighbour. On the contrary, Malays tends to participate more in neighborhood activities as compare to Chinese (Nobaya, 2003). Sakip et al. (2015) in suggestion for future studies, they suggested studies in classifications of parks users to get the comprehensive assessment of effective parks design for bigger demographics and usage as well as future plans.

Social interaction among multi-ethnic groups in public spaces in Malaysian towns has been given little attention by researchers, especially for multi-ethnic group users. In order to reduce the mono-ethnic friendships and promote more the multi-ethnic relationship for purposeful social interaction should be in place (Sua et al., 2013). Previously, researchers observed interactions of multi-ethnic groups in schools, working organization as well as the environment outside such as urban park and square that can measure and important.

Social interaction between Malays, Indians and Chinese students can occur in three folds; same ethnic, between two ethnic (Malay and Indian; Chinese and Indian; Chinese and Malays) and among all three groups (Ahmad and Yusof, 2010). At the neighbourhood interaction between Malays and Chinese living in the diversified

areas show that Chinese makes effort to mix with others from different ethnicity while Malays do not make much efforts. As a result Malays visit people of the same ethnicity but Chinese go to friends from the other ethnic groups.

Nobaya et al. (2003) claimed in the study that contact of any social interaction between neighbours is still an essential aspect of daily livelihood among residents and socialisers. Social communication between different people from various ethnic backgrounds on public spaces is a significant predictor of social community and harmony (Peters and Haan, 2011). High quality, well-designed and managed urban parks, square and public spaces will foster the quality of life (Beck, 2009). It creates a success public space that promotes psychological comfort and security. In fact, the quality of space lowest due to the poor public space planning and designing which will cause the decrease in utilization of public space and the decline of socialization among visitors and residents of town. In addition, people seek to utilize the public space, based on their perception of the quality of space, accessibility and the opportunity to engage in sociable activities between different ethnic groups. These are significant parameters that are found from previous studies on public space utilization.

In Malaysian context, the current design of public space does not attract visitors and this reduces the platform for interaction among users from multi-ethnic backgrounds. As a result there is less interaction among and between people of multi ethnicity. This aspect reduces the extent of individuals' solidarity and hence weaken the community relationship. Therefore, people living in multi ethnic residential areas often don't know their neighbours and this lead to lack of communication among friends from different backgrounds.

Multiple existing studies claims that social interactions among neighbors can be enhanced through public space (Abada et al., 2007; Echeverria et al., 2008; Cradock et al., 2009). These interactions pool together and create unity and harmony among community from different ethnicity. Simultaneously, the development of town and residential areas in Malaysia calls for maintenance of existing and creation of new public spaces to cover for increasing needs. However, this requires a

comprehensive plan to optimize their utilization (Nurhayati and Manohar, 2009). Research conducted in the past show that activities commonly done by park visitors in United Kingdom include; walking, cycling, exercising and socializing (Tzoulas and James, 2010). Most of urban residents perceived the public space functionality which affords active participation rather than aesthetic value. Lack of attributes and elements such as shades, pedestrian walkways and natural elements due decreasing interaction activities and factors that encourage people from multi-ethnic visiting each chosen public spaces (Namin, 2013). Also, the duration of visiting public spaces and the favorable times for users to visit public space are low.

Presently, urban community and people living outside the catchment area visit and enjoy public space at night time looking for relaxation. Ngesan et al (2013) in their study in Shah Alam and Putrajaya areas gave suggestion for future studies to use larger sample all over Malaysia. Furthermore, they suggested studies on the ramification of nighttime activities in public space to show the relationship between the behaviour of these leisure activities and quality of urban life.

Public spaces offer a good gathering place for different groups and communities and act as a catalyst for social change. Factors such as place, socialization, and quality of public space as well as accessibility of a public space in the Malaysian context are strong factors that would help attract multi-ethnic groups to use these public spaces. Usually, these public spaces pay little attention to the different needs of multi-ethnic backgrounds and focus less on quality. This is mainly because town authorities who develop these public spaces focus less on the needs of the target users from different cultures. According to Gehl (2001) and Nasution and Zahrah (2012) the quality of a place relates to how people interact, and so there needs to be further research on public spaces to help come up with those that satisfy the needs of every individual regardless of their background. This chapter briefly explains the utilization of public space, social interaction and cohesion among multi-ethnic groups.

Abu Bakar (2002) highlighted the major problem for planners and designers of public space in Malaysia. This problem is attributed to the multi-ethnic nature of

communities with their own needs of heterogeneity in nature. These different communities; Malay, Chinese and Indians have different ways utilize of public space influenced greatly by their traditions. As public spaces are set to be used by people from different multi-ethnic groups, it is important to ensure that these places promote social interaction and they upgrade the users' quality of life. This can be made possible through providing these places with various functions and making the urban setting community more attractive and expressive by suggesting livable environments (Peters, 2011; Kazmierczak, 2013). This would therefore determine how Malaysian ethnic groups which include Malays, Chinese and Indians use public space and the extent to which they are attracted to utilize these public spaces. Failure to adequately address the issues would make the public spaces underutilized and would also affect how these multi ethnic groups interacts in the public spaces in Malaysia.

Several studies across many disciplines discussed public space utilization needs (Table 1.1). Furthermore, the study of public spaces such as urban parks, square recreational spaces and playfields and the effects on multi-ethnic groups needs to be given more attention. In turn, urban public places bring people together to the natural environment and become of interest and a source of development of towns that has multi-cultural groups staying in the same neighbourhood urban community. Nevertheless, studies are needed in the future to analyse the features of public space including urban parks and square in urban and their effective uses during the day and night time. Also future studies should expand the sample size to cover all urban parks in the whole country since this study used only two parks in Shah Alam and Putrajaya as the study sample (Ngesan and Zubir, 2015).

Table 1.1: Summary of reading materials on public space and greenery that relates to usage and issues concerning socialization

Disciplines of Research	Authors (year)	Major research concern
Landscape and urban planning	Flores et al (1998), Oguz, (2000), Schipperijn et al. (2010), Barbosa et al. (2007), Sideris and Sideris, (2010), Maruani and Amit-Cohen, (2007), Golicnik and Ward Thompson (2010), Freestone and Nichols (2004), Soleckiav and Welch (1995), Matsuoka and Kaplan (2008), Chiesura (2004)	Low quality of public space attributes that affect people activities and interaction with each other
Health, Place	Teig et al. (2009), Cattell et al. (2008)	Relationship between physical activity and social interaction in an urban neighbourhood
Urban Forestry, Urban greening	Makinen and Tyrvaiven (2008), Sugiyama et al.(2009), Ward et al. (2010), Peters et al. (2010), Ngesana et al., (2013)	Different people using open green space with lack of security and maintenance
Building and Environment	Nikolopoulou and Lykoudis (2007), Turel et al. (2007)	Low quality of public space attribute such as activities, accessibility and maintenance curb people from different cultures to use public space
Cities	Lo and Jim (2010)	Differential community effects on perception and use of urban green space in Social function and Recreation

Thus, this research investigates the rate of public space utilisation and the quality attributes of public space that stimulate social interactions among users in multi-ethnic. In Malaysian context, the present status of the public spaces leads to low visitation and use by the multi- ethnic groups and this limits social interaction among people. This further leads to poor relationship among neighbours and other members of the community resulting to less cohesion and weak urban community. Abu Bakar (2002) mention that the most significant aspect of future research in the field of public space which can be applied and accepted by the multi-ethnic community particularly by Malays, Chinese and Indians. However, Malaysian park

design or any type of public space must take the multi-ethnic community into consideration in order to create the desired Malaysian atmosphere.

To address these issues among the multi-ethnic groups in the Malaysian peninsular, there need to be more studies that focus on social interactions among the multi-ethnic groups in utilization of parks, square recreational grounds, and playfields. This would help generate social cohesion among the different ethnic groups.

1.3 Research Gap

Various studies have been done in the past that examined the use of public space. Contextually, some studies looked at different aspects of urban landscape development in Malaysia (See Table 1:2). Most of these studies focused on public space visitation, and found that it is important to utilize these public spaces. Other studies found that different characteristics of a public space such as size as well as quality have an effect on its use (Coles and Bussey, 2000; Giles-Corti et al., 2005; Kaczynski et al., 2009; Joseph, 2011).

There have been a number of studies on public space utilization by different multi-ethnic groups mentioned in their studies. Use of public space by different multi-ethnic groups would act as a unifying factor to people of different cultural values. Therefore, there need to be further research on multi-ethnic public space utilization (Hudson et al., 2007). Thus, it is suggested that researches concerning the relationship between various ethnic group backgrounds in public space and their interaction with the public users can give social benefit and cohesion towards each other. Peters et al (2010) stated that social ethnic groups are related by their active utilization and interaction with public space. However, public areas that are designed to meet different cultural group's desires, to assist social interaction that may contribute to social relationship and cohesion among various ethnic groups in Malaysia is still yet to be obtained.

Table 1.2: Previous researches on public spaces for social interaction

Articles & Authors	Area of research	Site Context & Country
Public space		
The contribution of local parks to neighborhood social ties (Aleksandra Kazmierczak, 2013).	Indicate the social ties between the residents of urban neighborhoods and their parks use for social interaction that may help residents to build and develop relationships.	Local parks Manchester UK
Effects of access to public open spaces on walking: Is proximity enough? (Mohammad Javad Koohsari, Andrew T. Kaczynski, Billie Giles-Corti, Justyna Anna Karakiewicz, 2013).	This study examined both metric and topological proximity measures and to investigate associations between public space and influence residents walking and attractiveness to these spaces to utilize towards social integration.	Public open space (Three different configuration patterns to reach to POS) Neighborhoods in Melbourne (Australia)
Emergent public space: Sustaining Chicano culture in North Denver (Sig Langeegger, 2013)	The relationship between a publicly accessible spaces and a place where in diverse peoples learn from one another in the community activities gardens.	Public space (Gardens) North Denver (Europe Area)
Social interactions in urban parks: Stimulating social cohesion? (Peters et al., 2010).	Urban parks are perceived as an inclusive place where people of all ethnicities mingle together in one place.	Urban parks Dutch (Netherlands)
Public Open Space Privatization and Quality of Life, Case Study Merdeka Square Medan (Achmad Delianur Nasution and Wahyuni Zahrah, 2012).	The outcome of people interaction with the urban environment which give a positive contribution to quality of life that people keep doing their social activities in public spaces features.	Urban square Medan (Indonesia)

Thus, it is suggested that this study needs to concentrate and clarifies resident's social interaction and cohesion experiences in their urban community. However, public spaces that are designed to meet different multi-ethnic groups desires, to assist social interaction that may contribute to social relationship and cohesion among various ethnic groups in Malaysia is still yet to be obtained. Further research is needed to identify public space utilization in Malaysian towns. It is almost irrelevant to compare Malaysia with Western cities due to the difference in

climate, culture, language and ethnic group life style. Three ethnic groups live in the same urban community in Malaysia; the Malay, Chinese and Indians. Therefore, further research is needed to investigate how the properties and physical attributes of the groups affect the utilization of the public spaces as well as how it affects their interaction in the urban community.

1.4 Research Underpinnings

Most of the previous studies support the diverse natural settings and recreational attributes that can encourage visits and promote social interactions among public space users (Gehl, 2001; Huang, 2006). The correlation between public space utilization is found to be positive and in contrast with real usage, it is a significant factor towards enhancing people interaction (Barbosa et al., 2007). White people are perceived to utilize the parks more when alone to have a jog or a walk or enjoy the aesthetics values and qualities of the park. On the other hand, the Chinese users are perceived to use the parks with people of their similar ethnic group (Yi, 2000). Acculturation and place of multi-ethnic group could be a significant study in the magnitude of place use and interaction between different ethnic group users. Time and difference in relationship would not be a straight forward way to perceive the use of public spaces in a multi-culture (Stodolska, 1998; Rishbeth, 2001).

Public space promotes social interaction (Gehl, 2001; Kim and Kaplan, 2004) that can affect cohesion among different societies. Thus, people's perception of the quality of public space will promote the utilization of these spaces and promote quality of life. This research uses Assimilation Theory and Landscape Preference Theory as its suitable conceptual frameworks. Assimilation Theory represents the factors that lead to the utilization of public spaces by ethnic groups such as human activities, social interaction and attribute attraction among three ethnic groups. The different perception of the quality of the landscape of public spaces is presented using Landscape Preference Theory. The Assimilation Theory measures the public space socialization and different levels attractiveness while Landscape Preference Theory measures the perception on the quality public space. Therefore, Landscape

Preference Theory shows where ethnic diversity provides different perceptions about the quality of public places while Assimilation Theory that focuses on the cultural difference is an important theory in the interpretation of public space activities and leisure performance towards social interaction among multi-ethnic groups.

1.5 Research Aim

The aim of this study is to investigate the relationship between physical attributes and utilization of public spaces and its effects on social interaction and cohesion among users in multi-ethnic urban community in Malaysian towns.

1.6 Research Objectives

The objectives of this research work are as follows:

- i. To determine the activities in public spaces that promotes and prolongs social interactions in a small town;
- ii. To examine the physical features and spatial patterns of public space for people's interaction;
- iii. To investigate the experiences of user's activities in public spaces base on ethnic background, gender, age and occupation; and
- iv. To establish the influence of utilization public spaces in social interaction and cohesion in multi-ethnic community.

1.7 Research Questions

- i. How are public spaces utilised for leisure by people from different multi-ethnic background?

- ii. What is the extent of interaction in public spaces among multi-ethnic groups during leisure activities?
- iii. Does the variety of attributes in public spaces attract people from different background?
- iv. What is the extent at which people of diverse multi-ethnic groups are encourage to spend more time public spaces?
- v. Do public spaces provide people with diverse experience and satisfaction?

1.8 Research Significances

This study is conducted to understand the different perception of individuals from different multi-ethnic groups' background. It is to investigate the extent to which urban community affects social interaction and generate cohesion. The research is important in public spaces situated in a multi-ethnic community because they offer the opportunity for promoting utilization of public spaces for multi-ethnic interaction within the community.

This research clarifies the relationship between social interaction multi-ethnic groups on public spaces. This can be studied by examining how different ethnic groups utilize public spaces such as urban parks, square regional areas and playfields for different activities and their perception on public space attributes such as quality and attractiveness. Hence, these relations are important in achieving social cohesion among users of public areas. The research focuses on environments that encourage the utilization of public space by different ethnic groups. Public space typology with different attributes can encourage people of different backgrounds to engage with these outdoor facilities in urban community. Therefore, the study stands to fill the gap between the preferences of attributes of public spaces in towns and social interaction and cohesion among multi-ethnic groups.

1.9 Study Area

There exists different types of public spaces, from urban park, square, playgrounds, playfield and recreation grounds to commons. This research is conducted at residential area named Batu Pahat town

n. The Batu Pahat which is a district in the state of Johor in Peninsular Malaysia covers an area of 187.702 hectares. The Bandar Penggaram is the capital of the district. Batu Pahat which is 240 kilometers from the capital city, Kuala Lumpur is shown in Figure 1.1.

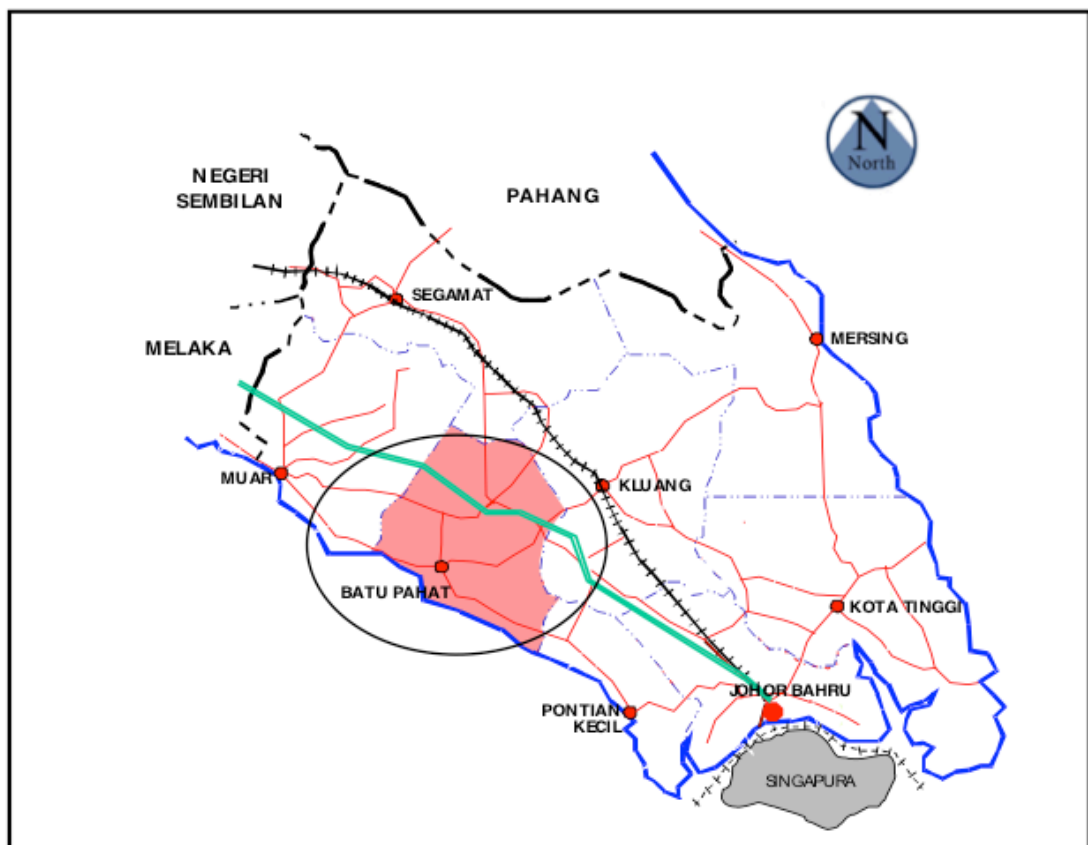


Figure 1.1: Map of Batu Pahat Town in the state of Johor, Peninsular Malaysia

The public spaces included in the investigation were urban park, urban square and playfield. As seen in Figure 1.2 these public spaces are located near the residential as well as the commercial areas, and they were selected because of different reasons such as size, green density and design characteristics which

represents the frequent usage by users. Also, the selected spaces are close to each other and located at the center of the Batu Pahat town. This center is the second most developed town in Johor, which was appropriately selected to be the study site. Batu Pahat town is the second most developed town in Johor, which was appropriately selected to be the study site.

Batu Pahat as a center is regarded as the focal area for the development and has various components of land use. It is the largest land use is residential area of 179 638 hectares which is 28.13 percent. This is followed by business and institutional community facilities and services. Government institutions are also concentrated in this planning block. There are many tourist attractions at the center which has old buildings and manmade resources like Batu Pahat Walk, open space and recreation as well as shopping complexes. Batu Pahat also has architectural heritage preservation area which has historical and old buildings. In this area, there are many other notable features such as river, schools and a mosque.

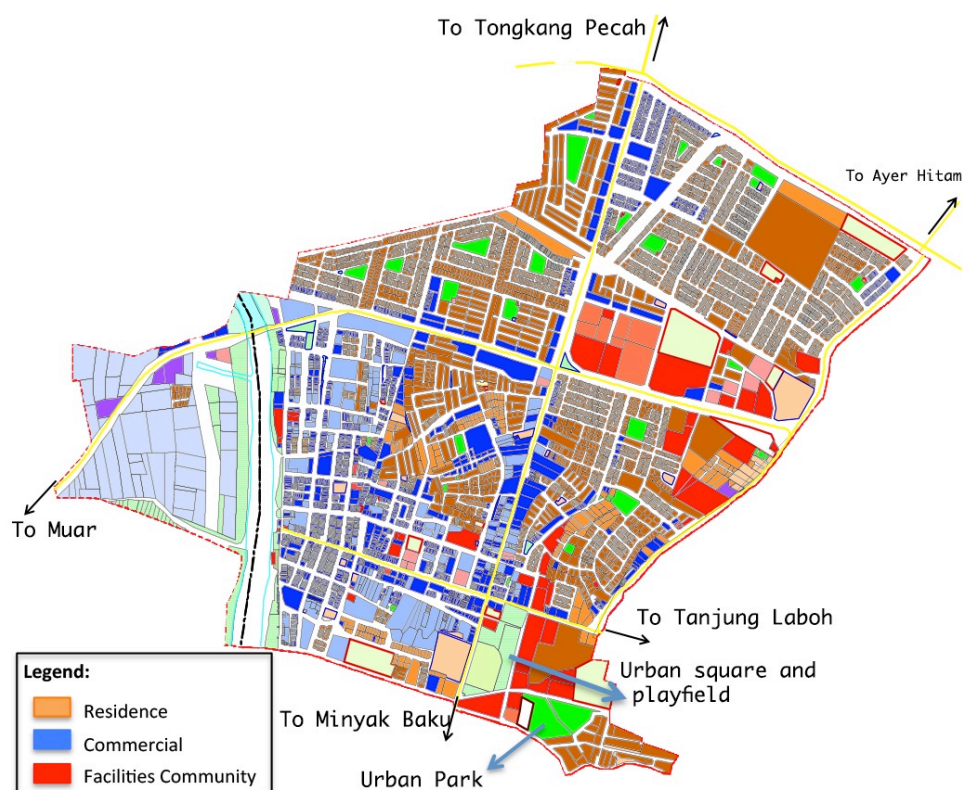


Figure 1.2: Land uses of Batu Pahat showing the main districts in the town

Source: Majlis perbandaran Batu Pahat

1.10 Scope of study

This study explores the factors that influence public space utilization and social interaction towards achieving social cohesion among multi-ethnic backgrounds. Factors that are relevant with public space utilization in urban community are discussed through public space typologies and physical features in the town to create a better place for social activities. The study reviewed a town development that is limited to Batu Pahat town, Johor, Malaysia where there are different ethnic groups of appreciable populations and the structure of the study area suited the three ethnic groups in urban community. The town chosen consists of three main ethnic groups, Malay, Chinese and Indian.

Most of the public spaces existed namely parks, urban square and playfields are selected because they are close to each other that have lack of maintenance towards the multi-ethnic social needs to utilize. Since parks, square regions and playfields are located in the town centre that are close to variety of residential and commercial areas, they serve a huge function and located near to residential area. Thus, it is suitable to investigate the degree of social interaction and cohesion among three multi-ethnic groups in the community. The researcher is investigating how the multi-ethnic group perceived to utilize public spaces and how social interaction is affecting them when they engage in different activities in public space. Hence, these are the reasons why Batu Pahat is chosen to represent public spaces, which offer opportunities for different ethnic groups to relax and enjoy outdoor social life, and engage in social interaction (Peters et al., 2010; Chua, 2013).

1.11 Outline of Research Methodology

The study measures the socialization, attributes of quality and attractiveness of public spaces in town. A mixed method of quantitative and qualitative approaches with the use of questionnaires were administered at the study area to elicit information on the understanding of human behaviour and experience from different multi-ethnic, across gender, ages and occupation in various public space typologies.

This was then followed by face-to-face interview. The qualitative method is frequently used to explore new finding of social behaviour and interaction (Lincoln and Guba, 1985). The final step is a triangulation of the various analyses and a search for common elements, patterns of behaviors, and the identification of areas of conflict and differences, both in the nature of the data and among the groups themselves. Responses were recorded in order to obtain data on the social behaviour of users in the public space and social interaction among different ethnic groups (Bryman, 2001). The questionnaire was distributed to public space users in analysing the properties elaborated in the reviewed literatures such as socialization, quality of place and attractiveness as main parameters of this study based on the occupants' perceptions of public space utilization.

The approach was developed by collecting data that demonstrate in how people utilize public space daily in Batu Pahat town, concentrating on social interaction and cohesion of diverse ethnic groups. All selected respondents received a letter of introduction that briefly describes the purpose and content of the questionnaire survey written in both English and Bahasa Malaysia, and the duration of the questionnaire. On the other hand, interview was chosen to capture different patterns of use at different times of day and on different days of the week. In turn, data analysis was done using (Rasch Measurement Model) for quantitative method, then followed by content analysis for face to face interview conducted in assessing the users' behaviour in different spaces. A structural equation modeling technique was used to test the factors that affect social interaction and cohesion on public space utilization was obtained by processing the data in the instrument survey.

1.12 Thesis Outline

The research is organised into five chapters as shown and summarised in Figure 1.3.

Chapter 1: This chapter discusses the overview of current research of the swift public space among different ethnicity groups. It exhibits the background of

this research followed by Aims and Objectives that are linked to the research questions to find out the output of the research result. Moreover, it gives more common ground to discuss the organization of the thesis chapters.

Chapter 2: To provide a review of the literature that discusses the relevance of the study and to build a framework to be the basis for a theoretical framework for this research. This research is going to discuss the concept of public space according to human perception and understanding public space in the town towards obtaining a reliable research that can clarify the human needs for quality of life

Chapter 3: This chapter discusses the reviews of the research methodologies to be adopted and the methods of analysis namely the uses of research statistical by Rasch Measurement Model and modelling by SEM (AMOS) followed by content analysis. In this study two strategies are applied to elicit the data collection which are is questionnaires which will elicit the presence of public space socialization and the attributes of quality and attractiveness, followed by different experience of public space utilization that will be applied in Rasch Measurement Model and SEM (AMOS) and a face-to-face interview to complement the missing data from questionnaires. The public space typology was selected such as urban parks, square regional areas and playfields in Batu Pahat town, Johor, Malaysia.

Chapter 4 and 5: The both chapters give the details of the data collection results that were elicit through questionnaires and interviews. On other hand, findings on public space utilization by different ethnic groups that affects social interaction and cohesion among usages was also evaluated. This chapter presents the research framework which discuss the output of people activities, social interaction and the degree of public space attributes. The data collection is analysed by Rasch Measurement Model and followed by Structural Equation Modelling (SEM). It presents models of the three sites of data collection to find out the effective factors leading to social cohesion among residents satisfaction of Batu Pahat town.

Chapter 6: This chapter exhibits the conclusion from the findings and the discussion in chapter 4 about the significant factors that affect different ethnic groups

preferences to utilize public spaces hence, creating social cohesion among users in the public spaces.

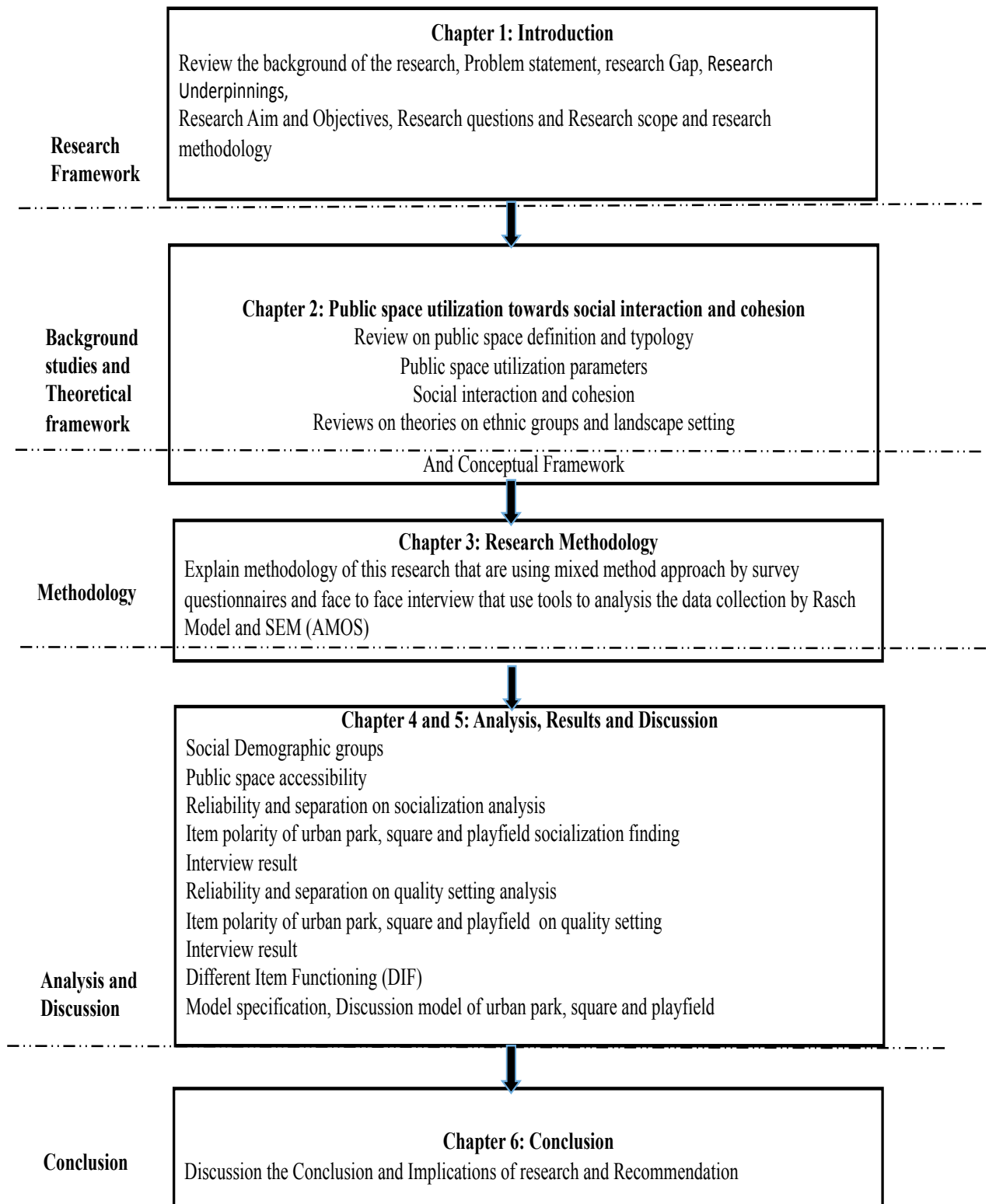


Figure 1.3: The flow of research process and thesis chapters

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