Public Spaces in Small Town
Contributing to Social Cohesion of Urban Community

Hesham Omran Elftas (PB113036)
PhD Candidate
Supervisor: Assoc. Prof. Dr Ismail Said
Co-Supervisor: Dr. Sapura Bt Mohamad
Co-Supervisor: Mohd Hisyam Bin Rasidi

Faculty of Built Environment
Universiti Teknologi Malaysia
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- Research Underpinnings
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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.

There is a need to understand people’s diverse social backgrounds and their interaction with the environment as the ease of access to such spaces are supportive of social functions in urban community (Barbosa et al., 2007).

The significance of attraction to public space could be a good indicator of prospects of social contact among ethnic groups and neighbours which also turns such places into livable and active spaces (Golicnik and Ward Thompson, 2010).

The activities in public spaces are an essential part that can help to create a pleasant surrounding for people to associate with themselves and engage in social activities during their leisure time.
Public spaces utilization

- Public spaces that help to enhance the image of the town and the city, provides a good quality of an urban neighbourhood for recreation, gathering, enjoyment and interaction with family members or friends.

  - **Promote interaction** between the citizens from different multi-ethnic groups (Fainstein, 2005).
  - Provide a variety of social and psychological needs of the residents that **lead them to communicate** in public spaces (Ngesan et al., 2013).

- **Social cohesion** is achieved through social interaction providing the basis for bonds between individuals, and promoting trust towards others.
Few studies have focused on Social ethnic groups, which makes it almost irrelevant to compare Malaysia with Western cities. Three ethnic groups live in the same urban community in Malaysia: the Malays, Chinese, and Indians. Due to the difference in climate, culture, language, and ethnic group lifestyle of Asian countries, it is needed to investigate how the properties and physical attributes of the groups affect the utilization of the public spaces. Which 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. There is a need to understand people of different social backgrounds about their environment. Research focuses on public areas that are designed to meet different cultural group's desires.
Research Problem

PROBLEMS

• There is Lack of the use of different public spaces of different multi-ethnic groups.
• It leads to poor relationship among neighbours resulting to less cohesion and weak urban community.

1 Interaction

• It is required to understand and clarify the kinds of activities promoted in public spaces.
• Less interaction among people in public space.

2 Attributes

• Issues of poor planning and quality mainteances in public spaces.
• People choose to use public spaces not only for its features, but also the condition of those attributes and features.

Social interaction among multi-ethnic groups in public spaces in Malaysian towns has been given little attention by researchers, importantly on public space role for multi-ethnic group users in promoting social cohesion.
Research Underpinnings

- **Assimilation Theory (AT):** When people from different cultural backgrounds interact in public space, assimilation takes place very quickly (Yinger, 1981; Goldsmith, 1994; Floyd, 2001).

- **Landscape Preference Theory (LPT):** People begin to investigate place attributes which influences people’s perception. Kaplan and Kaplan (1982) suggested that people begin to search and observe their environment in order to obtain information about their surroundings.
Research Aim

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.
Research Objectives

1. To determine the **activities** in public spaces that promotes and prolongs social **interactions** in a small town;

2. To examine the physical **features** and spatial patterns of public space for people’s interaction;

3. To investigate the **experiences** of user’s activities on public spaces based on **ethnic background, gender, age and occupation**; and

4. To establish the **influence of social cohesion** on the utilization of public spaces in multi-ethnic community.
Research Questions

1. To what extent do people use public spaces?
2. What are the people’s perception about public space attributes?
3. What activities do the different ethnic groups engage in at the public space?
4. What is the influence of social cohesion on public space in a multi-ethnic community?
<table>
<thead>
<tr>
<th>Factors</th>
<th>ITEMS Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Interaction</td>
<td>➢ Being alone, Being with family, Being with friends from same ethnic, Being with friends from different ethnic, Being with neighbours, Being with strangers from different area</td>
</tr>
<tr>
<td>2) Activities</td>
<td>➢ Exercising, Family visiting, recreational activities, Chatting with others (same ethnic), Chatting with others (different ethnic), Dating and celebrating, Leisure activities, Photo-taking, Working, gathering, eating and drinking, Following children playing</td>
</tr>
<tr>
<td>3) Choosing place to visit</td>
<td>➢ Park, square and playfield</td>
</tr>
<tr>
<td>4) Attraction attributes</td>
<td>➢ Trees and flowers, Night market, Water element, Pathway, Shelters and seats, Aesthetic of public space, place for Social activities</td>
</tr>
<tr>
<td>Factors</td>
<td>ITEMS Measures</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5) Quality of Attributes</td>
<td>- Shady trees, Enough facilities to support your activities, Amenities of Public space, peaceful of public space with degree of activities taking place, Space used to be green and wider, Space are under a good maintenance and management, Exciting, Quiet, Friendly, Harmony and happiness, Variety of features, Clean, Comfort and Satisfaction, Safe and secure, Music played, Special events and ceremonies</td>
</tr>
<tr>
<td>6) Spatial Characteristics</td>
<td>- The space for different activities are available for different ages and ethnics, The space for people socializing is available, The space for children to play is available, The space for observing people, chatting and interaction with them is available, The space for recreation is available, The space in a good shape and good condition, The space is spacious for different of people</td>
</tr>
<tr>
<td>7) Accessibility</td>
<td>- Distance, mode of transportation, coming from home or work.</td>
</tr>
<tr>
<td>8) Social cohesion</td>
<td>- Friends to do involve in activities, Number of friends to interact, Time of interaction (ties), trust with different ethnics, Meet and engage with others</td>
</tr>
</tbody>
</table>
There are three types of public spaces used as study sites in this research, namely urban park, square and playfields.
The Research Method

Mixed-Methods of Data Collection

SURVEY QUESTIONNAIRE

Study site selected (Urban park, square and playfield)

Interaction, activities, place to visit and attraction attributes

Quality of Attribute and Spatial Characteristics

Attractiveness (Accessibility and social cohesion)

➢ Rasch Measurement Model (Item Polarity)
➢ SEM (AMOS)

FACE TO FACE INTERVIEW

Study site selected (Urban park, square and playfield)

Demographic factors

➢ Gender (Male and female)
➢ Ethnic group (Malay, Chinese and Indian)
➢ Age (6-12, 13-18, 19-54, 55 and above)
➢ Occupation level

➢ Rasch Measurement Model By (Differential Item Functioning DIF)

➢ Content Analysis (Triangulation with Rasch Model result)

To answer objectives 1, 2, 3 and 4
Research Objectives & Data Analysis

**RO #1**
Social interaction and activities

- **Place attributes**
  - Provides a good quality of an urban community for recreation
  - Urban park, playfield and square users
    - Questionnaires (378) & interview (n=34)

**RO #2**
Physical features and spatial patterns

- Urban park, playfield and square users
  - Questionnaires (378) & interview (n=34)

- Rasch Measurement Model (Item Measure)
  - Content analysis

**RO #3**
Experiences of user's activities in public spaces

- **Different experiences and perceptions**
  - Male and female preference survey (n=378)
  - Age group preference survey (n=378)
  - Occupation group preference survey (n=378)

- Social needs in public spaces
  - Male and female preference survey (n=378)
  - Age group preference survey (n=378)
  - Occupation group preference survey (n=378)

**Triangulation**

- **People socialization-environment Attributes**
- **Social and Physical Character factors**
  - Social needs in public spaces
  - Social contact among ethnic groups and neighbours
  - Which also turns such places into livable and active spaces

- **Different needs & low and high relationship among Multi-ethnic**

- **Social cohesion are achieved through social interaction among the Malays, Chinese and Indians**
## Results and Findings: RO#1

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>Factors/ ITEMS</th>
<th>RESULTS AND FINDINGS</th>
</tr>
</thead>
</table>
| RO #1     | 1. Interaction| ❖ Urban park and square was utilized differently by the users and there were less interaction with each other. People prefer to engage in the park alone or with their family members and engage more with friends from the same ethnic compared to interacting with neighbours and strangers.  
❖ People engage more in playfield than the park and square where there are more interactions among friends from same ethnic. |
|           | 2. Activities | ❖ Urban park, square and playfield users prefer to participate in exercise activities such as walking, jogging, cycling and joining group activities like aerobic and dancing and significant reason to utilize playfield is football activity for adult.  
❖ Family is bring children to the park and accompany them to play at the playground and taking photos. |
|           | 3. Choosing place to visit | ❖ Malays are the main users of square and playfield while Indians are the least users at all three public spaces.  
❖ Chinese preferred to spend their leisure time in parks more than the Malays and the Indians. |
|           | 4. Attraction attributes | ❖ Most people prefer not to visit the park and playfield at night because they feel unsafe and less comfortable. People still prefer to utilize the square in the evening and at night time because they feel peaceful and have a sense of safety regarding to the night market in the square.  
❖ Trees and shelters are the significant attributes  
❖ The water fountain in the urban park and square area needed to be maintained. |
## Results and Findings: RO#2

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>Factors / ITEMS</th>
<th>RESULTS AND FINDINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RO #2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Quality of Attributes</td>
<td>The quality of tree shades is in low condition that people perceive the trees as a significant element. People like to utilize the place that has more green and wide space. It is because the quality of the greens or plants is not well maintained and thus not attractive. The elderly perceived quality attributes such as seats, shelters and toilets as important attributes in encouraging them to visit public spaces. The adults perceived that the low quality attributes of the public spaces such as the pathway, the cleanliness and maintenance have an impact on their physical activities and interaction among each other. Safety and security especially at night. Thus, this affects to visits at late evening and at night.</td>
<td></td>
</tr>
<tr>
<td>2. Spatial Characteristics</td>
<td>The park does not have much green grass and not wide enough for people. Family were more concern on playground area for children and an open space to let them play football which the park and square does not have those types of areas. Playfield is available for adults as they play football and not for other age groups especially children. Thus, spatial characteristics showed that lack of spaces for children such as playground leads children and their family to not be able to enjoy their activity at the park.</td>
<td></td>
</tr>
</tbody>
</table>
Factors/ Items | Results and Findings: RO#3
--- | ---
Ethnic group factors | 1. Different Experiences on Public Spaces interaction, activities and attribute attractions Base on Ethnic Background

**Social interaction (o2)**

- Chinese
- Indian
- Malay

**Activities (o3)**

**Attraction place (o4)**

**Attraction attributes (o5)**

Ethnic group on the playfield

- Chinese
- Indian
- Malay

**Background activities and attribute attractions**

Base on Ethnic

- Family
- Friends
- Neighborhood
- Exercise
- Family
- Recreation
- Chatting
- Dating
- Working
- Fitness
- Children
- Chatting
- Exercise
- Gathering
- Chatting
- Gathering
- Nature
- Social

**Items**

- 1/2A. Alone
- 2/2B. Family
- 3/2C. Friends
- 4/2D. Friends
- 5/2E. Neighborhood
- 6/2F. Garden
- 7/2G. Exercise
- 8/2H. Family
- 9/2I. Recreation
- 10/2J. Chatting
- 11/2K. Dating
- 12/2L. Working
- 13/2M. Fitness
- 14/2N. Children
- 15/2O. Chatting
- 16/2P. Gathering
- 17/2Q. Nature
- 18/2R. Social

**DIF**

- t-value
- (diff.)

- 4
- 3
- 2
- 1
- 0
- 1
- 2
- 3
- 4
Factors/Items | Results and Findings: RO#3
---|---
Ethnic group factors | 1. Different Experiences on Public Spaces interaction, activities and attribute attractions Base on Ethnic Background

Social interaction (o2) | Activities (o3) | Attraction place (o4) | Attraction attributes (o5)

<table>
<thead>
<tr>
<th>Items</th>
<th>Gender group on the park</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>18a</td>
<td>alone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20b</td>
<td>family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30c</td>
<td>friends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40d</td>
<td>neighbor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50e</td>
<td>stranger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60f</td>
<td>exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70g</td>
<td>family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80h</td>
<td>recreation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90i</td>
<td>chaset</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100j</td>
<td>dating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110k</td>
<td>leading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>120l</td>
<td>phottak</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130m</td>
<td>working</td>
<td></td>
<td></td>
</tr>
<tr>
<td>140n</td>
<td>gathering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>150o</td>
<td>chandise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>160p</td>
<td>square</td>
<td></td>
<td></td>
</tr>
<tr>
<td>170q</td>
<td>playground</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180r</td>
<td>rivercock</td>
<td></td>
<td></td>
</tr>
<tr>
<td>190s</td>
<td>shade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200t</td>
<td>waterelm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>210u</td>
<td>pathway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>220v</td>
<td>shelter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>230w</td>
<td>nature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>240x</td>
<td>social</td>
<td></td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Items</th>
<th>Gender group on the square</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>18a</td>
<td>alone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20b</td>
<td>family</td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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</tr>
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<tr>
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<td></td>
</tr>
<tr>
<td>130m</td>
<td>working</td>
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<td></td>
</tr>
<tr>
<td>140n</td>
<td>gathering</td>
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<td></td>
</tr>
<tr>
<td>150o</td>
<td>chandise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>160p</td>
<td>square</td>
<td></td>
<td></td>
</tr>
<tr>
<td>170q</td>
<td>playground</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180r</td>
<td>rivercock</td>
<td></td>
<td></td>
</tr>
<tr>
<td>190s</td>
<td>shade</td>
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<td>shelter</td>
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<td>230w</td>
<td>nature</td>
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<td></td>
</tr>
<tr>
<td>240x</td>
<td>social</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Factors/ Items | Results And Findings: RO#4
--- | ---
Social cohesion | To Establish the Influence of Social Cohesion on the Utilization of Public Spaces in Multi-ethnic Community

Urban park

Structural Equation Model (AMOS)
RO#4  
Factors/ Items Results And Findings: RO#4  
Social cohesion  
To Establish the Influence of Social Cohesion on the Utilization of Public Spaces in Multi-ethnic Community

Square

Structural Equation Model (AMOS)
To Establish the Influence of Social Cohesion on the Utilization of Public Spaces in Multi-ethnic Community

### Playfield

#### Structural Equation Model (AMOS)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Path</th>
<th>Path coefficient</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAt→SCo</td>
<td>Attraction attributes in the playfield will positively influence social cohesion</td>
<td>0.22</td>
<td>Supported</td>
</tr>
<tr>
<td>QA→SCo</td>
<td>Quality attributes in the playfield will positively influence social cohesion</td>
<td>0.26</td>
<td>Supported</td>
</tr>
<tr>
<td>Acc→SCo</td>
<td>Accessibility of the playfield will negatively influence social cohesion</td>
<td>-0.12</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Sin→SCo</td>
<td>Social interaction in the playfield will positively determine and influence social cohesion</td>
<td>0.22</td>
<td>Supported</td>
</tr>
</tbody>
</table>
Inter correlations of significant factors that affect social cohesion in public spaces utilization

<table>
<thead>
<tr>
<th>Effect Factor And Stronger</th>
<th>Urban park</th>
<th>Square</th>
<th>Playfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activities</td>
<td>Quality Attributes</td>
<td>Quality Attributes</td>
</tr>
<tr>
<td>2</td>
<td>Quality Attributes</td>
<td>Social Interaction</td>
<td>Social Interaction</td>
</tr>
<tr>
<td>3</td>
<td>Attraction</td>
<td>Social Interaction</td>
<td>Attraction</td>
</tr>
<tr>
<td>4</td>
<td>Attraction Attributes</td>
<td>Social Interaction</td>
<td>Attributes</td>
</tr>
<tr>
<td>5</td>
<td>Social Interaction</td>
<td>Social Interaction</td>
<td>Activities</td>
</tr>
<tr>
<td>6</td>
<td>Accessibility</td>
<td>Social Interaction</td>
<td>Accessibility</td>
</tr>
<tr>
<td></td>
<td>Spatial characteristics</td>
<td>Social Interaction</td>
<td>--</td>
</tr>
</tbody>
</table>

Conclusion of Research
Contribution of Research

- The quality of public space attributes such as shade trees and shelters, security and safety, cleanliness, comfort, wideness and greenery, good and well-maintained facilities for physical activities were influencing the way people are attracted and utilize public spaces.

- Children’s playground area was the most significant attribute that attracts both children and their families to visit the public space.
Theoretical Implications

- The significance of the study outcome is its effect on the degree of diversity of ethnic groups in promoting public space utilization in order to enhance understanding among multi-ethnic groups of the community.

- The urban parks became a regular place of attraction to users because of the profound impact of the unique park attributes in Batu Pahat town.

- The night market in the square is another attribute of attraction that brings people to visit the square. People interact with their families and friends while shopping and sitting around the water fountains.

- The adults are mostly attracted to use the playfield to interact with each other for exercises and football activity.
Therefore, it can be concluded that in designing and planning public spaces in urban communities there is need for determining the type of public space needs of the prospective users, their gender, age, ethnic and occupation.

This is necessary in creating the proper outdoor environment with the right facilities and good quality of attributes for people of different background.

It means that people are attracted to visit public spaces in order to spend leisure time with their family and friends and endure interacting with them when the public spaces are attractive.
PAPERS


Thank you for your attention.