

# **Environmental Experiences of Malaysian adolescents in two neighbourhoods in Johor Bahru, Malaysia**

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This study is dedicated to Malaysian adolescents,  
who are an important generation of which  
this research has sought to understand  
some of their needs in relation to their environment.



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# Abstract

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This research has addressed gaps in knowledge relating to environmental experiences of Malaysian adolescents in two neighbourhoods in Johor Bahru, Malaysia. This thesis discusses how the adolescents' experiences may differ from adults' assumptions and planning. The study begins by highlighting current issues relating to adolescents and urban open space planning and design in Johor Bahru, Malaysia.

Survey questionnaires were used as a research tool to reveal adolescents' time use and environmental experiences of their housing area, neighbourhood and the city. The time use not only revealed their activities but also places they liked or valued and their ideal housing neighbourhood environment. Time use data diaries and interviews were used to verify the data from the questionnaire and to seek more specific data of what they wanted from their outdoor environment. The findings of the research elucidate that there were both similarities and differences in Malaysian adolescents' use of their outdoor environment across different ethnic backgrounds, genders and ages. It is concluded that inadequacies existed in current Johor Bahru urban planning in addressing the needs of the adolescents.

Furthermore, from this study, the Malaysian adolescents assigned attributes or specific criteria to the facilities and spaces they wanted within their housing area, neighbourhood and the city. The facilities and spaces they wanted were linked to their physical and social activities which they would like to do. The attributes assigned by the Malaysian adolescents are elements of play, variety, ambience, size, safety, fun and excitement, challenge, walkable, aesthetic and green, sociability, accessibility, intelligent and possessing affordances for sports activities.

Based on the research findings, this study outlines recommendations for Malaysian housing and neighbourhood landscape in relation to adolescents' needs. Early consideration of adolescents' needs should be incorporated in the planning and design process. One of the recommendations should include providing opportunities for Malaysian adolescents' participation to determine their needs for facilities and spaces in housing area and the city during the planning and design stage.

# **CHAPTER 1:**

## **Introduction:**

### **The Literature review – Research context and rationale**

---

#### **1.0 Introduction**

Interest in adolescents and their environment arose over the past thirty years among researchers from various disciplines such as landscape architects, geographers, psychologists, planners and sociologists. The increase in research interest in adolescents and their urban environments was initiated when researchers found that there was a need to integrate research findings and theory in the design of environments for the adolescents (Chawla, 2002; Lynch, 1970; Marcus Cooper, 2001) by accumulating first hand information and views of the adolescents in the decision making process in practice.

This chapter presents the first part of the literature review which will introduce and discuss the term adolescence, the key concepts, and basic theories of their development and describe some of the current issues concerning adolescents in cities, particularly in urban housing areas and neighbourhood areas, describing in detail the context and rationale of this research. The research scope, research questions, aims and objectives, in terms of what is achievable within the time allocated, and the areas covered by previous research are also explained.

#### **1.1 Definitions of key words and concepts**

For the purpose of understanding some of the key words and concepts used repeatedly in this thesis, the following are their definitions.

##### **1.1.1 Adolescence**

The term adolescence first appeared about 102 years ago when it was incorporated into the social science literature by G. Stanley Hall (1993), who was considered as the pioneer researcher in adolescence research. When Hall produced his first book on



Adolescence in 1916, it also marked the beginning of the empirical and theoretical study of adolescence as one of the stages in man's life span. The book managed to attract further research in other areas of adolescence to include research in other disciplines such as psychology, sociology, anthropology and medicine.

The word adolescence originated from the Latin word *adolescere* which means to 'grow or to grow into maturity (Muuss, 1998). Despite the appearance of the term in the early 20<sup>th</sup> century, recent scholars still suggest that adolescence is a relatively contemporary (Santrock, 2001; Rice, 2004) and an ambiguous concept as supported by Sibley (1995). Sibley writes:

*The boundary separating child and adult is a decidedly fuzzy one. Adolescence is an ambiguous zone within which the child/adult boundary can be variously located according to who is categorizing. Thus, adolescents are denied access to the adult world, but they attempt to distance themselves from the world of the child. At the same time, they retain some links to childhood. Adolescents may appear threatening to adults because they transgress the adult/child boundary and appear discrepant in 'adult spaces'.....These problems encountered by teenagers demonstrate that the act of drawing the line in the construction of discrete categories interrupts what is naturally continuous. It is by definition an arbitrary act and thus may be seen as unjust by those who suffer the consequences of the division. (Sibley, 1995, pp. 34-35)*

Adolescence is a challenging stage which every human has to go through in the earlier part of our lives. It is one of the main phases of a long developmental process that occurs in every human being and each phase of the development of man is linked to the other phases. Further to Sibley's statement on adolescents, another scholar (Santrock, 2001) defines adolescence as a developmental period of transition between childhood and adulthood with consideration of not only age, biological, cognitive, socioemotional and sociocultural changes but also sociohistorical influences. Hendry (1993) adds that adolescence is 'a transitional period between the protected and dependent status of childhood and the independence and freedom of adulthood'. (Hendry et. al , 1993, p.4). Meanwhile, Freud (1998) maintained adolescence as a phase of uncertainty about the self and by nature an interruption

to peaceful growth whereby the adolescent can behave for a considerable time in an either consistent or unpredictable manner.

### **1.1.2 Adolescents' Age**

One who undergoes the adolescence stage is known as the adolescent and in general, the adolescent is seen as a child who is transforming into a youth, who will gradually turn into an adult. The use and meanings of the term adolescent vary in different countries according to political, socio-cultural and economic context. In other words, a person at the age of adolescence is a youth between childhood and adulthood. Scholars have different opinions on the age of adolescence. Most developmentalists (Santrock, 2001; Siefert and Hoffnug, 1997), indicated the start of adolescence as being approximately between 10 to 13 years of age and ending between the age of 18 and 22 for most individuals. (See Figure 1.1.1). The Convention on the Rights of the Child (1989) states that adolescents are the 'older children' because under Article 1, children are under the age of 18 years. For UNFPA, it follows the following definitions:

Adolescents: 10-19 years old (early adolescence 10-14 and late adolescence 15-19)  
([www.unfpa.org/adolescents/aout.htm](http://www.unfpa.org/adolescents/aout.htm).)

Another term which is a synonym of adolescent is the term 'teenager'. This term was first used in the 1943-1945 issues of the Reader's Guide to Periodical Literature. Teenager is now more commonly used by the general lay public to refer to young people aged between thirteen and nineteen (Rice, 2004).

Apart from identifying adolescence through age, many researchers who study adolescents prefer to specify adolescence by its stages, whether it be the early or late stage of adolescence. The onset of the early stage of adolescence can be seen when a person undergoes a major part of his or her pubertal change (Eveleth and Tanner, 1990). According to Rice (2004), late adolescence or the exit from adolescence for many people starts when one's career interests and identity exploration become more evident. In other words, the adolescent years can correspond with the teenage years. The beginning of adolescence can be defined by an individual's biological age but the ending of adolescence can be determined

by the person's social age (Kimmel, 1995; Schlegel & Barry, 1991). In some countries, another contributing factor that affects the stage of adolescence is culture in terms of the differing cultural standards or circumstances (Dasen, 1977).

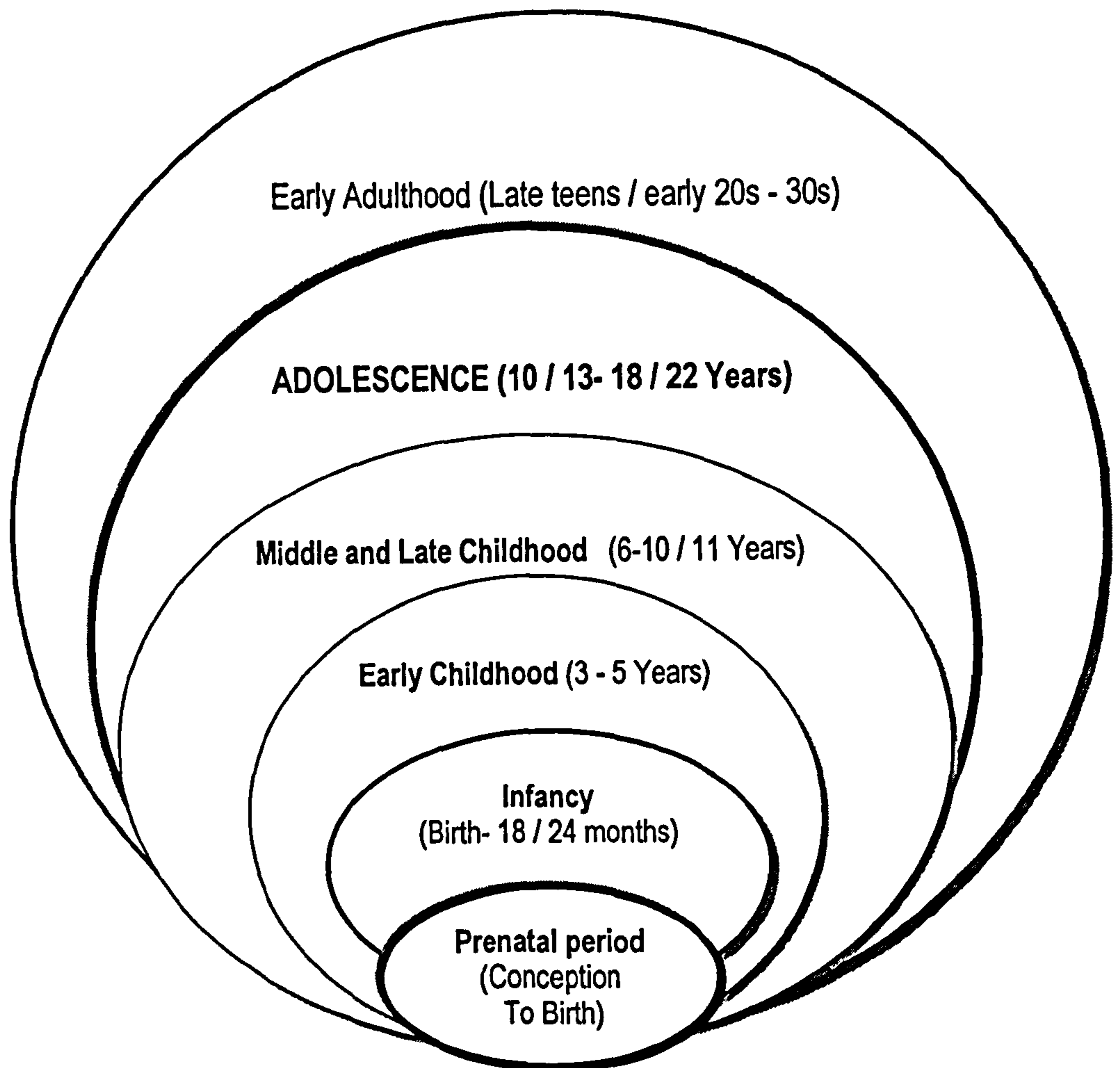


Figure 1.1.1: Periods of Development from Conception to Early Adulthood  
Source: Santrock (1998)

### 1.1.3 The Needs of the Adolescents

Adolescents like the adults have basic needs to fulfil. Abraham Maslow (1970) categorised the human needs into four basic elements- the need for food and drink, security and safety needs, the need for affection and the need for self actualisation. These needs vary in terms of priority and differ according to age group and gender.

Owens (1999) points out that many of the needs of adolescents are similar to those of adults, children and the elderly but others are unique to adolescents. The needs of adolescents are discussed in terms of their physical and social needs.

### **1.1.3.1 Adolescent Physical Needs**

Adolescence is a critical point in life in the adoption of behaviours relevant to health (Maggs, Schulenberg and Hurrelmann, 1997). Apart from food, adolescents need to be engaged in regular exercise to stay healthy to prevent the onset of health hazards such as premature disability and mortality. American health experts blame the TV for adolescents' poor physical conditions and obesity. The large amount of time spent in front of a television or computer screen has been shown to be related to low back pain and obesity in adolescents and children (Balague, 1994). Adolescents do need exercises as it does make a difference to their lives. Physical exercise is also a good buffer to adolescent stress (Brown and Siegel, 1988). In a study involving 154 boys and girls, who were assigned to a 30-minute running programme every week or to regular physical education, attendance at these sessions increased cardiovascular health and increased creativity (Tuckman and Hinkle, 1988). Children and adolescents are recommended to participate in at least 60 minutes (and up to several hours) of moderate to vigorous physical activity every day (Commonwealth Department of Health and Aged Care, 2004). Increased opportunities for physical activity will cause the adolescents to opt for selectively engaging in these activities instead of more inactive behaviours (Larson, 2000). However, the physical education adolescents get in school is not enough. Physical activity can take place in other places and the closest and most accessible are those within the proximity of the home.

Thus, forms of physical activities should be available not only in schools but in their neighbourhood. Participation in sports activities can be an important predictor of physical activity and there is a need to improve access to community based physical activities opportunities (Troost, 1997) to enable fun and reduce stress, and develop a lifelong physical activity habit as well as educating the public about the need for community play spaces.

### **1.1.3.2 Adolescent Social Needs**

Rousseau described adolescence as a 'second birth' when the first five years of life shape a person's relationships with other persons and the consequent adolescent years further create a pattern of relationships with society. Adolescence indicates that the needs for social interaction and self reflection are equally important for adolescents and are reflected in studies which indicate that adolescents spend of substantial time socialising and thinking (Santrock, 2001).

Many argue that the experiences gained through activities by adolescents greatly influence the adults they become and in order to become socially mature, adolescents need social interaction with their peers and with adults (Larson and Richards, 1989). Cognitive theory contends that among adolescents, the stimulation of moral development has a large social component that derives from social interaction, moral decision making, dialogue and moral interaction. These opportunities are not only provided by families, but also the peer group, the school and the person's social status in society (Simanowitz, 2003). Spending time with friends is similarly important to enable the adolescents to become independent from their friends and parents in the process of their transition to become adults. The experience also provides them with an opportunity to test and form their own values and to establish their self identity (Larson, 1989).

On the gender factor among adolescents, Guardo and Meisels (1971) reported observations that children avoid too much contact with the opposite sex until they discover new virtues in one another, around the period of adolescence. From the results of research using line drawings of figures, Koslin (1971) deduce that children gradually learn to develop social distance from other ethnic groups and that such separation is often established by the time of adolescence. Personal spacing seems to stabilise early in life and it is only during adolescence too that the system is fine-tuned to handle a range of situations and social relationships. Social connectedness is important because when people get socially disconnected, that is a point in time when they seek comfort and a sense of security through illicit activities (Catford, 2001).

#### 1.1.4 Adolescents and Culture

Even though adolescents in different parts of the world can be the same in some respects, for example, adolescents everywhere around the world go through a period of 'storm and stress' and undergo similar developmental stages, they can be different due to their culture. Culture is acknowledged as one of the factors that can make adolescents across the globe different from one another (Mead, 1928; Schegel and Barry, 1991).

Adolescents in different country may differ according to their culture comprising specific systems of beliefs, values, languages, behaviours and human-made aspects of the physical environment. The systems vary from one group to another when a society may adopt different sets of arrangements, thus cultures differ between different peoples of the world.

<http://www.wsu.edu:8001/vcwsu/commons/topics/culture/culture-definition.html>).

Culture is a broad concept. It has many components and according to anthropologists, culture is central to humanity and can be classified into three categories. Culture is firstly defined as a way of life typical of a group, secondly as a system of symbols, meanings and cognitive schemata transmitted through symbolic codes and thirdly as a set of adaptive strategies for survival related to ecology and resources. Culture also includes all institutionalised ways and the implicit cultural beliefs, norms, values and premises within a society that govern conduct as well (Altman, 1980). In a culture, random assemblages occur not only of behaviours but also patterns, beliefs and all other products of a particular group of people that are passed on from generation to generation.

For adolescents, a two-way relationship exists between them and culture. Cross cultural research has also shown that differences in culture can also have an effect on adolescents' physical, cognitive and socio-emotional development. Culture comprises different components, for example, cultural values and societal systems which are interrelated with one another. Individual adolescents' development from different cultural backgrounds can be affected through the interceding effects of proximal social contexts, their peers and family, who have varying cultural values and societal systems. It influences the adolescent and contributes to the stability of a

society. Cultural arrangements of adolescents within their society are influenced by physical environmental factors.

The culture of the adolescent can also be affected by his interactions with other cultural or ethnic groups (Krech, Crutchfield and Egerton, 1962). The society associated with the adolescent comprises arrangements for solving problems among society members such as those linked to biological needs. On the other hand, the adolescent can also affect his culture and lead to social change.

In order to have an understanding of adolescents, it is appropriate to comprehend their developmental theories.

### **1.1.5 Adolescent Development Theories**

In general, there are three main developmental theories that are relevant to adolescents. These are psycho-social theory, space theory and Brofenbrenner's ecological theory. Scholars use theoretical approaches in understanding adolescent development (Coleman, 1980). One of the approach is psychoanalytic which examines adolescents in relation to their maturation, physical and psychological development and individuation. The other approach is sociological focuses on the causes of an adolescent's transition into adulthood in terms of social contexts, role development and conflicts and the relative influence of socialising agents in addition to acquisition of new roles and adaptation of new skills. Both approaches share a similar notion that adolescence can be a stressful period for a person. Thus, the study of adolescence involves the interplay of psychoanalytic, socio-cultural, and somatic factors which can vary from person to person (Glueck, 1959).

#### **1.1.5.1 Psycho-social theory**

Another theory which is popularized by Erik Erikson (1968) is the psycho-social theory of adolescence which relates to the social changes of humans. Erikson categorises human development into 8 stages and each stage represents a major psychological crisis that one has to face throughout one's life. Upon entering early adolescence at the age of ten, a person begins to move from a parent-centred world to a peer-centred world where peers and friends become the major social influence for one

who is just beginning to enter the stage of young adolescence. The adolescent begins to be concerned about the themes of identity versus confusion. At this stage, adolescents are primarily searching to find out who they are. Becoming independent and having peer acceptance become the central themes during this stage. Adolescents in the early phases of this stage become confused while trying to develop a sense of independence and at the same time are more aware of themselves and their community. At this stage too, adolescents face numerous conflicts that will give them experience and new knowledge of life. Thus, the formation of a strong and coherent sense of identity is a crucial developmental stage in adolescence requiring processes of 'individuation' and 'social relatedness'. The dual processes can be achieved through the exploration of options and alternatives (Shaw, 1995). However, scholars agree that most individuals undergo a form of development that is unique whereby no two adolescents can have a similar form of development even though they are in the same surroundings. This opinion supports Paterson (1989) who stated that adolescents will face and tackle problems in different ways.

During adolescence, the social environments are found to be of importance because adolescents not only have to contend with expanding social and financial but demands also academic ones. Adolescents who experience difficulty in their social interactions and are exposed to adverse environmental conditions can face the risk of emotional problems (Felner and Felner, 1989). For every individual, his or her social, family and work relationships can provide a framework for emotional, security and development well being. Relationships within the family and beyond may result in experiences of pleasure and enjoyment as well as having to face difficult times resulting from unhappiness, anger and anxiety. A person, in his childhood, is attached closely to parents and this continues right through adolescence and the family remains the most powerful primary socialization agent.

Concurrently, adolescence also sees the development of the relationships with peers gaining more importance as adolescents move towards having more significant responsibility but slowly shift away from their parents' control (Jackson, 1993). Peers come second after family as a socialising agent. Adolescence involves changes in social development and the nature of peer relationships. Peers turn out to be



significant individuals in adolescents' lives because they can expose them to a range of experiences, institutions and concepts through their activities and sociometric make up that parents and relatives do not (Furnham, 1991). During adolescence, peer relationships become more prominent and intimate as more time is spent with their friends rather than with their family. However, parents will normally continue to become important sources of support for the adolescents especially when the adolescents face times of conflict, stress and tension. The degree to which an adolescent is capable of handling the multiple challenges associated with this stage is linked to the stresses and supports experienced during early adolescence. Social environments are important as they provide opportunities for social interaction to take place but they may affect the people within the environment.

#### **1.1.5.2 Space Theory**

Another important theory in adolescents is the space theory which was introduced by Kurt Lewin (1951). The theory stated that the adolescent stage is also known as the 'storm and stress stage'. Lewin believes adolescence lies in two worlds. The adolescents' experience in their childhood may not be sufficient for them to use in encountering problems in the adolescence stage. The behaviour of the adolescent is formed through interaction between the environmental and personal individual factors. The environmental factors comprise the family and family relationship, peers, neighbourhood relationships and the adolescent social environment. The individual factor refers to an adolescent's mental ability, talent, individual interests, values, sexuality and position in the family. These factors are said to form the living spaces of mankind. Within this living space, the individual classifications and their relationship with others will determine the type of person they would become, whether to be someone with a positive or negative attitude towards his community. Lewin's space theory complements Urie Bronfenbrenner's ecological theory which also links adolescents to the environment (Lewin, 1951; Bronfenbrenner, 1979).

### **1.1.5.3 Ecological theory, structure of the environment and the adolescent**

Scholars have defined environment in many ways and one which is most appropriate for this research is that of Bronfenbrenner (1979). Bronfenbrenner's theory is also known as the ecological theory that looks at a child's development within the context of the system of relationships that form his or her environment. His theory defines complex "layers" of environment, each having an effect on a human's development. Urie Bronfenbrenner's ecological theory (1979) indicates that human development is linked to four environmental systems, namely, the microsystem, mesosystem, exosystem and macrosystem. (See Figure 1.1.2). Earlier in his research, Bronfenbrenner assumed that developing people are influenced by their natural environment which he defined as nested structures with the person located in the centre and surrounded by layers of environmental systems, starting with the immediate settings, the family to the more remote context of culture.

According to Bronfenbrenner, the environmental systems form contexts of development. The interaction between layers in the adolescents' maturing biology, their immediate family and community environment, and the societal landscape stimulate and manoeuvre their development. There are changes or conflict in any one layer which will permeate the other layers. In order to have some understanding of the adolescents' development we must look at their immediate environment and the interaction of the larger environment as well.

The microsystem becomes the immediate surroundings or 'landscape' that bring about activities and interactions for a person. For the adolescents, their microsystems can be dynamic contexts in which each person influences and is influenced by all the other persons in the system who may be his family, his peers in his neighbourhood and school or the youth groups. The second environmental layer, the mesosystem, refers to the connections or interrelationships among the microsystems of schools, homes and peer groups. Bronfenbrenner believes that young people who have good relationships with parents are especially inclined to be accepted by their peers and to enjoy close, supportive friendships during childhood and adolescence (Gavin & Furman, 1996).

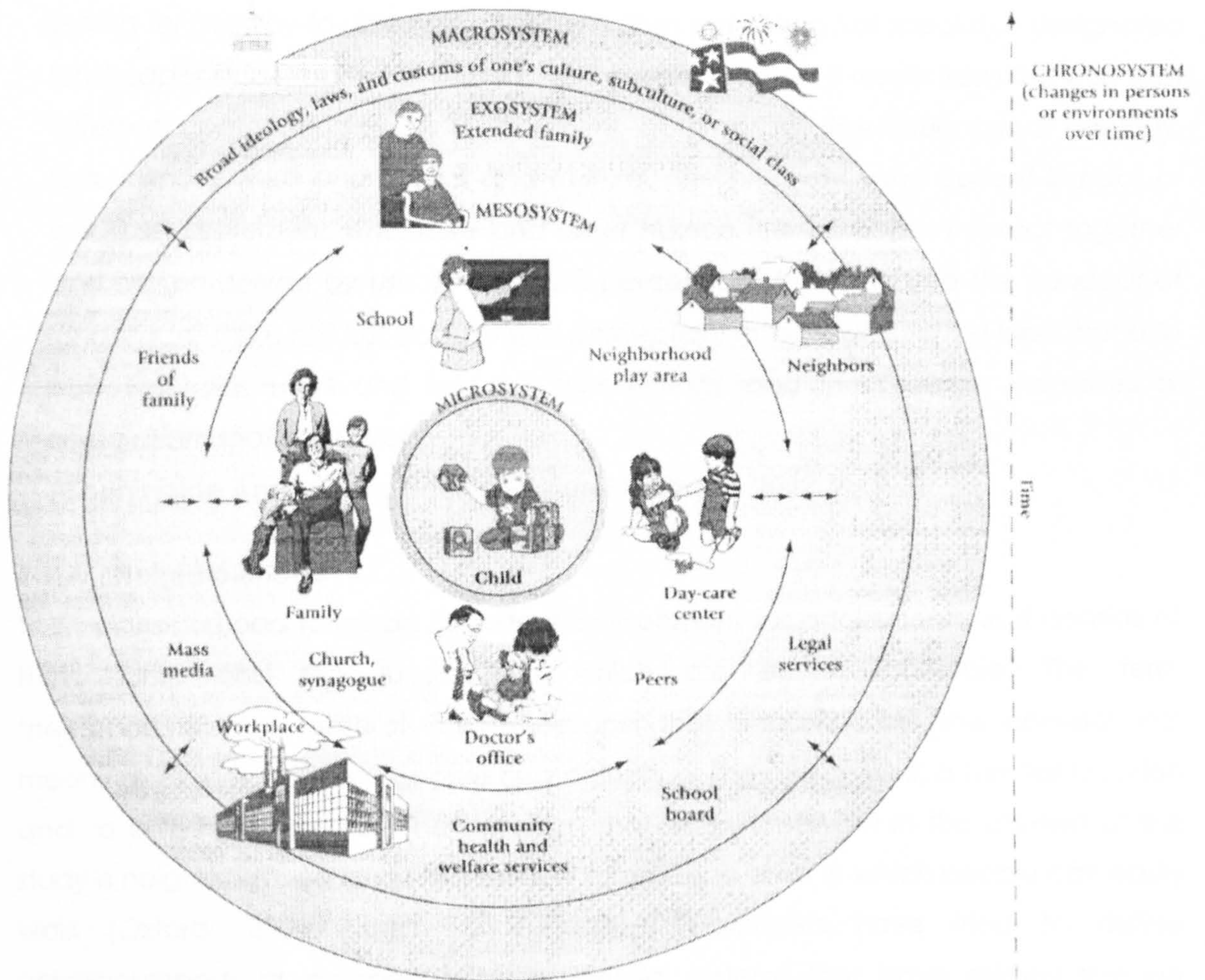


Figure 1.1.2 : Urie Bronfenbrenner's ecological theory

Source: Bronfenbrenner (1979)

### 1.1.6 Landscape, environment and place

In general, the term landscape refers to the outdoors which is related to the environment but the term is difficult to define due to its subjectivity. Appleton (1990) believes that landscape is an environment which is perceived visually and Bourassa (1991) links landscape to aesthetic experiences while Laurie (1986) defines landscape as reflections of systems- the dynamic, natural and social. For Relph (1976), a place can be a landscape. The definition conceived by the Countryside Agency and Scottish Natural Heritage seems to define landscape in a more integrated manner.

*Landscape is about the relationship between people and place. It provides the setting for our day-to-day lives. The term does not mean just special or designated landscapes and it does not apply to the countryside(...). It results from the way that different components of our environment- both natural (the influences of geology, soils, climate, flora and fauna) and cultural (the historical and current impact of land use, settlement, enclosure and other human interventions)- interact together and are perceived by us (..). People's perceptions turn land into the concept of landscape. This is not just about visual perception, or how we see the land, but also how we hear, smell and feel our surroundings, and the feelings, memories or associations that they evoke.*

**(Countryside Agency and Scottish Natural Heritage, 2002, Pg.2-3)**

### **1.1.7 Neighbourhood**

The neighbourhood forms an important environment for adolescents as it consists of their home and the surroundings which are easily accessible. The term 'neighbourhood' is part of the landscape that encompasses the conventional meanings of 'neighbours', 'people of a district', or the district itself, a familiar location and a unifying character. The definition that is most relevant in the context of this study is neighbourhood as a residential or mixed used area in which people can easily walk (Oxford, 2004; Hugh Barton, 2000). Sociologists have tried to define neighbourhoods as comprehensive residential systems that have existed through history and their physical traces can be found in ancient cities. Neighbourhoods are not only associated with their physical entities but also social characteristics (Madanipour, 1994).

The understanding of a neighbourhood evolves through the various concepts posed by theorists. (See Table 1.1a). A neighbourhood is connected to the people living within it in a distinctive district and includes the relationships between the residents, formed through their contacts with one another and the place where they stay. As there is no single exact definition of neighbourhood, a researcher normally chooses a certain dimension to define neighbourhood. Reference to neighbourhood is made through the community, district, ward and quarter (Gharai, 1999). A neighbourhood is understood as being a geographical term referring to a distinct part, of a town or city.

It can be differentiated from other neighbourhoods through housing homogeneity and the existence of certain boundaries in a particular area (Mann, 1970). Residents within a neighbourhood are provided with services and opportunities to form friendships with other people. That is why a neighbourhood has both physical and social dimensions which involve the people living within a district and their relationships with other people within the same neighbourhood area.

From the sociological point of view, the study of neighbourhood is focused on its localised social structure and people's interactions. Meanwhile, designers, planners and geographers initially depict a neighbourhood by only the demarcation created by boundaries and surrounding areas, thus portraying an understanding of neighbourhood as referring only to its physical components such as the residential units.

A more definite description of a neighbourhood is furnished in the works of Robert E. Park and E.W. Burgess (Park, 1984). According to them, the physical features of a neighbourhood consist of land use, street patterns, density, natural boundaries, housing units and the amount of open spaces. In 1915, Robert E. Park introduced the idea of neighbourhood as an ecological concept with planning limitations. At one point of time, the residents of a neighbourhood rightfully are the ones who determine the changes in the neighbourhood contending to their aspirations, values and goals. Milton Kotler's (1969) definition of neighbourhood as being a political settlement of a small territory with associations whose absolute property is its capacity for deliberate democracy" gives an overall definition that relates to the residents of the neighbourhood. It also provides a useful basic definition for designers to refer to when further changes in the quality of a neighbourhood need to be made. Amerigo (1997) and Rossi (1989) also added that house and neighbourhood are studied from the physical aspects that relate to equipment and services and the social aspects that refer to social networks established within the areas in the neighbourhood.

**Table 1.1a: Evolution of the definition of neighbourhood**

<b>Geographers, Planners Designers</b>	<b>Concept and Ideas of a Neighbourhood</b>	<b>Components of Neighbourhood according to the concept or ideas</b>
Robert E.Park and E.W. Burgess	A neighbourhood is made up of physical features.	Land use, density, street patterns, natural boundaries, condition of housing units, amount of open spaces
Robert E.Park	An ecological concept with planning implications	
Clarence Stein, Walter Gropius, LeCorbusier and Frank Lloyd Wright	A neighbourhood has desirable features in terms of 1. accessibility 2. focal point 3. safety	1. A neighbourhood focal point, for example, the existence of a school with a recreation area, a park 2. Peripheral access roads 3. Safe residential looped streets and CUL DE SACS 4. Homes facing or bordering park and recreational spaces
Social planners and sociologists.	Neighbourhood with social dimensions but the physical dimensions are taken for granted.	Symbolic and cultural aspects, shared activities and experiences, common values and loyalties.
<b>After World War 2</b>		
Milton Kotler	"Neighbourhood is a political settlement of small territory and familiar associations whose absolute property is its capacity for deliberate democracy"	Neighbourhood boundaries are not fixed. It varies from person to person depending on life cycle, ethnicity and personal preference.

### 1.1.8 Evolution of neighbourhood concept

Since the 19<sup>th</sup> century, neighbourhoods have been perceived as an urban unit and residents' needs and the conditions of each period became the origin of neighbourhood formation over time. As Rossi points out, residential areas used to evolve around cities. As modern urban environments face numerous problems, the neighbourhood idea was introduced as a means of responding to the problem. In the discussion of the concept of neighbourhood, the physical entity and social structure are used. The neighbourhood concept is viewed as an added value that is focused as a home of the community supporting domestic functions or activities (Mumford, 1954).

On the other hand, Jacobs (1961) sees that neighbourhood is capable of restoring urban life, but insists that the residents should be empowered to have their say in improving the neighbourhood and she does not agree that neighbourhood should be planned. Corbusier (1973) insists that neighbourhood should be able to contribute towards the well being of the residents through better living environments, mainly by better health standards and the provision of physical comfort.

Neighbourhoods should act as an urban unit supporting social interaction among the people. Turner (1976) and Fichter (1972) highlight that the approach of the design of a neighbourhood with its social commitment should arise from residents' communal action in participation. This idea is supported and adopted by urban design professionals in designing a better living environment for the inhabitant (Hester, 1984; Hester, 1990). When reviewing neighbourhood from the point of social effectiveness, the physical design of the neighbourhood is expected to generate social activities among the community within a certain neighbourhood.

When examining the qualitative expression of neighbourhood, expressions for order, identity and meaning act as the components used in the definitions. Neighbourhood is also used to express relationships between residents and their immediate environment. Duany and Plater-Zyberk (1991) introduce neighbourhood from the perspectives of urban lifestyles which sees the importance of a place, a social group and activities in the place that create meaning for a certain neighbourhood. The idea of sustainability in a neighbourhood has been an additional concept in recent years

that see the neighbourhood concept as being that which supports not only social and physical but also ecological and economic aspects.

Neighbourhoods possess a physical identity through characters which comprise building groups, streets, public spaces, landscapes, natural and artificial and specific areas such as the community area, the local shopping centre or an important public building (NSW Dept. of Infrastructure, Planning and Natural Resources, 2005; [www.dipr.nsw.gov.au](http://www.dipr.nsw.gov.au))

### **1.1.9 Open spaces**

Open space is defined differently by authors and thinkers. Gold (1980) defines open space as land and water in an urban area that is not covered by buildings. He added that open space can be any undeveloped land within an urban area. However, Tankel's (1963) definition of open space includes not only land and water but also the space and light above the land and water. Gehl (1987) defines open space according to the users' view as a space that accommodates different types of activities which are necessary or optional as well as social activities. Necessary activities are those that need to be done such as waiting for a taxi, buying groceries at the local shop or going to school or work within any physical environment. Optional activities are those that people choose whether to do or not depending on the conditions of the weather or setting of a place such as strolling in the park, sitting or standing. Social activities are those that involve another person or persons and the nature of activities includes those of necessary and optional activities such as walking and chatting in a park with a friend or family member.

### **1.1.10 Public spaces**

Public spaces are defined by Steven Carr (1992) as being responsive, democratic and meaningful places that protect the rights of user groups. Meanwhile, Madanipour (1999) defined public space as those areas within towns, cities and the countryside that are physically accessible to everyone, where strangers and citizens can enter with few restrictions. Some have sought to expand the concept of public space to mean 'any place that people use when not at work or at home' (Shonfield, 1998)



Public spaces are accessible to all groups and provide for freedom of action but also for temporary claim and ownership and a public space can be changed by public action, because it is owned by all. In public spaces, people can learn to live together.

Walzer (1986) suggests that:

*Public space is space where we share with strangers, people who aren't our relatives, friends or work associates. It is space for politics, religion, commerce, sport; space for peaceful coexistence and impersonal encounter. Its character expresses and also conditions our public life, civic culture and everyday discourse.*

This chapter will also highlight the current issues and some review on studies relevant to this research.

## **1.2 Current issues on adolescents and significance of study**

The 21<sup>st</sup> century sees urbanisation being improved in terms of the provision of better structure in societies, human settlements, economies and human interrelationships. For cities to be attractive for living, work, and play, they should be able to provide for basic human needs with an emphasis on convenience and conducive settings for people from all walks of life. Hence they will help to ensure that urbanites enjoy living in a city when the city is lively, livable and efficient. Among the many groups of people living within a city, the younger generation of adolescents make up a substantial percentage of the human population in many countries. They form one of the major social groups identified as being an important component of society. They are also acknowledged as the citizens of today and tomorrow. The adolescents are deemed as an important asset to every country. The differences in size, gender, ethnicity, age, race, culture, ability and health make every adolescent a unique individual. These differences can make the adolescents a distinctive social group as well.

Adolescents are also children because UNICEF (1989) stated that children are those who are 18 years and below. As 'older children', adolescents have their own rights and freedom in the environment whereby they are also entitled to special attention in

terms of care, assistance and good living to enable them to develop into individuals who can assume responsibilities within their own communities (UNICEF, 1989; Hart, 1997; Matthews; 2001). During the process of growing up, adolescents undergo a gradual transformation from being children into adults and they achieve self maturity not only through biological but also psychological and social changes (Santrock, 2001; Rice, 2004). To enable them to undergo the adolescent phase smoothly, adolescents need both social and physical support around them. This support should come from their social network, comprising their family, friends and social community and physical support through the physical environment from around them.

Many studies on adolescents are based on issues faced by the adolescents and they are common for many adolescents across the globe.

### **1.2.1 Adolescents: Developmental needs and the environment**

The three main developmental theories relating to adolescents indicate that connections exist between the environment with its physical and social resources and the adolescents' needs in growing up. Bronfenbrenner (1998) has highlighted in his theory the importance of the environment to the adolescents because they need a social and physical environment to undergo development from the stage of being a young child to an adult. Formation of personality, values and way of life are affected by adolescents interaction with the environment (Bronfenbrenner, 1998; Santrock, 2004) and what existed within the environment is imperative as it will determine the affordances of the environment to support social and physical activities. The concept of affordances (Gibson, 1979) imparts a foundation for understanding how the physical and the social attributes mutually constitute each other (Gaver, 1996; Norman, 1988). Gibson's theory claims that the characteristics of an environment can influence patterns of interaction to the extent that they afford proximity, privacy, and or legitimacy. The theory also predicts that formal and informal interactions can take place when proximity, privacy, and legitimacy are all afforded within an environment. Proximity affords a chance for encounters and privacy and legitimacy a chance for transforming these encounters into interactions and discussions.

Studies of children and adolescents and their environment have attracted scholars from a broad spectrum including geography, psychology, urban planning and landscape architecture. Person-environment research reveals the effect of the environment on human beings through two main types of studies: environmental-use studies and environmental-attitude studies. Environmental-use studies are undertaken with the aims of understanding the socio-spatial movement of children of various ages ranging from infants to adolescents. Some of the studies are related to play spaces and adolescents (Cooper Marcus, 1974; Francis, 1984/1985; Hart, 1979; Lynch, 1977; Moore, 1986; Moore and Young, 1978; Owens, 1994; Wood; 1993). Some studies attempted to understand adolescents' territorial range, the distance the adolescents and children are willing to travel from home to play or go for their activities (Hart, 1979; Matthews, 1987). Wayfinding (Matthews, 1984) and environmental information (Bronfenbrenner, 1979) are two other research areas within environmental use studies.

On the other hand, environmental-attitude studies gave more emphasis to landscape preferences towards people's everyday environments such as favourite places, neighbourhoods, homes and schools. Such research are aimed at providing information in understanding attitudes towards living, playing and learning spaces (Hart, 1979; Hester, 1979; Korpela, 1992; Ladd, 1975; Malinowski and Thurber, 1996; Moore, 1986; Tuan, 1974). In one such study by Tuan (1974), he discussed the view that the environment is said to have a link to the emotions. He deduced that emotion in human beings could be expressed and depicted in things and places. One such places is the outdoor landscape which is said to be one of the environments with a link to the emotions. Other research indicates that environments can offer opportunities to explore things. For example, the findings of a study involving adolescents with depressed attitudes, showed that they searched for comfort and happiness to explore things in the environment. Positive adolescents who are content with their environment are more likely to turn to more social activities (Malinowski, Jon C. and Thurber, Christopher A., 1999). Adolescents' social activities are those which they do with people within their social networks such as their peers, family and community. Elements that form part of a landscape can support social and psychological development as well as provide satisfaction to all users including adolescents (Owens, 1994).

Even though the environment is said to be important for adolescents, much research carried out within different disciplines concurs with the general opinion that adolescents are still deprived of an environment that should rightfully be designed and provided in line with what they need.

### **1.2.2 The public's perception of adolescents globally**

Compared to younger children and adolescents of the past, today's adolescents face more challenges in undergoing the process of growing up. Many adults consider the adolescents a difficult group in society. Musgrove (1964) once wrote that having invented the adolescent, the society faced two major problems on how and where to accommodate the adolescent in the social structure and the issue of how to make them behave according to the appropriate manner that the society wanted them to. Therefore, the public's negative perception of adolescent is present for a long time.

For centuries, the decade of adolescence, from puberty to early adulthood, has been viewed as risky and problematic. There was continuing concern for centuries of adolescence being conceived as the troublesome years of man's life. Aristotle thought that adolescents of his time were impulsive. They were prone to excess, exaggeration, and lack self-restraint. Meanwhile, Plato characterized the adolescents of his era as argumentative and easily excitable. Throughout the centuries, the adolescents have been persistently linked to problem behaviour. Social scientists believe that the magnitude of contemporary problems among adolescents suggests that there is an inherent risk in being an adolescent and a basic lack of control during adolescence can lead to them have a high risk profile (Gottfredson, 1994). This is a global issue surrounding adolescents in many other countries such as the United States, the United Kingdom and Australia.

The increase in juvenile delinquency among adolescents in the United States alone has caused a moral alarm among the public leading to measures to curb the freedom of adolescents seen as necessary to control the problem. Lucas (1998) pointed out that the United States of America's teen phobia exist dues to the rise in juvenile delinquency. This problem caused widespread moral panic and resulted in

the imposition of stricter law and order on adolescents. In addition, the ability of urban adolescents to access green spaces has also decreased over time due to increased restrictions such as housing authority police enforcing anti play rules on public housing grounds, locking parking areas as play areas, and police prohibition on street stickball games for fear the broom handles would be used as weapons (Gaster 1991). Valentine (1996) further added that some adults articulated the need for greater spatial controls over adolescents and delimited their spatial freedom due to the overwhelmingly negative portrayal of adolescents by the media. One of the steps taken was to remove them from public spaces. As a result, the adolescents' geographies become limited and they assume the role of being 'invisible' citizens (Breitbart, 1998). Despite their association with several social issues, the adolescents are also a group with the most free time compared to the other age groups. Thus, steps imposed by the authorities and the public to restrict their movement can frustrate them further and form stress in their everyday lives (Larson, 2000; Zill, 1995).

To support the statement that adolescents have a lot of free time, findings from time use studies indicate that American children and adolescents alone were reported to spend more than half of their waking hours in leisure activities and a substantial amount of their time spent everyday at home (Larson and Verma, 1999). Much of this time was spent in either unstructured peer focused activities or watching television. Most of the adolescents' activities took place within their home and its immediate environment.

Thus, the immediate environment becomes essential as a place to support the activities of the adolescents during their free time during their out of school hours. Provision of a good outdoor environment to support adolescents' activities may be relevant to providing a conducive environment for their development because policy advocates and developmental scientists suggest that positive development and the emergence of developmental problems among adolescents could be prevented if their leisure time were used for quality out of school activities and programmes (Eccles & Gootman, 2002).

### 1.2.3 Adolescents and the city

Research also identified adolescents as being one of the frustrated population groups in relation to public spaces especially when they are not designed for what they like or prefer (Gans 1967, Popenoe, 1977). Currently, with more adolescents in urban areas living in small houses with limited living space, no doubt, the outdoor landscape becomes increasingly important as their immediate environment. If some thought were given to the design of spaces in the outdoor environment, it would not only be beneficial for adolescents but would also be conducive for the other groups of users. For some researchers, discovering and understanding how adolescents in cities spend their time and move around their landscape has been their research focus particularly for some important studies relating to young people.

Through Florence Ladd's observations (1975), the adolescents' interests were often denied both in terms of the interaction and resources they experienced in many public places. Thirty years ago, an important study pioneered by Kevin Lynch in 1977, 'The Growing Up in Cities Project' provided the impetus for research on children and the environment. Kevin Lynch (1977), who is an urban designer, became one of the researchers of his time, together with scholars from the disciplines of ecological and environmental psychology, such as David Canter, Leanne Rivlin and Harold Proshanky, who looked at the environment beyond its physical entities. His research identified the ways children and adolescents perceived and used their environment.

Kevin Lynch's studies involving adolescents perceived the environment as a functional whole which had in it various physical and social entities. The physical entity features do not stand on their own but have their own cultural meaning and they can form 'places' which support human social behaviours. Places are spaces where activities take place depending on the resources within them that support the activities. When Lynch carried out his first Growing Up in Cities study in the 1970's in four cities around the world, he explored children's environment within urban settings and the findings provided information about how young children and adolescents used their time, identified their activities around the city particularly in their neighbourhood spaces and their social network. The findings not only revealed some of the young people's perceptions of their city environment in their everyday lives but highlighted some of

their major deprived needs. In summary, Lynch's study found the childrens' and adolescents' needs towards their environment were alienated and marginalised and these conditions have persisted up to this day as found when the study was replicated in the 1990's.

The findings from the 1990's Growing Up in Cities Studies did not change much. This time, researchers from different disciplines collaborated and the number of study areas increased. Apart from the United States of America, the United Kingdom and Australia, the study was carried out in some developing countries such as Argentina, India, South Africa and Poland. The findings from these studies undertaken globally, collectively indicated that today's societies still do not provide due consideration to the needs of adolescents in most decisions relating to their environmental and social needs (Chawla, 2002).

#### **1.2.4 Previous and current research on adolescents on Malaysia**

While some research in the West has started to focus on adolescents' use of public open spaces, many of the previous studies about Malaysian adolescents are still directed to issues relating to adolescents' health and social problems such as drug abuse, alcoholism, depression, parental relationships, peer relationships, larger group situations (Lee, 2002; Kumpulan Anti Dadah, 1995) and related issues.

Rapid development and the more recent emphasis on industrialization within urban areas in Malaysia has caused the migration of more people into the cities and created a demand for more housing developments (Seventh Malaysian Plan, 1996). This has had an effect on the landscape and it is crucial to take into consideration the consequences of this change on the general public, which includes adolescents. For every new housing area, the developer has to consider what kind of basic facilities or amenities the project will require. What sort of environmental and neighbourhood open spaces are needed by the future residents should also be considered in order to encourage the integration of the residents into community life. Even though improved planning policies are being formulated to address the needs of residents at large in the macro level, adolescents are still a group that is often left out.

### **1.2.5 Urban Open Space Planning- Provision for Adolescents in Malaysian Cities**

Creating urban open spaces with settings that are conducive, livable and functional has become the target of most Malaysian planners and environmental designers. Of late, more users are concerned over the quality of the environment and the way these spaces can be used and be beneficial for various activities (Lee, 2002). However, Urban Open Space Planning in Malaysia, which is currently provided by the Malaysian Department of Town and Country Planning through the Town and Country Act 1955 (Act 9333) has not been able to provide enough open spaces for the general public. Even though the Open Space Planning under the Town and Country Act 1955 (Act 9333) is being monitored from time to time, implementation is still weak and poorly planned considering the current status of insufficient provision of open spaces within the cities.

Despite having the Town and Country Planning Act 1995 which was supposed to ensure the provision of adequate open spaces and natural resources, there is a continuous loss of open spaces through the conversion and development of designated open spaces into other land use. The ability of developers to get the reserve land for open spaces converted to other land use is due to the weakness of implementation of the Town and Country Act 1995 (Act 9333) which will be discussed in Chapter 4. Furthermore, provision of open spaces is only considered as a social commitment which is provided minimally without considering its value in terms of the physical and social well being of the general public. As a result, even though it is compulsory for new developments to provide open spaces to get a Certificate of Fitness (CFO) for their projects, it is only provided in the form of a playground for small children, under the age of 12. Those above the age of 12 are clearly excluded. The CFO is a certificate to verify the status of a project as being ready to be occupied. Apart from the problem of the lack of open spaces, poor maintenance, neglected and unsafe play spaces make the spaces unattractive to use.

### **1.2.6 Physical Activity and obesity among Malaysian adolescents**

Research on health has found important facts regarding the lack of physical activity and obesity among Malaysian adolescents. Even though Malaysia is fast gaining the status of a more developed country, the health of the people within urban areas is



deteriorating due to the problem of obesity. Like adults, the young people of Malaysia are also facing the problem of maintaining the ideal weight recommended by the Health Authorities (Malaysian Health Authorities, 2005). In many Asian countries, one in every five children in urban areas is now overweight (Asia International Food Centre, 2005). Apart from changes in diet, lack of physical activity has also been blamed for the increase in obesity among young people (of whom one group are adolescents). Previous studies have reported an increase in obesity among Malaysians of all ages up to 6% (2000) from a mere 1% in 1997 (Ismail MN, Vickneswary, 2000). Other studies highlighted the very low levels of physical activity (PPSEWA, 1997) among young Malaysian adults, who, even, in their twenties are gaining weight at a substantial rate. A recent WHO report (WHO, 2000) noted that maintaining a good level of physical activity would help to reduce obesity among young Malaysian people. The need for physical activity is supported by recommendations forwarded by Health authorities internationally. One such recommendation is made by the Canadian Task Force on Preventive Health Care, stating the benefits of regular practice of moderate physical activity for the maintenance of a healthy body weight (Canadian Task Force, 1992). Recent evidence has also implicated the current everyday activity of television viewing as one of the causes of obesity in children and adolescents in the Phillipines (Dietz, 1991). Recommendations on the length of time needed for daily physical activity are given in developed countries such as the United States of America. According to the United States National Association for Sport and Physical Education, adolescents and children need at least 60 minutes of physical activity a day for periods of ten to fifteen minutes (Asia Food Institute Centre, 2005).

In the Malaysian context, adolescents in schools are only subject to compulsory physical exercise of 1.5 to 2.5 hours per week. Those of ages twelve and below are provided a mere 1.5 hours of physical education a week while those in secondary school, ranging from ages 13 to 17, are provided only 2.5 hours of physical education (Johor Department of Education, 2005). Whether the Malaysian adolescents' limited time for physical activities in school can be compensated for by the activities they undertake during their after school hours has yet to be studied.

Some research in the West reveals the needs felt by adolescents in the environment and identifies some of the important key points in achieving the goal in the studies of

adolescents and public spaces (Owens, 1993). Currently, Malaysia is still facing a lack of studies relating to adolescent's use of urban public spaces. Thus providing opportunities for researchers to explore the issues of Malaysian adolescents' use of urban spaces, particularly in housing areas which form part of their outdoor environment that can support their physical and social development and activities (Lee, 2002; Moidin, 2003; Syed Ali, 2003). This research acknowledges the importance of urban spaces and facilities for adolescents within urban housing and neighbourhoods in Malaysia and its relevance to adolescents' needs in their everyday lives. This research will attempt to understand Malaysian adolescents' current life by examining how they use their time and identifying their daily weekday and weekend activities, their favourite or valued places, the types of open spaces and facilities they use and need. The line of enquiry in this research will also attempt to identify the attributes that the adolescents associate or link to what they want in terms of facilities and spaces. These findings are the first of their kind to provide information on Malaysian adolescents' needs in relation to urban public spaces and facilities particularly in neighbourhood areas that could be used as one of the references to assist designers and the major policy makers in future design considerations relating to young Malaysian adolescents' environments.

### **1.3 Research questions**

The discussions of the issues pertaining to contextual open space planning and use of outdoor environments in Johor Bahru have managed to guide the research in its direction and focus, that is to understand the adolescents' experiences of their urban neighbourhood environment.

This research focuses on Malaysian adolescents' environment. The research problems and questions are outlined to further narrow down the focus of the study to a manageable time frame and resources. Research questions are crucial in determining the direction of the research but during the process, allowance is given on flexibility in adjusting them according to unforeseen circumstances. The clear and precise nature of the research questions affects the suitability of the methodological approaches in dictating the research methods used (Silvermann, 1993).

This research aims to understand Malaysian adolescents, the aspects of their time use, their activities, the environment and the attributes that Malaysian adolescents like in their current and ideal environments. The research enquiry starts by looking at current;

1. Local issues and problems focusing on adolescents and their environments; and
2. Existing theories and studies relating to adolescents and their environment.

The lack of understanding of adolescents' everyday life, including their movement and activity patterns within their outdoor environment, is an obstacle to understanding their physical and social needs in the provision of open space. In order to answer the research questions, the research undertakes data collection using surveys, time diaries and interviews. The qualitative approach was also chosen because the method could provide rich data by allowing the adolescents to voice their own opinions thereby enhancing an understanding of their latent issues. This knowledge is crucial to use for future changes in the environment to accommodate adolescents' needs. While much of the research on adolescents in other countries is positively shifting its paradigm to the inclusion of adolescents in the early stages of environmental design (Cooper; 1990; Malone; 1999), Malaysian researchers have yet to explore this particular research area and its methods. Even though this research aims to understand Malaysian adolescents in Johor Bahru and to gain an insight into their needs and ideas, this study has not been able to incorporate any rigorous adolescent participation methods due to time and financial constraints.

Even though, the authorities make the assumption that their planning policies have addressed the needs of most users, including the adolescents, this research will attempt to understand whether the spaces provided are appropriate for adolescents. The findings on the Johor Bahru adolescents' environmental ideas, experiences and what they want from their housing area, neighbourhood and the city will be able to provide indicators as to the aspects and issues that need some environmental considerations in the urban planning of open spaces within neighbourhood spaces.

The research questions are also based on the literature and theory in the further refinement of specific topics. As the research progressed, relevant concepts were developed and themes included based on the literature search. In the methodology

of this research, the establishing of the research questions was also linked to the research strategy adopted, data collection methods and analysis of the data. Socio-cultural aspects, which include factors of ethnic background, gender and age differences are considered because they may influence the findings of the study (Bryman and Burgess, 1999). The main research interest is identifying the adolescents' time use in their daily lives, their types of activities particularly their leisure patterns, and the resources within their existing housing and neighbourhood landscape. They were also asked about the types of settings of open spaces within their outdoor environment and which attributes should be considered to create such settings.

The research question in its broadest form concerns the adolescents' concepts, examining current and preferred activities in their home's outdoor environments and what the adolescents want in their housing area and neighbourhood.

The research questions formulated for this research are:

1. What do the Malaysian adolescents want or desire from urban housing and neighbourhood open spaces in relation to their social and physical needs?
2. How do Malaysian adolescents use public open spaces and does the present development of housing and neighbourhood spaces in the study area, Johor Bahru, Malaysia consider the needs of adolescents?
3. Does the urban open space planning in Malaysia address the needs of these adolescents in the planning and designing of urban housing neighbourhood spaces?

#### **1.4 Research Scope**

This research acknowledges that adolescents have needs which are often overlooked in the provision of urban space and facilities within the urban housing area and neighbourhood (Weinstein and David, 1987). This research has also attempted to understand what the local adolescents get from their urban housing and neighbourhood landscape by reviewing the current Malaysian policies and guidelines in the provision of urban housing neighbourhood spaces. It is related to what the adolescents' or teenagers' want from their outdoor environment linking current planning and design trends of neighbourhood spaces in housing areas, the perception and needs of the adolescents in neighbourhood spaces and what sort of

settings, places and activities they would need and enjoy. The research gradually draws an understanding of Johor Bahru Malaysian adolescents' current use of urban housing and neighbourhood spaces in relation to their preferred and ideal environment which can support their outdoor activities. It is hoped that the findings of this research can provide an insight into the needs of adolescents within an ethnically diversified Malaysian society.

## **1.5 Aims**

Within the literature context and research scope, the following aims are formulated:

1. To understand Johor Bahru adolescents' time use and how they use their out of school leisure time for their activities according to ethnic background, gender and age.
2. To understand what Malaysian adolescents want in terms of facilities and public spaces for their social and physical activities within the housing area, neighbourhood and the city.
3. To understand what types of places the Malaysian adolescents go to for their activities according to ethnic background, gender and age.
4. To identify the attributes the Malaysian adolescents consider as important for the facilities and public spaces they want in their housing area, neighbourhood and the city, Johor Bahru.

## **1.6 Objectives**

The following objectives of the research are formulated in order to achieve the aims:

1. To review the provisions of existing Malaysian government policies in relation to adolescents' needs and according to ethnic background, gender and age.
2. To identify Malaysian adolescents' activities and time use within their daily lives with specific reference to their use of open spaces within their housing area and neighbourhood in Johor Bahru.
3. To identify the places Malaysian adolescents in Johor Bahru go to, and those they like or value within the neighbourhood and the city of Johor Bahru.

4. To identify changes needed by the adolescents in Johor Bahru relating to their urban housing neighbourhood spaces.
5. To identify the attributes Malaysian adolescents assign to facilities and public spaces in their housing area and neighbourhood in Johor Bahru.
6. To discuss the potentials of integrating some of the findings of this study in the provision and upgrading of adolescents' landscape environment in Johor Bahru urban open space planning.

## **1.7 Thesis Structure**

There are a total of 10 chapters in this thesis. The structure chosen for this thesis will be conventional. The first two chapters forms the research literature review. The first chapter is the introductory chapter and being the first part of the literature review. The breakdown of the 10 chapters is summarised in Table 1.7a.

### ***Chapter 1***

Chapter 1 presents part of the literature review and context of this research as well as an overview of the research, outlining its context, current issues relating to adolescents and the environment, the research aims, objectives and the thesis structure. The first part of the literature review on adolescents explains the theoretical framework of the research – adolescence, adolescents' needs, culture, basic theories on adolescence, neighbourhood, neighbourhood open spaces and public spaces.

### ***Chapter 2***

Chapter 2 gives the literature review of previous studies on adolescents and their environmental preferences in relation to time use and urban spaces. Some literature on the benefits of having a good outdoor environment relevant to adolescents' well being will also be reviewed. There is also a review of methods used in studies relating to children and adolescents.

### ***Chapter 3***

Chapter 3 describes the methods used in the research.

The following chapters will then present the research findings and discussion according to thematic organisation.

**Table 1.7a : Research methods used and relevant chapters**

<b>Phase</b>	<b>Method</b>	
Contextual data collection	Literature review : Theoretical Framework  Exploratory surveys, meetings and interviews	<b>Chapter 1 :</b> Definitions and Theories <b>Chapter 2:</b> Previous studies on adolescents and the environment, benefits of open spaces and review of research tools used in research with young people. <b>Chapter 3: Methodology</b>
Substantive data collection	Interviews with landscape architects and officers from government agencies	<b>Chapter 3:</b> Methodology
Results	Survey Questionnaires: Respondents: 1. Adolescents (10-17 years old)	<b>Chapter 5, 6, 7, 8 and 9</b>
	Time Diaries: Adolescents (10-17 years old) (The time diaries were used to verify the information on time use in survey)	
	In-depth interviews with Adolescents (10-17 years old )	<b>Chapter 7, 8 and 9</b>
Conclusion	Discussion and Conclusion	<b>Chapter 10</b>

#### **Chapter 4**

Chapter 4 provides an overview of the study area, Johor Bahru. It examines the adolescents' environments in the context of open space provision in Malaysia. It

highlights the current provision in terms of policies and design considerations for open spaces within housing area and neighbourhood.

### **Chapter 5**

Chapter 5 will present and discuss the research findings on adolescents' time use and activities on a weekday and a weekend. It will also highlight their favourite activities.

### **Chapter 6**

This chapter will discuss the adolescents' favourite places and people they go out with within their housing areas and neighbourhoods.

### **Chapter 7**

Chapter 7 examines the adolescents' places in the city of Johor Bahru.

### **Chapter 8**

Chapter 8 presents findings on what the adolescents want in the housing area and neighbourhood.

### **Chapter 9**

Chapter 9 discusses the attributes assigned by the adolescents for the facilities and spaces which they want or desire in their housing area and neighbourhood.

### **Chapter 10**

#### **Discussion and conclusion**

The final chapter presents the conclusion of the study by readdressing and linking the initial issues, aims and objectives of the study to the findings. The chapter will also include some recommendations for the consideration of adolescents in future provision of more appropriate environments for adolescents in the planning and design of open spaces in the housing area and neighbourhood in Johor Bahru. This chapter concludes by providing future research direction by mentioning related research areas as an extension to the current research to further enhance or expand the pool of knowledge on environmental psychological research for Malaysian adolescents.

#### **Appendix**

Several appendixes that provide supplementary information for the main chapters are included in the study.



## **1.8 Summation**

This chapter has presented the first part of the literature review, describing in detail the research context and rationale which include issues, research questions and scope of study. In addition, the chapter presents some of the main definitions, key concepts and context of adolescent and their environment. This chapter has also highlighted the importance of understanding adolescents and their environment to meeting the challenge of providing an outdoor environment which is much needed by the adolescents for their physical and social needs. The following chapter will then present the second part of the literature review, focusing on the studies relating to adolescents and their outdoor environmental issues.

## **CHAPTER 2:**

# **Adolescents and their environmental experience in urban outdoor environment**

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### **2.0 Introduction**

Chapter 2 provides a review of the research findings drawn from various professional and academic sources on adolescents, their urban outdoor environment and the benefits of urban spaces for adolescents in order to highlight the significance of urban spaces for adolescents. The findings of the studies indicate that for adolescents the outdoors goes beyond being a place for physical and social activities. The chapter will also outline various methods of data collection focusing on environmental research and design involving adolescents.

The shift in the research paradigm of adolescents and their use of public spaces began when adolescents were identified as a group that was normally left out in the provision of public spaces in urban areas. Research interest in young people and the urban environment started late and were not given much focus until as late as the 1970's. The studies on adolescents-environment were initiated within two disciplines, geography and psychology in the mid 1970's when Tuan (1974) associated emotion and environment in his study using 8 to 16 year-old boys as respondents. His study gave us an indication that people do not go to places to do things but they could be connected to the place through their emotions. Tuan insisted that human beings could feel the emotions in the form of the expression and anchorage of things and places. Apart from uncovering connections between place and emotion, Tuan revealed that emotions might dramatically shape the way we view, use, and assess our everyday external environments. This applies to people of all ages including the adolescents.

Adolescent's experiences of outdoor environments are unique and the spaces they carve out for themselves need to be recognized because they play an important role in all of their geographies (Valentine, 1998). The interest in young people's geography

was partly triggered when the media gave an overwhelmingly negative portrayal of adolescents in terms of their presence and activities (Beattie, 2005; [www.actnow.com.au/Issues/Portray\\_of\\_young\\_people\\_by\\_the\\_media.aspx](http://www.actnow.com.au/Issues/Portray_of_young_people_by_the_media.aspx)). The adolescents were often associated with social problems and for this reason adults thought that removing young people from public space would be one way of tackling the problem. Hence, the adults assumed the need to articulate greater spatial controls over young people to control their socio-spatial presence in public spaces (Valentine, 1996). This resulted in the young people's geographies being reduced and they became 'invisible' citizens (Breitbart, 1998).

In general, studies of adolescents' interactions with the environment may be broadly classified into two categories, environmental use and environmental-attitude studies. The aim of environmental-use studies has generally been to understand the everyday socio-spatial movement of man's life from infancy through adolescence. Chronological age has been emphasized by most researchers as an independent variable (Amedeo, 1993; Cooper Marcus, 1992; Tuan, 1974). In environmental use studies, research looks at how children and adolescents use and experience the environment. On the other hand, environmental-attitude studies has a focus on the change caused by external environment on the psychological and even physiological well-being of adolescents such as identifying attitudes or personality differences which may affect environmental preferences using theories related to environmental psychology.

The following are some of the studies relating to young people and environment in the two categories. (See Table 2.0a). Environment is a word perceived differently by researchers from different disciplines. From the perspective of psychologists, people have some form of relationship with the environment. Psychologists normally refer to the environment of children and adolescents as being the people close to them such as their close friends, peers or people who care for them. On the other hand, professionals in the built environment such as urban designers, landscape architects and urban planners perceive the environment as external or outdoor spaces and the potentials and constraints belonging to places. When the research focus is on the built environment, then the research looks at how these external or outdoor spaces and places relate to the users or people and how they use the outdoor environment

(Carmona, 2003; Gans, 1968). Past research comprised studies on adolescents' use and experiences of the outdoor spaces found important data found on their time use, their preferred, valued and favourite places, their socio-spatial experience and identification of what they wanted from the environment. The following research draws upon some of this research. The following are some of the research.

**Table 2.0a: Studies of adolescents, children and the environment**

<b>Research Areas</b>	<b>Topic</b>	<b>Researchers</b>
<b>Environmental-use studies</b>	Territorial range of children's play and exploration	Coates & Brussard, 1974; Hart, 1979; Matthews, 1987
	Children's play spaces	Coates & Brussard, 1974; Cooper Marcus, 1974; Francis, 1984/1985; Hart, 1979; Lynch, 1977; Moore, 1986; Owens, 1994; Schiavo, 1988; Sobel, 1993; Weinstein & David, 1987
	Way finding	Gale, Golledge, Pellegrino, & Doherty, 1990; Golledge, Smith, Pellegrino, Matthews, 1984
	Acquisition of environmental information	Blaut, 1991; Bronfenbrenner, 1979; Golledge et al., 1985; Heft & Wohlwill, 1987; Matthews, 1984 Moore & Young, 1978
<b>Environmental effects</b>	Restorative or healing effect of natural environment	Dovey, 1990; Hartig, Mang, & Evans, 1991; Kaplan & Kaplan, 1989; Kaplan & Talbot, 1983; Korpela & Hartig, 1996; Ulrich, 1979; Ulrich et al., 1991

## **2.1 Studies relating to adolescents' time use**

Time use is another important source of information for researchers in helping them to understand people such as adolescents. There have been numerous studies relating to adolescents that adopted time use diaries as one of the research tools in data collection. Time use patterns become part of the information revealing something about how adolescents grow up. Researching adolescents' activities using time use data from time diaries and interviews managed to reveal the trend or pattern of adolescents' life (Swanbrow, 2002; Zuzanek, 2000) and time use data has been widely utilised to understand adolescents. Time use studies were mainly used to understand and get a detailed snapshot of the way the respondents spend their time

in a day, whether on a weekday or a weekend, and identify the main activities involved as well as the time they spend on each activity.

In the use of time diaries, the respondents are normally asked to fill out time diaries for two randomly selected days, one on a weekday and another during the weekend (Swanbrow, 2002; Zuzanek, 2000). Such studies of adolescents' identified activities in three specific domains; at home, in school and the outdoors of their daily lives. Time use studies also included studies involving adolescents from different backgrounds, measured along similar sets of variables, helping to pinpoint differences in the form and substance of adolescents' daily life. Previous studies using time use data have also been used to make comparisons of how adolescents in different countries use their time and the findings are found to vary according to countries and culture (NHK, 1992). The focus of the studies varied on linkages between time use and policy, school performance, community services and public spaces across different ethnic backgrounds, cultures, ages and genders to see whether there were any gender, age and cultural differences. Variations in time use were a result of differences in a person's culture, norms, gender and age. Through the time use method, adolescents' needs and preferences can also be identified by their use of free or discretionary time use. However, time outside of school cannot be considered as being totally 'free' because it is a product of a set of opportunities and constraints existing within their environment (National Institute, 2000).

The time use studies analysed how the respondents use their time in a day for certain activities such as those carried out at home and the outdoors as well as the nature of the activities, whether they were passive or active (Driskell, 2002). Their activities gave an implication as to whether their lifestyle was active or sedentary. In one of the studies that used time use diaries, conducted in the United States of America, findings revealed that American girls aged from 6 to 17 years-old were found to spend an average of six hours a week on play compared to 10 hours a week for boys. The girls spent less time than boys participating in sports. However, the girls spent two hours a week more than boys engaged in household work and in personal care. The girls spend almost an hour more a week studying. The American boys spend an hour more than girls each week watching television. The 12-17 year-old adolescents were found to spend an average of five hours on home computers and the Internet. The 15 to 17

year-olds spent seven hours less time watching television but more time on studying. The study on American time use found that younger adolescents spend less time on physical activity, almost two hours less on sports and outdoor activities. More time is spent on sedentary activities such as television, home computers, reading and doing nothing. Nevertheless, there was a steady reduction in the time spent sleeping and a strong increase in time spent visiting, socializing and studying out of school among the adolescents (Swanbrow, 2005).

In another study comparing Dutch and Canadian adolescents' time use, the data shows that adolescents aged 15 to 19; in the Netherlands spend about 20 minutes more per day attending school and doing school homework, and 10 minutes less on domestic work than their Canadian peers. The Canadian adolescents attending school have nearly an hour more free time per day than their peers in the Netherlands and spend time watching television, engaging in physical leisure and socializing with friends (Zuzanek, 2000).

## **2.2 Studies on Adolescents' Preferred and Valued Places**

Studies on places were another area that touched on adolescents and their preferred or valued places which were normally based on initial concepts of place. 'Place' is a concept that is so deeply ingrained in culture that it is difficult to give any straightforward definition of it. The meanings of place are drawn from different disciplines according to which the definition varies. In the Oxford Dictionary of Geography (Mayhew 1997), the entry for 'place' is: 'A particular point on the earth's surface; an identifiable location for a situation imbued with human values.' A place is not just any location, but a specific one. What makes it specific is when it is 'imbued with human values'. For others, place has a wider meaning than it has in the field of geography, which include different kinds of meanings related to one's position in a society or other kinds of circumstances. The concept of 'place' when approached through a spatial perspective could mean 'a location in space'. Place has also been studied in terms of being a space that has influence on communication and interaction behaviours but so far the findings are fragmented and contradictory regarding which physical elements of a given environment have an impact on behaviours.

Studies on adolescents' preferred or valued places were broadly approached by researchers through the use of interviews and reports of adults, children and adolescents, on the recollections of their childhood days and current experiences. Comparisons were made of the past recollections of adults and the current children's reports on experience of significant settings or places (Raymund, 1995; Sebba, 1991). According to Hall (1993), adolescents enjoy their personal freedom because they want access to the adult world but they like places where the authority is weak. The author elaborates on some outdoor spaces that grant forms of personal freedom.

There are studies on adolescents' preferences of favourite and valued places relating to gender (Coleman, 1961). Coleman (1961) found that recreational spaces were more valuable to male adolescents. One such example was the swimming pool. The swimming pool is one recreational facility that both male and female adolescents use and value but male adolescents were found to use recreational facility for sports more actively than females. Although female adolescents were found to use recreational facilities, they would normally just 'hang-out' and socialize with each other rather than be involved in using the space actively.

In Schiavo's study (1988) on favourite places, the top four responses for favourite places for middle adolescents in a suburban community were the street, natural parks, commercial areas, and developed parks. All of these spaces can be utilized with friends, which is psychologically beneficial to a group such as adolescents who enjoy being with their friends. In this study, adolescents suggested that additional gathering places such as club-houses, arcades, or dance halls be developed, indicating their preference for more public places to spend time with their friends. Schiavo (1988) concluded that females are more likely to value commercial areas both for shopping and 'hanging-out'.

There have also been studies undertaken to verify the importance of favourite places to adolescents. Studies on favourite places undertaken by Korpela (1992) listed

places which the respondents associated with 'control and self regulation' and quiet reflection.

*"Favorite places are used as a means of regulating unpleasant and pleasant*

*feeling"*  
(Korpela 1992, 250).

Therefore, the ultimate goal of going to favourite places was to reduce the tension that went along with being an adolescent. He further stated that the natural environment could provide positive feelings for the adolescents. Being in a natural environment provided the adolescents with a sense of being away, a sense of being in a different world, a feeling of fascination, and compatibility with the environment.

Patsy Eubank Owens (1988) analysed teenagers valued spaces. Each outdoor place that was valued was then analysed for the characteristics found in these places. These characteristics were meant to help designers in the design of outdoor spaces for adolescents. Owen's studies (1988) revealed that the main concern of the adolescents was they were bored when there was a lack of things to do in their community. If there were no appropriate activities available for the adolescents to do, they might participate in unsatisfactory activities. Thus, providing them with a variety of acceptable alternative activities would help to reduce the possibility of undesirable activities among adolescents (Eubanks 1993). Table 2.2a shows the adolescents' valued places from four studies (Owens, 1988; Owens, 1993; Silberiesen, 1986; Schiavo, 1980)

Apart from studying the places favoured by the adolescents, unfavourable or disliked places in urban areas were also noted in the study of town centres (Woolley, 1999). Therefore, preferences for places existed among adolescents who could also relate to affordance or what was available in a place. Apart from gender differences, age was another variable used in studying preferences of places among adolescents. The changes in preferences in the course of growing up were studied by Malinoski and Thurber (1996). Their study of place preference of 8 to 16 year- old children and adolescents in a summer camp showed that there were differences in the way the younger and the older children chose places. The younger children tended to prefer places based on the affordances of the place while the cognitive qualities of places formed the basis of their preference for places.



**Table 2.2a: Summary of Valued Places**

**Source: Schiavo (1988), Eubanks Owens (1988), Silberiesen (1986), Eubanks Owens (1993)**

Valued Places	Silberiesen (1986)	Schiavo (1988)	Eubanks-Owens (1988)	Eubanks-Owens (1993)
Developed Parks/Athletic Facilities	•	•	•	•
Places at Home	•		•	•
Commercial Areas	•	•	•	•
Natural Parks	•	•	•	•
Places at School		•	•	•
Undeveloped Open Space			•	•
Urban Hardscapes/Street	•	•		•
Theme Parks				•
Views			•	•
Friend's House		•		
Neighbour's House		•		
Public Building		•		
Communal Greenbelts	•		•	
Youth Centre	•			

### **2.3 Studies relating to adolescents and public spaces**

Among the many places visited or used by adolescents are public urban spaces. Public urban spaces in cities were said to be highly valuable and able to enhance the quality of urban life by providing a range of opportunities, physical settings, sociability and cultural diversity (Burgess, 1988). Several studies of adolescents and public spaces were undertaken in the past thirty years. There were three major studies that were identified as crucial in pace setting future research on adolescents globally. These studies not only emphasize adolescents' perceptions and experiences of the local environment but also open up further research in environmental planning and

design as well as social science research.

The studies proved important as substantial input to planning and decision making of environmental projects. The studies were important too to address the issue of social exclusion of adolescents in the use of public spaces when government policies and strategies perceive adolescents' activities as crimes. Graffiti and skateboarding are two of the apparent activities that have been criminalised by the authorities as being unacceptable. For the past ten years, studies relating to policies and strategies involving adolescents have also been undertaken to examine policies which affect adolescents' activity and mobility.

### **2.3.1 The Three Major Studies involving adolescents and their city lives experiences**

In the 1970's, three prominent researchers, Kevin Lynch (1977), Colin Ward (1979) and Roger Hart (1979) became pioneers in a research area involving studies of adolescents and their city life experiences.

The first one, Kevin Lynch's project, *Growing Up in Cities*, in 1977 became one of the pioneering and key longitudinal studies on young people's perception and experience of the environment carried out in four different cities. The cities chosen were Melbourne, Warsaw, Salta and Mexico City. Lynch used the action research approach and collected information with the aim of using it to find ways of understanding the lives of young people in urban areas. The focus of the study was on children and adolescents living in low-income areas who used the resources of their environment to play and socialise.

Twenty five years later, in the 1990's, this study was replicated using Kevin Lynch's methods and supported by UNESCO. The title of the study maintained the original name, *Growing Up in Cities*. However, the replicated study made some modifications on the earlier methodologies. The main aim of the replicated study was to investigate the longitudinal impact of urban changes on children and adolescents from impoverished communities and identify the cultural impact of the global mobility of the four cities again (Chawla, 2002).

However, apart from having the first study's original sites revisited, the number of sites

in the second Growing Up in Cities Project was increased to eight countries. The additional cities included in the replicated research were Oakland, Buenos Aires, Trondheim, Northampton, Bangalore and Johannesburg. Not only was the number of sites increased, the project crew included interdisciplinary professionals from a more diverse background involving architects, urban designers, architects, planners, activists, geographers, urban planners, psychologists, community developers and educators. The study was not only interdisciplinary and longitudinal but was also cross cultural.

Apart from assessing the urban environment, the human costs and benefits of economic development were included in demonstrating how the 12 to 15 years old adolescents' use of the outdoor environment and their perception of the resulting micro-environment affected their lives and personal development. The participatory programmes used adolescents' own perception of the environment in reshaping the urban environment to suit their needs. The study's 12 to 15 year-old respondents were from low socio-economic backgrounds. The study was not only interdisciplinary and longitudinal but was also cross cultural. The emphasis of the research using participatory methodology, worked along a multi-paradigmatic and multi-method approach. It was a combination of quantitative and qualitative methods.

The lapse of time, twenty-five years, and a wider coverage of sites for the replicated study produced some constants in criteria mentioned by the respondents in judging their environment in failing or fulfilling their needs. The constants of the second Growing Up in Cities Study is shown in Table 2.3a. The positive criteria deduced from the findings were the need for green areas, settings which allowed diverse activities, safe places and places to socialise among friends and the community. The negative criteria mentioned were boredom, fears, social exclusion and concern for the unmaintained dirty environment. There were an additional concern of more recent issues mentioned by the adolescents in the nineties such as environmental pollution, crime and racial-ethnic issues. Both studies revealed that the children and adolescents needed spaces that could provide opportunities to socialise and to play with friends and the community.

**Table 2.3 a : Constants mentioned in the findings of the 2<sup>nd</sup> Growing Up In Cities Study**

**Source: Chawla, 2002**

	<b>Positive Criteria</b>	<b>Negative criteria</b>
1.	green areas for informal play and exploration as well as organised sports	boredom;
2.	a feeling of social integration and acceptance;	fear of crime or harassment
3.	varied, interesting activity settings;	social exclusion and stigma;
4.	peer gathering places;	heavy traffic
5.	a general sense of safety and freedom of movement;	uncollected rubbish and litter
6.	a cohesive community identity	

The adolescents wanted spaces to have certain characteristics. They mentioned spaces that provide varied settings with opportunities for a variety of activities, a place that is safe and which has a positive sense of acceptance and identity. Furthermore, the findings of the study indicate that there is a need to include children and adolescents' views regarding environmental decisions through participation. However, to ensure that the participation among the respondents is carried out effectively, investments should be made on the people who can facilitate participation which include training them; the use of qualitative and quantitative well being indicators and to recognise the role of action research ( Driskell, 2002).

Public participation in research among young people was not new (Gray, 2001; O'Donogue, 2002; Race, 1998; Tienda, 2002; UNICEF, 1996; Salvadori, 2001; Sanoff, 2000; Scanlan, 2004; Varney, 2004; Ward, 1979; Wates, 2000). It was mentioned and used in research relating to young people as early as the 1970's. Public participation among children was mentioned in earlier research in the seventies by Colin Ward (1979) when he conducted a qualitative research of children's experiences and explorations of the urban environment through education and play. Ward recognized the rights of the children to determine what they actually wanted from their outdoor environment. Ward highlighted that children's rights were important and they should

be permitted to exercise their rights by being allowed to be involved in the public participation process.

The research of Roger Hart was another extensive work on young people and the outdoor environment. The important study, *Children's Experience of Place*, was conducted by Roger Hart (1979) which was considered as one of the most extensive studies of children on landscape preference and use. He carried out a case study of *Children's Experience of Place* in a small town in New England, in the United States of America. The study ascertained the types of landscapes that existed for children. The conclusive essence of his study revealed that children possessed an interest in their environment. The children had urges to explore through their ability to modify the landscape. The research disclosed that children and adolescents ascribed spatial richness and meaning to the landscape especially those that provided access to natural areas and elements.

### **2.3.2 Other studies involving adolescents and their outdoor environment in the United Kingdom**

Apart from the three main studies above, there were also other studies which look at adolescents and their outdoor environment. In the case of the United Kingdom, studies of adolescents relating to place use and behaviour were rather limited and recent research or studies have focused on children and adolescents aged five to eleven. Hugh Matthews stated that there was a need to research adolescents' environments according to their perception as they were a significant outsider group. He also recognised the importance of involving adolescents in environmental planning. He mentioned that adolescents, particularly in the 14 to 18 years age group, had been excluded from public spaces and ignored from research in the past. Considerable interest in adolescents' use of the environment in the United Kingdom only started in the mid nineties. The *Growing into the 21<sup>st</sup> century* research was an important research in the United Kingdom, embarked upon in 1996. The research involved multi-disciplinary academics and consisted of twenty-two different projects to study children and adolescents as social actors.

One of the most relevant studies was conducted in Northampton and acknowledged the adolescents and their outdoor environment involving public spaces beyond the home and school. The spaces used were meagre spaces which were not what they needed (Matthews, 1995). The study centralised the major theme of street use as a social arena and identified social and environmental fears and social responsibility among children and adolescents aged 9 to 16 years. The findings of the study revealed information on how, where and why they used the streets. It was revealed that 80 % of the respondents preferred to be in outdoors. They preferred to use street corners, vacant places and indoor shopping centres. According to the respondents, these places possessed cultural values, meanings of being different and special and which help to create their own identities. One third of the respondents used the streets for hanging out. The study also revealed that streets were not male dominated because 45% of the users were females (Matthews, Limb and Taylor, 1999). In their preferred public places, the respondents left symbolic expressions in the form of territorial markers such as graffiti which carried meanings. They were symbolic expressions used to indicate their need to distance themselves from the adult world.

The research found that clashes took place when adults' anticipation on the adolescents' space use patterns were different from the actual ones practiced by the adolescents. (Matthews, Limb and Percy Smith, 1998). Adolescents' complaints about their environment were noted in another study conducted by the British Health Department. In the diary section of that study, many adolescents talk about where they live and most of the respondents complain that there is not much that they can do or few places to go within their housing neighbourhood. Some express their frustrations about the conditions of the neighbourhood and note that if there were more activities to do in the neighbourhood, many adolescents would keep out of crime (Gordon, Jacki and Grant Gillian, 1997).

The increase in the adult's spatial control and the decrease in young people's mobility were again proven in another research project which compared the survey data in London and Hatfield with the Mayer Hill classic studies of the 1970's and 1990's. The findings revealed that there has been a decrease in independent mobility among adolescents caused by parents' anxiety over children's safety in public spaces. Female adolescents among minority ethnic groups were found to have restricted use

of public urban space (Greenfield, 2000) indicating uneven use patterns of public space according to gender, locality and ethnicity.

Not only are adolescents excluded from adults' public space, but some researchers have identified that conflicts occur among adolescent groups themselves, to control hang out areas (Woolley, 1999; Matthews, 1997; Percy-Smith, 2001; Malone, 1999). The younger adolescents have found it problematic to even be in their own territory as harassment caused conflicts among adolescents. This has led them avoiding being in their own areas. However, the researchers viewed harassment as a form of adolescents' way of contesting their micro geographies as there is a multilayered microgeography coexisting in the same location (Percy-Smith, 2001).

Comparative studies of adolescents and their local environment were also carried out based on the Growing up in Cities Project. A comparative study of children's independent access to their local environment to children in other countries was conducted in New Zealand. The other countries selected for comparison were cities in Germany, Australia and Britain (Tranter and Pawson 2001). The variability of the children's freedoms and restrictions of movement to their local neighbourhood and school were charted and compared. The findings reveal that culture can be a determining role for outdoor activities and the form of parents control on their children's independent mobility. Among the countries, the German children enjoyed the highest level of freedom, and greater and wider use of open space not only among their children but also people of the other age groups. This was attributed to the better public transportation system and the positive shared sense of adult responsibility for children's supervision, which is not practised in the other three countries who were more individualistic (Tranter and Pawson 2001). The findings show that the adolescents' preferences for private spaces are as places to retreat. It is also seen that their chosen activities focus mainly on friendship network building in the immediate locale and take place predominantly in the home and the neighbourhood (Tranter and Pawson 2001).

## **2.4 Urban open spaces and their benefits to adolescents**

The use of open spaces among adolescents can be considered from the importance in providing opportunities for physical activities. Physical activities are necessary for adolescents because they are associated with their well-being. Research has shown that adolescents globally are now spending less time on physical activity due to fewer opportunities for physical activities especially in a time of advanced technology. The effects of advanced technology which creates machines to help with carrying out work makes jobs become less physically demanding and has affected adolescents in their physical activity level as it makes them lead a more sedentary life. (Boyce, 2004; Higgins, Gaul and Gyn, 2003; Jensen, 2002) The main causes of this sedentary style of living are activities associated with advanced technology such as television, video games, and the computer (Crespo, 2001). The American Heart Association (1998) stated that adolescents spend an average of 17 hours a week on television in addition to the time they spend on video and computer games. Adolescents today are also overburdened with school homework and non-activity oriented academic commitments after school and spend less time going out to 'play'. Parents with their own busy working lives, impose less parental supervision when the adolescents are at home after school and thus the initiation for physical activity is absent. The American Heart Association added that American children are less fit compared to children a generation ago and that there are earlier signs of cardiovascular disease such as weight gain, higher serum cholesterol and cigarette smoking. This fact was supported by findings from the Health Organisations across Australia and the United Kingdom (Australian Heart Foundation, 2005; British Heart Foundation, 2005) which found that adolescents in these two countries face similar situations.

Apart from sedentary lifestyles, adolescents today have wider a variety of personal problems such as divorce, unstable homes, and drug use which can affect their physical, emotional and mental health (Jackson and Bijstra, 1998). Medical research found that physical activities, for example, play, has positive affects on an adolescent's overall well-being in terms of not only their physical but also mental and emotional health (Cavill, Biddle & Sallis, 2001). Such research has found relative consistency of both epidemiologic and intervention studies in health research which suggest that physical activity is associated with improved mental health and



psychological well-being. Physicians were recommended to inform patients about these benefits and strongly encourage them to incorporate physical activity into their daily routines. The Health Education Authority recommends that "all young people including adolescents should participate in physical activity of at least moderate intensity for one hour per day. Examples of moderate intensity activities for all young people including adolescents may include brisk walking, cycling, swimming, most sports or dance.

Research has also shown that physical activities can have positive effects on adolescents such as mental problems (Fontaine, 2000). The following are some of the findings of research carried out by Dr. Fontaine (2000) which linked the effects of physical activity on some mental problems such as depression, anxiety, panic disorder, energy and self-esteem. (See Table 2.4a).

**Table 2.4a. The Effect of Physical Activity on Mental Health**  
**Source: Kevin R. Fontaine, PhD , 2000**

Trait or Disorder	Effect	Comments
Depression	Moderate ↓	Decreases symptoms; efficacy similar to psychotherapy in patients with mild-to-moderate depression; unclear whether PA prevents onset of depression, but it may reduce symptom severity
Anxiety	Small-to-moderate ↓	Reduces state anxiety but unclear whether it improves trait anxiety
Panic disorder	Small ↓	Often produces transient increase in anxiety, but anxiety dissipates with time if patient adheres to regimen of activity
Energy/vigor	Large ↑	Intensive PA increases perceived energy level; unclear whether regular PA influences habitual energy levels
Self-esteem	Small-to-moderate ↑	Greatest improvement found in those with low self-esteem before PA
Positive affect	Small-to-moderate ↑	Effect most pronounced if PA involves social interaction

Physically active people tend to have better mental health, according to the 1996 U.S. Surgeon General's Report on Physical Activity and Public Health. Compared with inactive people, the physically active had higher scores for positive self-concept, more self-esteem and more positive "moods" and "affects." These findings seem similar in both young people and adults. Physical activity has also been used to treat mental

health problems such as depression (American Heart Association, 2005). For general health, experts recommend accumulating a total of 30 minutes of brisk walking on most, preferably all days of the week. (US Dept of Health 1996, UK Dept of Health 2000, US Health Education Authority 1996).

Physical activity declines dramatically over the course of adolescence, and girls are significantly less likely than boys to participate regularly in vigorous physical activity (US Health Department, 2002). The majority of studies of adolescent indicate declining participation in physical activity (Cohen, 2006). Only half of 11-16 year olds in the United States currently walk for ten minutes a day (US Health Education Authority, 1999). Children in Britain walk 50 miles a year less than they did a decade ago.

Around 20% of children can be classed as overweight (Reilly, 1999). Television, computers, cultural changes and fears for children's safety out of doors play a large part. Between 1986 and 1996 the proportion of under 17 year olds walking to school fell from 59% to 49%. British schools offer less physical education than do those in any other European country (British Health Authority, 2005). The impact of physical activity should also be analysed in terms of its effects or impact on adolescents when they become adults.

## **2.5 A review of methods for environmental research and design involving adolescents**

There are many different methodologies used in environmental research and design to understand the way adolescents interact with their environment. The adolescent's cognitive development, social competency, personal mobility, autonomy and control are some of the aspects that need to be considered when selecting research methods (Ziegler and Andrews, 1987). Researchers are also beginning to see opportunities of participation in a research as a way of getting on involved in matters affecting their environment and everyday lives (Hart and Moore, 1982-1983; Hart, 1997; Matthews, 1999).

Adolescents can be active users of facilities in housing and neighbourhood environment but they are seldom given the opportunities to express what they actually wanted (Cooper-Marcus and Moore, 1976).

### **2.5.1 Measurement of Adolescent's Behaviours In the Outdoor Environment**

Planners and designers of environment with interest in understanding how the adolescents use the landscape environment which can then serve as a useful guide to the provision and design of facilities and public spaces in housing and neighbourhood landscape. Adolescent's activity and behaviour are influenced by their environmental usages (Ziegler and Andrews, 1987). Piaget's theoretical model influence the study of adolescent's interaction with environment to enable understanding the adolescents' behaviours and spatial perceptions. The theory can be used as basis to measure adolescents' awareness and their environmental experiences and crisis (Barraza, 1999). There are four stages of children's spatial development in relation to their skills such as their ability to understand symbols, development concept of object permanence. In order to validate aspects of the adolescents' physical landscape, studies used methods such as questionnaires, interviews, time use diaries and direct observation. There are various measurement techniques which were used in different research in relation to age groups. See Table 2.5a.

**Table 2.5a: Measurement Techniques in environmental research relating to Age Groups involving Younger Children and Adolescents**  
 (Source: Adapted from Ziegler and Andrews (1987, pp.330))

Measurement Technique	Age Groups		
	Pre school children	School Children	Adolescents
<b>A. SELF REPORT METHOD</b>			
<b>1. Survey Attitude Instruments</b>			
Directed questions		X	X
Games	X	X	X
Likert Scale		X	X
Open ended questions		X	X
Photographic simulations	X	X	X
Scale Models	X	X	X
Semantic Differentials		X	X
Time Use Diaries		X	X
<b>2. Interview Techniques</b>			
Content Analysis	X	X	X
Participant Interview	X	X	X
Q-Sort	X	X	X
Structured	X	X	X
Unstructured	X	X	X
<b>3. Visual Graphic Technique</b>			
Drawings		X	X
Sketch Maps		X	X
Aerial Maps	X	X	X
Cognitive Maps		X	X
<b>B. NON-SELF REPORT</b>			
<b>4. Direct Observation</b>			
Behaviour setting	X	X	X
Personal space	X	X	X
Time sampling	X	X	X
Structure observation	X	X	X
Walking census	X	X	X
Field trips	X	X	X
<b>5. Indirect Methods</b>			
Tracks	X	X	X
Records	X	X	X
<b>6. Instrumental Observation</b>			
Time-Lapse Photography	X	X	X
Still Photograph	X	X	X
Video Taping	X	X	X

## **2.5.2 Research design in relation to Adolescent's spatial cognitive development stages**

Adolescents spatial cognitive developmental stages are the Concrete Operational Period (School Age Children from Age 6 to 13 years of Age) and the Formal Operational Period (Age 12 and above).

### **i. Concrete Operational Period (School Age Children from Age 6 to 13 years of Age)**

Many studies were conducted with children of this age group because they use the outdoor environment more often such as the playground, parks and they carry out activities at these places. During the Concrete Operational Period, the children are able to represent the environment and can recognize inter relationships of the topological properties in an integrated system. Some of the research areas for this age group include the study of children's needs and experiences of nature (Kong, 2000), children's use of the streets (Abu-Ghazze, 1998; Valentine and McKendrick, 1997), outdoor activities in a suburban residential area (Cooper-Marcus, 1995; Raymund, 1995); children's environmental concerns and expectations for the future (Barazza, 1999); children's preference for play equipments (Cunningham and Jones, 1999) child-environment-activity relationships (Medrich, 1982); children's use of place (Smith, 1995; Moore, 1986).

Direct naturalist observation was one of the method used in observing children's use of play environment of various settings (Haseltine and Holborn, 1987; Hole, 1967; Moore, 1986; Hart, 1974). Another research (Department of Environment, 1979) looked into children's play behaviour in housing areas by observing 16 housing areas to locate the places where the children went to play and their activities. In addition, verbal and or graphic skills such as questionnaires, interviews, cognitive mapping were also some of the other research tools used in research with children and adolescents. Matthews (1995) study of children had also used a questionnaire survey and semi structured interviews.

In order to assess the social context of developing young children and adolescent to the sources of support, their experiences of their housing area and neighbourhood

were noted through another technique called the 'Neighbourhood Walk' which was developed by Bryant (1985). This technique was supported by structured and interviews of the respondents. In Moore's research (1986), he used observation and interview with children in documenting their activities in housing area. In Kevin Lynch's research (1977), he came up with recommendations of using multiple methods of acquiring research data. According to him, data from census demographics and maps could indicate the socio-environmental features of the study areas. Lynch suggested that an understanding of local culture in childhood could be collected from materials relating to local culture. Observations of the young respondents and individual interviews could also be used to understand the respondents and their community. To enable the researchers to relate to the experiences of the children when they went through the city landscape, the researchers were given guided tours by the young respondents. Apart from the respondents, people connected to the respondents were also approached. The researchers interviewed parents and local officials to get their points of view on the environmental conditions of the respondents.

Direct methodologies which did not depend on literacy skills such as observation and interviews were some of the options when doing research with children in their pre-adolescent stage on their environmental perception and usages of facilities. However, these methods can take time and expensive. The combination of research methods in environmental research can be further explored as mentioned by Ziegler and Andrews (1987).

## **ii. Formal Operational Period –Adolescents (Age 12 and above)**

When an adolescent reaches the formal operations stage, there is an increase in the ability to use abstract spatial concepts such as topographical and geometrical transformations. It is at this stage too that an adolescent fully developed cognitive ability for formal, abstract and relational thinking. The adolescents are closer to becoming adults and therefore can understand complex tasks that are normally used among adults. Research on environmental knowledge and perception is possible with adolescents when they have the skills in literacy production such as questionnaires, time diaries and self reports. (Kosslyn, 1974; Lynch, 1977; Chawla, 2001; Driskell, 2002). Adolescents were among the respondents in Lynch's study (1977)

of their behaviour in urban public spaces and among the methods adopted were observation, interview, observation, questionnaire and map drawing.

Some of the methods for environmental research and design involving young children and adolescents, their purpose of study and examples of researches are summarized in Table 2.5b.

**Table 2.5b: Some of the Methods Used by Researchers in Environmental Research Involving Children and Adolescents for Different Purposes**

	Researchers	Purpose of Study	Methods Used
1	Abu Ghazze (1998)	To understand children's use of the street as a play in Abu-Nuseir, Jordan. <ul style="list-style-type: none"> <li>• The use of street as Playground.</li> <li>• Number of users and length of stay.</li> <li>• Age of users and types of activities</li> </ul>	1.Observation 2.Structured interview of mother and children 3.Behavioural Mapping
2.	Barraza (1999)	To evaluate children's environmental perceptions, their expectations and concerns for the future.  To identify the effect of culture and school ethos on the formation of environmental perceptions in children.	Drawings
3.	Brunetti (1972)	To study noise distractions and privacy in conventional and open school environments	1. Observation 2. Questionnaire

	<b>Researchers</b>	<b>Purpose of Study</b>	<b>Methods Used</b>
4.	Chawla (2001)	An action research to gather information that could inform policy and practice as well as cooperated with groups of people who support initiatives to improve urban fabric for children; integrating young children and adolescents effectively into Local Agenda 21.	Multiple Methods: 1. Maps 2. Observation 3. Individual interviews with children, parents and officials 4. Guided Tour
5.	Coates and Sanoff (1972)	To describe behaviour density and diversity and to yield profiles of activity types and group types	Behavioural Mapping
6.	Cooper-Marcus And Moore (1976)	To study children use of space outdoors, around houses, and in parks, streets and lanes	Observation
7.	Depeau (2001)	To understand the factors influencing young people's autonomy and their perceived risks when moving around the city	Multi Methods: 1. Interview 2. Questionnaire, Sketch Map 3. Guided Neighbourhood Tour that focused on young people between age 9 and 19.
8.	Evans, Saegart and Harris (2001)	To investigate the relationship between residential crowding and mental health among children in low-income families	Interviews with children aged 8 to 11.



	<b>Researchers</b>	<b>Purpose of Study</b>	<b>Methods Used</b>
9.	Gaster (1991)	<ul style="list-style-type: none"> <li>• To study urban children access to their neighbourhood: changes over three generations</li> <li>• To determine changes in children's use of local public space between 1915 to 1976</li> <li>• The number and quality of settings visited</li> <li>• The age at which children were allowed outside without the parent's supervision</li> </ul>	1. Interview 2. Literature (Archival Data, Autobiographical Data)
10.	Hart (1979)	To obtain information relating to children's spatial activities, place knowledge, place values, feelings and place use. Eliciting place knowledge	1. Observation 2. Interview 3. Colour Photograph 4. Aerial Photograph
11.	Hefts (Ziegler and Andrews, 1987)	To determine the level of interior and exterior background noise as well as the activity level of the home	Interview
12.	Ittelson et.al (1970)	The technique of describing users by age, gender and sometimes ethnicity and the uses of specific built sites	Behaviour Mapping
13.	Kosslyn et.al (1974)	To study adolescents' environmental knowledge and perception	1. Map Drawing 2. Observation

	<b>Researchers</b>	<b>Purpose of Study</b>	<b>Methods Used</b>
14.	Lynch (1977)	To record children and adolescent behaviour in public spaces in urban areas	1.Observation 2.Individual Map Interview 3.Map Drawing
15.	Medrich (1982) Berg and Meldrich (1980)	Study of the out of school activities of six grade Emphasize activity observed within the frame and children environmental settings To explore child-environment-activity relationships	1.Questionnaires (Parents filled up the questionnaires) 2.Participant-Interview 3.Group administered questionnaire 4.Student-produced area maps
16.	Sebba (1991)	The landscape of childhood: the reflection of childhood's environment in adult memories	Questionnaires
17.	Tranter and Pawson (2001)	To provide a case study in children's independent access to their local environments. It also explores the role of social traps in impeding the creation of a more sustainable, child friendly city.	Questionnaires
		To study privacy among children aged 5 to 12 years of age	Open ended questionnaires

## 2.6 Conclusion

Current impact of the outdoor environment, community and authorities were found to be not in total favour of the adolescents. While physical and social activities are pointed out by health authorities as important in the well being of adolescents, the resources within the environment such as public spaces and facilities do not fully accommodate the needs of the adolescents. Recent research has shown that adolescents in the cities were excluded and perceived as intruders of public open spaces and their movement were 'controlled' through the imposition of policies which did not favour their activities in such places (Valentine, 1996; Malone and Hasluck, 1998; Owens; 2002).

Due to the issues, many environmental research attempt to understand how children including the adolescents relate to various aspects of their environment. Due to the fact that adolescents have linguistic, conceptual and graphic abilities, varied choices of research methodologies in environmental research can be utilized. Among the research methodologies used in researching adolescents ranged from the use of survey questionnaires, observations, time use diaries, focus group, interviews, mapping and the use of media such as photograph taking. The methodologies produced data which when analysed revealed the socio spatial movement of adolescents and their outdoor environments.

The following chapter will discuss on the methodology used in this particular research.

# CHAPTER 3:

## Methodology

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### 3.0 Introduction

This chapter will describe the stages of the research, the research tools selected, how the research work is implemented and how the data are analysed. Research design and procedure are regarded as an important part of the research as selected methods for data collection, analysis and interpretation of data will ensure the findings answer the research aim. Based on the research aim, that is, to understand adolescents' use of housing area and neighbourhood spaces, information about their everyday activities, places they go to and their opinions of their outdoor environment in Johor Bahru, Malaysia was obtained.

### 3.1 Stages of the research

The research design of this study was cross-sectional and the research was conducted in three phases: the exploratory survey, the pilot survey and then the final survey. The methods used in this research are concerned with gathering of information with regards to adolescents' environmental experiences, identifying their preferences and activities in outdoor housing environments and beyond in Johor Bahru. The phases of the field study are briefly listed in Table 3.1a.

**Table 3.1a: Stages of the Research**

Phases	Stages	Research Tools
1	Exploratory Study	Survey Questionnaire
2	Pilot Study	Survey Questionnaire
3	Field study	Survey questionnaire Time use Diary In-depth Interview

### **3.2 Document Review**

In this research secondary information was initially sought and the source of information was mainly extracted and reviewed from various documents related to records on the history, vision, structure plan, issues, guidelines, regulations, statistics and current trends in the development of the city of Johor Bahru which included information on the two housing areas and neighbourhoods selected. Some of the main documents included the Johor Bahru Structure Plan, Johor Structure Plan, ISI (Institute Sultan Iskandar) reports which were acquired from local government agencies such as the Johor Bahru City Council, the Town and Country Planning Department, the Johor State Government and the Sultan Iskandar Institute.

### **3.3 Study Area**

Bearing the requirements of the research in mind, the study areas selected are two housing areas and neighbourhoods comprising of Taman Pelangi and Bandar Baru UDA in Johor Bahru. They were mixed development housing areas within urban Johor Bahru, Malaysia.

Taman Pelangi is one of the oldest mixed developments of the city, developed in the early 1970's and is located East of Johor Bahru City Centre. The other housing area and neighbourhood, Bandar Baru UDA was developed later in the mid 1970's. It is located on the West of the City Centre. Information from Johor Bahru Local Council and Johor Bahru Education Department was consulted in order to identify the adolescents required to participate in this study, within the selected areas. The Malaysian Census 2000 was also used to gain information on the socio-economic background of the people of Johor Bahru.

The neighbourhoods had adolescents from a range of social and ethnic background and age groups in order to examine whether there were significant differences according to ethnic background, gender and age in terms of activity pattern, use of public spaces, choice of favourite places and their opinions of their housing and neighbourhood environment.

### **3.4 Sampling Frame**

The main sampling frame of adolescents was taken from the list of students in different neighbourhoods throughout the city of Johor Bahru. The Johor Bahru Education Department provided the list of schools for the main sampling frame of the research.

#### **3.4.1 Selection of schools**

The selection of schools was based on certain criteria. Firstly the schools had to be urban. Secondly, the headteacher of the school allowed their students to participate in this research and thirdly to ensure there was sufficient samples of adolescents from different ethnic backgrounds participating with a number of Malay, Chinese and Indian schools respondents within Johor Bahru were approached. Finally, ten schools were selected from the sampling frame and six agreed to participate. The schools were in the two neighbourhoods, Taman Pelangi and Bandar Baru UDA.

#### **3.4.2 Selection of respondents**

Access to adolescents was necessary to examine whether there were connection between outdoor activity pattern, use of public spaces, choice of favourite places and opinions of their outdoor neighbourhood environment according to ethnic background, gender and age. The adolescents were selected from within the schools in both neighbourhood areas using probability sampling. In order to sample a cross-section of adolescents to represent the population of adolescents in Johor Bahru, Malaysia, and gather the most relevant information relating to the objectives of the research, the following criteria were used:

- The study area selected comprised mixed development housing areas within the city of Johor Bahru, Malaysia.
- A selection of 2 housing areas in two neighbourhoods which have adolescents within the population.
- One of the objectives of the study was to investigate whether there existed any ethnic differences in the activities and use of housing and

neighbourhood spaces. In the context of this study, because Malaysia is a multiethnic country, this study, sought to also reflect the differences in ethnic backgrounds - the Malays, Chinese and Indians. Table 3.4a shows the breakdown of the three ethnic backgrounds within the Johor Bahru adolescent population.

- Adolescents who attended the schools but who resided outside of the housing areas were excluded.
- In this research, the age groups or bands used were; 10 to 11, 12 to 13, 14 to 15 and 16 to 17 year-olds. The age bands of the adolescents are selected by referring to the UNESCO standards and according to definitions given by child psychologists.

**Table 3.4a : The population of adolescents in Johor Bahru by ethnic background**

**(Source: Malaysian Department of Statistics, 2004)**

Ethnic background	YEAR	
	2005	
	Number	%
Malay	130,851	63
Chinese	37,386	18
Indian	33,232	16
Others	6231	3
Total	207,700	100

### **3.4.3 Access to respondents**

The respondents of the study were all school-going adolescents and they who were involved with academic programmes and activities. Earlier arrangements had to be made to enable the school authorities to find the right time to assemble all respondents within the required age groups and for them to sit down to fill in the questionnaires. Even though the Johor Bahru Education Authorities permitted studies to be conducted using school going adolescents, access to them was only allowed within the school grounds and with the permission of the specific school head

teachers. In all selected schools, the Head Teacher further delegated the job of assisting the researcher to the school counsellor. In the Malaysian school system, the counsellor has access to all the student records. Subsequently, it was within the capacity of the counsellor to provide assistance in the selection of respondents based on the respondents' criteria set by the researcher.

In dealing with the respondents, consent letters seeking permission from the parents were distributed with the help of the school counsellor. The questionnaire distribution and interviews were only carried out after the consent forms had been returned. The targeted respondents numbered 384. However, because the time slot for the main survey was only a month before their school examinations, the researcher anticipated that the number of potential respondents who would agree to participate in the study would be low. For this reason, a total of 800 consent forms were distributed to parents. Seven hundred and twenty consent forms were returned and 620 parents granted their permission for their children to participate in this study. Only respondents whose parents had given permission to participate in the study were selected and given the questionnaires to complete.

#### **3.4.4 Ethics of research with adolescents observed in this research**

The respondents' confidentiality was given foremost importance as they were young people protected by the law. Ethical issues considered in this research with adolescents were related not only to confidentiality but also time. The researcher planned the time of contact to avoid taking up too much of the respondents' time as well as to ensure that power differentials were not used to push them into situations, or answering questions, with which they might feel uncomfortable (Graeme, 2001; Alderson, 2004). Two key principles of ethical research observed in this study included:

- Obtaining informed consent from both adolescents and their parents or guardians, and ensuring that they felt able to withhold their consent and stop being involved at any point
- The respondents were not rushed during the interview and questionnaire sessions so as to give them ample time to prepare.



### **3.5 Research Tools**

To achieve the objectives of the research, the research adopted a combination of research tools. By combining both qualitative and quantitative research methods, the researcher hoped to overcome the weakness or intrinsic biases and the problems that come from a single method (Olsen, 2004). The primary method chosen for all the three stages of this research is the survey questionnaire. The exploratory study research tool was survey questionnaire only. In the pilot study, only the survey questionnaire was tested. In the final stage of the research, apart from survey questionnaires, the time diaries and in-depth interviews were also utilized as the research tools.

The questionnaires were chosen for this research because they were widely used by environmental designers, planners, architects and landscape architects in their social research relating to assessing user needs assessments, post-occupancy evaluation, and environment and behavioural research (Bechtel, Marans and Michelson, 1987; Kuter, 2001). The use of questionnaires provided the research to gain pre-constructed input from the adolescents.

#### **3.5.1 Purpose of Survey**

The earlier issues discussed in Chapter 1 relating to this research area helped to formulate the aim of this study which was focused on the understanding of adolescents, their needs and their use of housing and neighbourhood spaces in Johor Bahru, Malaysia. The research was to survey and identify the Malaysian adolescents' environmental experience based on their time use, activities, identifying the places they went to in and around their housing area, neighbourhood and the city, how they used the public neighbourhood spaces and what they actually needed from their neighbourhood environment. The surveys were carried out in three stages, namely, the exploratory stage, the pilot study and the final survey.

#### **3.5.2 Exploratory survey**

The previous literature review identified the issues in adolescents' environments in general, limiting the parameters of the study and providing a review of what previous researchers had recommended and had done previously, assisting in setting the primary aim of the exploratory study. The choice of survey instrument was

made based on its adaptability, and it being the simplest research tool in the earlier part of the research, the exploratory stage. The preparation for the survey instrument in the exploratory stage included a literature review of the type of survey instrument used in similar research areas, followed by an outline of the survey content.

Thus, a questionnaire comprising close and open-ended questions was designed and distributed in one school to 50 students. Random sampling was used in the selection of respondents in the exploratory survey. Even though all the questionnaires were returned, only 45 were fully completed. The ages of the respondents ranged from 10 to 17 years old. The exploratory survey revealed that there were indeed some issues relating to adolescents' use of the urban housing and neighbourhood environments when their answers in the questionnaire raised issues of dissatisfaction with their immediate environment. The findings and the preliminary evaluation of the exploratory study helped to plan and improve the main research survey questionnaire and provided the researcher with a rough estimation of time management. When the earlier exploratory study was carried out, analyses of the weaknesses of the earlier questionnaire were noted and the design of the pilot study questionnaire addressed these weaknesses. According to the respondents, the sentences used in the earlier questionnaire were too long and complicated and some of the questions were vague. The structure of the questionnaire for the pilot study was restructured to make the questionnaire shorter, with fewer questions and using simple terms or words.

### **3.5.3 Pilot Study**

Before embarking on the main survey, a pilot survey was used as a precursor to the actual survey and pretesting the whole process of the survey and interviews among the respondents. The earlier findings of the exploratory study affected the way the pilot study was designed and conducted. The pilot study stage enabled the testing of the research tool before the actual data collection stage commenced.

#### **3.5.3.1 Sampling for Pilot Survey**

Random sampling was used in the pilot survey. A total of 60 respondents from age 10 to 17 were selected in this stage. Each group had both male and female respondents and they were from the three ethnic backgrounds, namely the Malays,

Chinese and Indians. Twenty respondents were taken from the age groups of 10 to 12 year-olds from one primary school and the remaining forty respondents, the 13 to 17 year-olds, were from a secondary school.

### **3.5.3.2 Briefing on questionnaire for pilot survey**

In the pilot survey, the respondents were given a briefing by the researcher on the aims of the research, the general structure of the questionnaire and the way they should respond to the questions. They were given the opportunity to take about 5 minutes to browse through the questionnaire and to ask questions if they were unsure about any questions or issues. They were then invited to complete the questionnaire. After the completion of the questionnaires, they were again asked about how they had handled the questionnaires and the problems encountered. The respondents were asked about the clarity of the instructions in the questionnaire, the wording of each question, whether the questions were easy to follow and the method of marking the responses. The respondents were also asked whether they were certain about the anonymity of the responses. Attempts were also made to get some feedback from the respondents as to their suggestions on improvement of the overall format of the questionnaire, its clarity and whether there were questions that needed to be added or omitted. The logistics of administering the questionnaires were also recorded in terms of the time taken including the overall time frame of the exercise. The results of the pilot survey were then processed and revisions were made, where necessary, according to the comments made by the respondents.

## **3.6 Main Survey**

The final phase was the final survey which not only included the use of survey questionnaires, but also incorporated time use diaries followed by in-depth interviews. The main survey was carried out over a period of 3 months from July to September 2004. It was also based on the selection of the characteristics of the sample (Refer to 3.4 ) and survey objectives. The questionnaires were distributed in places such as a classroom, a library and the school canteen. (See Plate 3.1 and 3.2) The researcher was available in all the sessions with the respondents. The school representative was only present in the early part of the session when he or she

introduced the researcher to the respondents and left the researcher on her own while the adolescents completed the questionnaires. The researcher gave a briefing on the introductory instructions, answered questions from the respondents on the questionnaire and monitored the extent to which the questionnaires were completed.



Plate 3.1: The school canteen was used as one of the venues for completing the questionnaires

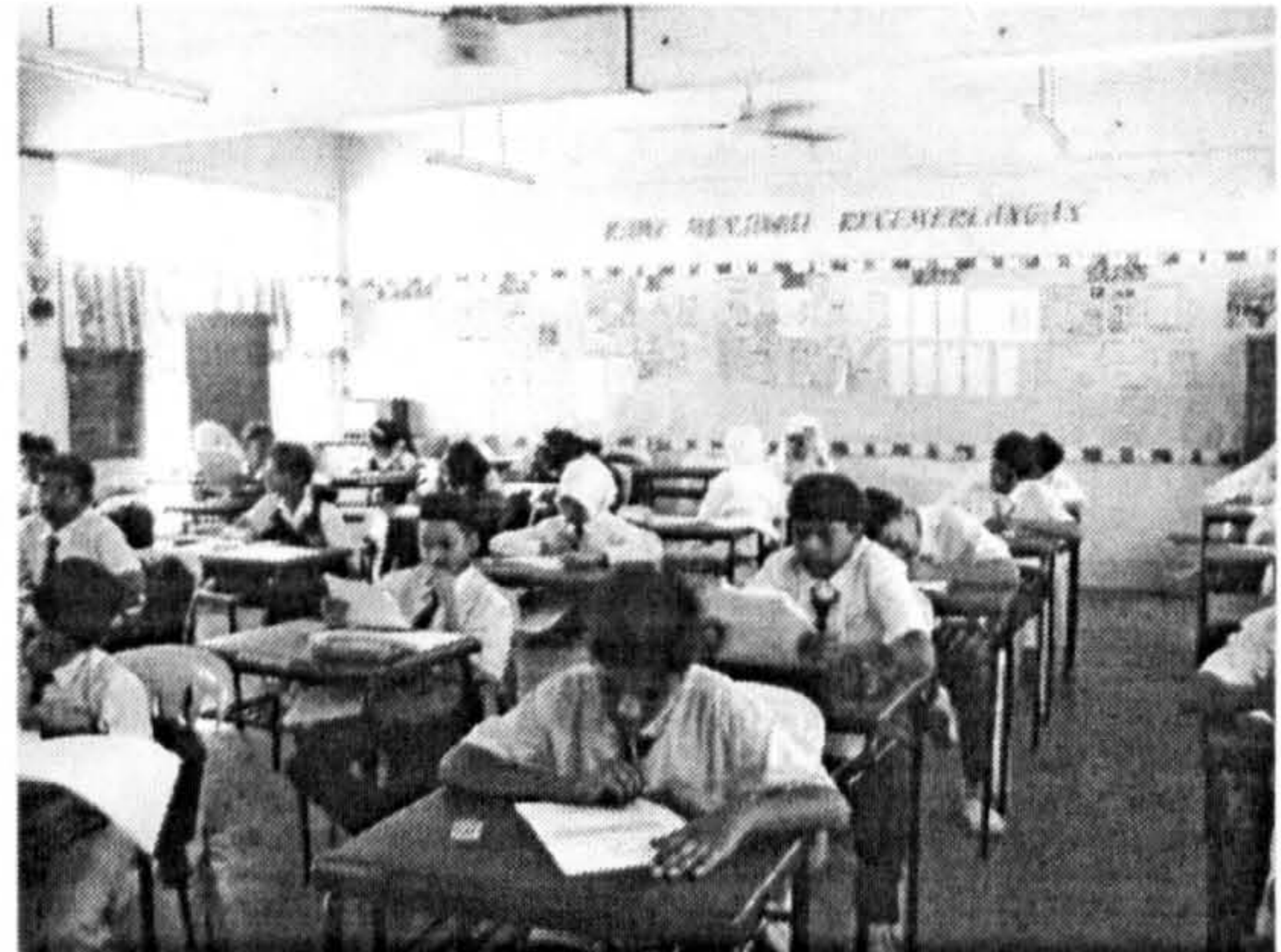


Plate 3.2: Filling up the questionnaire in a classroom

### 3.6.1 Main Survey Sampling

Stratified probability sampling was used in the main survey to enable the smaller strata of the adolescents population in Johor Bahru to be included in sufficient numbers to allow comparison (Russell, 2001; De Vaus, 2001). The nature of the research problems, the availability of sampling frames, methods of data collection and level of precision determined the sampling. Probability sampling was chosen to produce representative samples. The sample size of the respondents was 384 (Russell, 2001; Creative Research Systems, 2003) and 96 completed the time use diaries and were then interviewed. (See Appendix 1 for formula used to calculate sample size for survey).

The sample size chosen for this study was determined by the use of statistical calculations. The initial consideration was to determine how many completed

responses would be required. The research used optimum sample size so as to avoid an increase in costs and causing diversion of attention from having to do repeated follow-up activities for non responding samples which, in the end, might cause sampling error. The statistically calculated sample size derived for this study is 384. The period of research's field study coincided with the schools' final term examination. Therefore, the researcher anticipated that there would be a higher possibility of non-response. Thus, over sampling was done even though additional costs were incurred. It was a necessary step in order to reduce the possibility of introducing error or bias into the entire survey.

**Table 3.6a: Number and percentage of consent forms and questionnaires used in the study**

1. Total number of consent forms distributed to parents	800 (100%)
2. Total questionnaires distributed	620 (100%)

### **3.6.2 Main Survey Questionnaire**

The type of questionnaire chosen for this study was the self-administered questionnaire, which was completed on site by the respondent. The questionnaires comprised a combination of structured, focused and open-ended questions. About 10% of the respondents who completed the questionnaires were then selected to take note of their everyday activities for one week with the use of a time diary. Finally, the respondents were interviewed individually.

### **3.6.3 The language used in the questionnaire**

The Malay language is Malaysia's national language and English is the second language. In the design of the survey, the items involved in the questionnaire were first translated into the Malay language in consideration of the ethnicity and different cultures of the respondents in Johor Bahru, Malaysia.

#### **3.6.3.1 Types of questions and responses**

The content of the questionnaire was based on the literature review which defined the parameters of the study, reviewing what others had recommended and previously done. The straightforward questions were designed to be not only

purposeful but also accurate and unambiguous. The questionnaire was kept short through the use of only relevant questions and topics covered. There were both open and closed questions. The questionnaire was divided into three different parts.

The first two parts of the questionnaires had closed questions which were found to be more difficult to write even though the results were more readily available for statistical analysis and interpretation.

### **Part A of the questionnaire**

The first part of the questionnaire dealt with the respondent's background, relating to socio economic background information. (See Appendice 3: Survey Questionnaire)

These questions included:

A1. Respondent's gender

A2. Respondent's age

A3. Respondent's ethnic background

A4. Respondent's religion

A5. Respondent's parents' or guardian's occupation

A6. Respondent's parents' educational background

A7. The housing estate where the respondent lives

A8. Type of dwelling or house, whether they are terraced, detached, semi-detached or other type, such as multi storeys dwellings

### **Part B of the Questionnaire**

The second part of the questionnaire, Part B, consisted of questions about their daily life pertaining to their activities, favourite or valued places and the people they like to go out with purposely for certain activities within the housing area and neighbourhood. The questions in the second part of the questionnaire gathered the following information:

B1. Time use on a weekday and a weekend of Malaysian adolescents' lives in Johor Bahru

B2. Their favourite outdoor activities

B3. Frequency of their outdoor activities

B4. When they do their favourite outdoor activities

B5. Favourite or valued places they go to in their housing area, neighbourhood and the city

B6. The people they like to go out with in the housing area and neighbourhood.

B7. The questionnaire also included a question to gather information on their meeting frequency

The survey questions examined both activities and the movement of the adolescents within their housing area and neighbourhood on a weekday and at the weekend. The survey questions obtained information on their favourite activities as well. These activities indicated whether the respondents' housing area and neighbourhood had resources available for them to use. The resources referred to public facilities, open spaces, streets, houses, other buildings and the physical environment pertaining to the general condition of the neighbourhood. The daily life of the adolescent in this study was within the three broad time use categories (Gehl, 1980) of necessary time, contracted time and free time.

Necessary time referred to time spent on the main activities associated with their personal care. Contracted time referred to time spent on main activities such as formal education where there were explicit contracts which controlled the periods of time in which the activities were performed. Examples of these forms of activities were formal and religious school sessions and tuition. Committed time referred to time spent on the main activities to which a person had committed through social or community contracts such as time spent on family and other household responsibilities, for example, house chores, shopping and voluntary work. Last but not least, free time, which was the residual category of time use. This category had the most number and diversity of activities and comprised time spent on all other main activities. The activities within this category included conducting religious obligations, socialising and a range of activities commonly associated with recreation and leisure, for example, sports, hobbies and watching television. The activities could be categorised further into structured and unstructured activities. Structured activities indicated activities which were generally scheduled at a certain

time and place on a regular basis such as team sports. Unstructured activities were forms of free play and other outdoor activities. The time frames used for the activities in the questionnaire were as in Table 3.6b.

**Table 3.6b: Time Frames of Time Use Data in Part 2 of Questionnaire**

Day		Time	Activity
Every day(Monday to Friday)	1	Morning ( From waking up time to 1.00 o'clock)	
	2	Afternoon(1.00p.m to 7.00 p.m)	
	3	7.00 p.m up to sleeping time	
Weekend(Saturday, Sunday and public holidays)	1	Morning ( From waking up time to 1.00 o'clock)	
	2	Afternoon (1.00p.m to 7.00 p.m)	
	3	7.00 p.m up to sleeping time	

### Part 3 of the questionnaire

Part 3 of the questionnaire addresses what they thought about their housing area and neighbourhood spaces;

- Current issues that were of concern to the adolescents
- Elements or resources in terms of spaces and facilities which they would like to have within their housing area and neighbourhood
- Attributes they assigned or associated to physical resources such as spaces and places which they needed within their housing area and neighbourhood

The last part of the questionnaire had open-ended questions designed to provide opportunities for the respondents to voice. It is also to capture unanticipated answers that even the researcher could not predict such as describing in their own words their needs, aspirations and perceptions of their environment. The researcher provided a realistic estimate of the time required to complete the questionnaire based on the average respondent. Instructions scripted on the questionnaire guided the respondents as to the way the questionnaire should be completed. The



confidentiality and how the data would be handled was also briefly explained to the respondents as well as to fulfil the ethical requirement in research with children and adolescents.

### **3.7 Analysis of Data from Questionnaires**

Before processing the survey data, a coding table was designed for all anticipated responses. However, during the process of data entry, new codes were added based on the responses of the questionnaires. As this research maintained anonymity of the respondents, each respondent was assigned a specific identification number and given a pseudonym. Pseudonyms were also used when presenting the findings of the study such as their views about their neighbourhood. All survey questions were pre-coded to facilitate direct computer entry. In this survey, coding was done prior to the recording of survey responses onto a computer file for analysis. The research data from the questionnaires was coded, analysed and enter into a SPSS, cross-tabulated to summarise numerical data in simple descriptive statistics which describe the numerical data of one variable with the frequency distribution or percentage. Since the sample was based on a probability random survey, and the variables were categorical, the statistical association of variables was measured by using the Chi-Square test, and significance was tested at 0.05 level of significance. The theory and Chi-Square assumptions required the expected number of observations in each cell to be large enough or at least greater than 5 at 5% level (Erickson and Nosanchuk, 1979). Frequency and percentages tables for variables were constructed to show frequency distributions. Some of the trends identified in the findings were displayed through graphs.

### **3.8 Time Diaries**

Time diaries were used in this research to document detailed information on the respondents' time use and to confirm or verify the earlier findings on time use in the survey questionnaire. For the purpose of this study, the time diaries were used with the intention of recording the amount of time spent by the respondents on specific activities and when these activities took place. The diary method was used as an aide-memoire and it was a tool that ensured the interviews conducted would relate

to the respondents' real experience and not the researcher's assumptions. (See Appendix 3)

For the time diaries, 131 of the respondents who filled in the questionnaires were selected to complete up the 7-day' time diary. After reviewing the time diaries, those which were not filled in properly were excluded and only 96 were found to be informative enough to follow through with the final in- depth interview.

### **3.9 Interview**

Semi-structured interview was chosen for this research and it represented an important qualitative research tool to obtain information. The interviews started off initially having a dimension of being partially structured while still maintaining a certain degree of flexibility, allowing it to lead into the main content of the interview. The 96 respondents who were interviewed were also those who had filled in the time diaries and questionnaires. Feasible arrangement of the interview was carefully planned from the point of developing and piloting the interview, the setting-up of the interview as well as travel arrangements, transcribing and analyzing the interviews. As an elaboration, an in-depth response was needed, and the semi structured form of interview was chosen. Adolescents from the primary and secondary schools of Bandar Baru UDA and Taman Pelangi were selected from among those who had already submitted their questionnaires and who had given their consent to be involved in the interviews. About 48 from each neighbourhood, totalling 96 adolescents, were interviewed.

#### **3.9.1 The place of interview**

The interviews were all conducted at their schools. During initial enquiries on their preferred place of interview, 75% of them mentioned that they would be comfortable if the interview was carried out in their schools. Their preference was in line with the school authorities request to have all the research sessions within the school premises. The school councillor's resource room was selected as the venue for the interview. The councillor's resource room was allocated by the school because it was a room frequented by students for group discussions. The availability of the students was confirmed upon receiving permission from both their parents and the school authorities. There was a constraint whereby the time slots provided

were at the school authorities' discretion, and the time slot given was only provided when the respondents had their breaks between their classes. Each break ranged from 15 minutes to an hour. The time taken for each interview ranged between thirty minutes to one hour for each interviewee. As the respondents were from different age groups, different schools and had the constraint of only being able to be interviewed at the assigned time, the interviews were undertaken over a 10-day period.

### **3.10 Research Methodology: Strengths and Limitations**

Each of the methods used in this research has its strengths and limitations.

#### **3.10.1 Survey method**

The study uses the survey method as it is the method of data collection from respondents thought to be representative of the population needed for this study, using an instrument composed of closed structure and open-ended items (questions). This is perhaps the dominant form of data collection in the social sciences and it provides efficient collection of data over broad populations, amenable to administration in person. Even though critics hold opinion that survey research methodology is a method which can artificially forces respondents to formulate opinions, the benefits of gaining data and information of a large population within a limited time and resources outweigh the weakness of the method. It was in consideration of the limitations of the method that two other methods were adopted to validate the data from survey questionnaire based on its similarity in the responses or answers given for similar areas of inquiry.

Nevertheless, in designing the questionnaire, attempts were made by the researcher to make it simple by using simple questions which were made using a clear referent, the rank list kept short with a maximum of three and using, wherever possible, simple terms. As recalling the past is difficult, the questions in the questionnaire used recent time frames. Questions were asked based on their most-related actual experiences and hypothetical items in the questionnaire were assigned in the final part of the questionnaire; given 'open-ended' answers as such items require time for consideration. Different forms with different orders were adopted so as to lessen the

order or response bias. As the questionnaire was written in the Malaysian National Language, Malay, semantic equivalence was sought through the translation or back translation method, to see if the original and re-translated item remained the same (Behling and Law, 2000).

### **3.10.2 Interview**

In-depth interviews are one of the qualitative methods used in this research to complement the survey questionnaire as well as because it used smaller samples than in the quantitative method, seeing each individual as a unique being. This method was used for this study as the research would also like to explore some depth of the data besides the breadth and because the researcher had to play an active role in the data collection due to the constraints of time and finance (Wimmer and Dominick, 1997). "Qualitative research is a useful mass media tool only when its limitations are recognised" (Wimmer and Dominick, 1997, p.85). The review indicated that qualitative research relates mainly to interviews done on a small scale. The method was conducted in combination with a survey questionnaire and time use diaries (Hammond, Breakwell and Schaw, 1995). The limitation of the qualitative methods were the difficulty of drawing definitive conclusions from the findings or at least generalising them to larger groups because of the small scale of the method. For this reason, it was used to complement the data gained from the survey rather than being the primary method of data collection.

During the interview, the respondents were given the freedom to answer in the way that they were comfortable with especially in this research when the respondents were school going adolescents. However, interviewing in such a manner was time consuming for the researcher in terms of conducting the interview and analysing it. The interview uses a smaller sample than to the survey questionnaire and lasted up to several hours. It focuses on the use of open-ended questions allowing the respondent to answer freely. Interviewing is a difficult method to employ properly and it relies mainly on the interviewer-researcher to enable an objective interview to be undertaken.

### 3.10.3 Time Diaries

The 'time-budget' of time use schedule, pioneered by Sorokin in the 1930s (Sorokin & Berger 1938) involved respondents keeping a detailed log of how they allocated their time during the day which focused on a typical day in the life of an individual from a particular group or community. The use of time use diaries as a research tool has been found to be time consuming and labour intensive but its benefit is in getting to know the activities of the respondents through proper recording of accounts of time use. The data or information tell much about the respondents' quality of life, social and economic well-being and patterns of leisure and work. Diaries used in this study were of a semi-structured open format, allowing respondents to record activities and events in their own words. An obvious advantage of the free format was that it allowed for a greater opportunity to recode and analyse the data. The researcher listed 112 respondents to undertake the diary keeping task and only 96 respondents' time diaries were detailed and then analysed.

In this study, a preliminary interview was found necessary to explain the diary keeping procedures to the respondents. A concluding interview was used to check on the completeness of the recorded entries. Even though steps were taken by the researcher to ensure that the diaries were recorded as explained to the respondents, there were still limitations to this method as occurrences of errors in reporting still happened.

A research method that involves the self-completion of information demands that the respondent has a reasonable standard of literacy. Thus the time diary and the data may be slightly biased towards the population of competent diary keepers as the selection of respondents to undertake diary keeping was randomly taken. The time diaries were also prone to errors arising from respondent conditioning, the incomplete recording of information and under-reporting, inadequate recall and insufficient cooperation. A balance has to be considered to make the diary keeping task for the respondents long enough to capture the behaviour or events of interest without jeopardising successful completion by imposing an overly burdensome task.

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## **CHAPTER 4 :**

### **The Study Area:**

### **Local Adolescents' Cultural Life and Open Space Planning in Johor Bahru, Malaysia**

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#### **4.0 Introduction**

This chapter present the findings on the study area of this research. It will describe the city of Johor Bahru, its historical background, the city's vision as well as the current issues and characteristics of the city. Major organisations which play an important role in decision making processes pertaining to the drafting of policies, planning and the development of the city will also be highlighted.

Adolescents from different parts of the world may differ from one another because of their culture. In order to provide an overview and better understanding of the study area's adolescents, this chapter will also highlight some aspects of their cultural background. The information are based on information gathered from interviews with the respondents, government organisations in Johor Bahru and secondary resources.

#### **4.1 Johor Bahru and its historical background**

The study area, Johor Bahru, is a city considered as the southern gateway to the Malaysian Peninsular due to its location in the southernmost tip of Peninsular Malaysia. (See Figure 4.1 and Plate 4.1).

Malaysia has 13 states and Johor one of the states which is located in the south. Johor Bahru is the capital of Johor. It is one of the oldest cities in South Malaysia. It was historically known as Iskandar Puteri when it was founded in the year 1885. The early capital of Johor at that point of time was Telok Belanga in Singapore but Iskandar Puteri or Johor Bahru was made the traditional Malay capital upon the opening of Istana Besar (the Main Palace of the Johor Sultanate) in 1886. Johor Bahru evolved from a small fishing village and a small port in the late 19<sup>th</sup> century and was colonised by the British. The old city expanded with more villages growing up around

the centre of the city. The Straits of Johor separate Johor Bahru from Singapore. When Malaysia achieved its independence from the British in 1957, further development took place in all parts of the country including Johor Bahru. Development within the city became more diversified in the 1970's with the building of the first industrial estate and the establishment of more housing projects. Among the earlier developments was Taman Pelangi. By the 1980's, the city had more shophouses, hotels, shopping complexes and a port. Currently, as a busy city, Johor Bahru is envisioned to become a planned and cultural city by the year 2020. Johor Bahru covers an area of 2064.2 square kilometres with a population of 1,278,000 (Jabatan Perancang Bandar MPJB, 2000).



Plate 4.1 : An Aerial View of the city of Johor Bahru, Malaysia

## 4.2 Visions for Johor Bahru

Vision 2020 was formulated to develop Malaysia at the start of the new millennium. This vision sought to create a united nation based on strategic challenges and the creation of an ethnically integrated nation with the vision of making Malaysian society fully caring, mature and tolerant and one in which people can freely profess their customs, cultures and religious beliefs freely. The Eighth Malaysian Plan 2004 further highlighted growth in urbanisation and acknowledged that affordable housing within old and new neighbourhoods should include the concept of human settlement with an emphasis on the provision of proper community and recreational facilities.



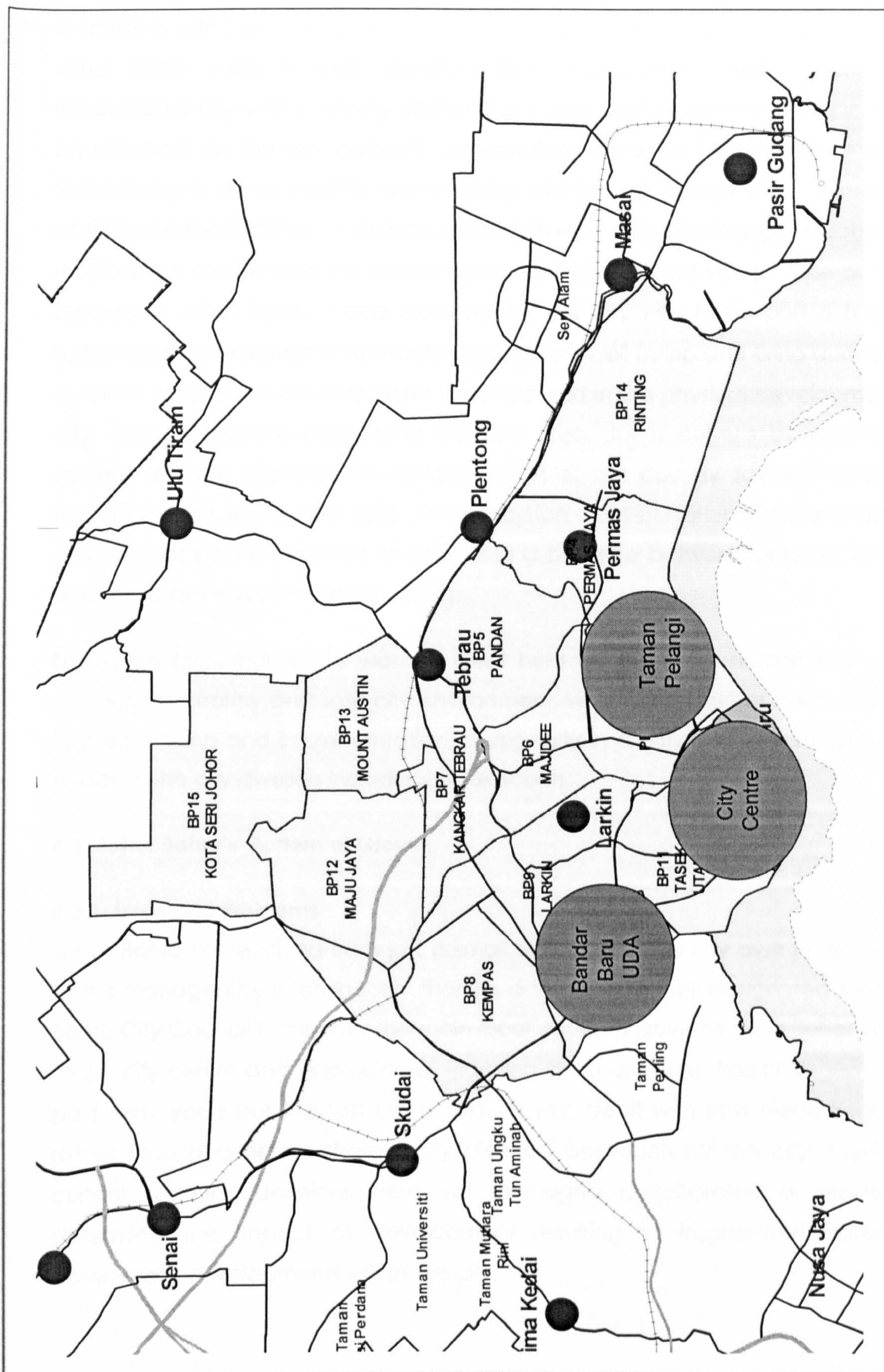


Figure 4.1.1: Study Area: Johor Bahru- Taman Pelangi, Bandar Baru UDA and the City Centre

In tandem with the country's national vision, the missions set by the Local Authority of Johor Bahru were to work towards creating a planned and culturally vibrant international city with planning of physical, social and economic development with an emphasis on the environment, conservation and local identity. It also targeted maintaining a clean, healthy and cheerful city through the provision of recreational and landscape facilities. A cultural approach was adopted to support Johor Bahru's multicultural society and the maintenance of positive local values. One of the main focuses of Johor Bahru Local Authority for the city was to support a holistic and sustainable development that would improve the well being and living quality the city dwellers. Most of the developments were focused in the physical development of the city, geared towards beautifying the city area. Johor Bahru's development was geared towards realising the national vision of the country towards becoming a 'Garden Nation in the year 2005'. The Malaysian Garden Nation Vision was one of the government's policies aimed at achieving a balance between physical, social and economic development (Ngah, 2002).

The vision for Johor Bahru was an ideal held by the local authority to create a conducive, healthy and safe city environment, which had not yet been fully realised in the planning and implementation, particularly in creating environs that suited the needs of the city dwellers including, adolescents.

### **4.3 Johor Bahru's Pattern of Growth**

#### **4.3.1 Issue and Problems**

Johor Bahru has evolved from just a small settlement to a city over recent decades and is managed by three local authorities according to their designated zones. Johor Bahru City Council is currently the main local authority governing old Johor Bahru, the major city centre and its precincts. Planning in Johor Bahru has changed over the past thirty years but the fast urban growth was dealt with in a piecemeal manner rather than a coherent strategically planned approach for the city. Previous and current planning decisions were not thoroughly corroborated or reassessed to determine the impact of development resulting in fragmented housing and commercial developments within the city.

The rapid socio-economic and urban growth of Johor Bahru also resulted in the emergence of new housing and commercial developments. These developments were controlled and handled individually. Even though Structure Plans were made to help to achieve more efficient developmental planning, they were supplemented by detailed Local Plans. However, the planning guidelines and development control in Local Plans did not advocate an effective approach to ensure that the private sector provided public facilities in new developments. The private interests of getting maximum profits from a development would be given priority and as a result the public facilities provided were at a minimum. This too had an impact on the environment for adolescents in Johor Bahru whose needs were not being considered seriously even though according to the 2000 Malaysian National Population and Housing Census of Johor Bahru, the adolescents formed a substantial 31% of the whole population of the city (Department of Statistics, 2003).

#### **4.3.2 Classification of Ethnic Groups**

In general, the Malaysian Ethnic groups comprise the indigenous groups or, as they are termed locally, the Bumiputra, the Chinese, Indians and others. The Malays form the major indigenous group. These people are fragmented by factors such as religion, language, national origins and distinctive subcultures. Despite the number of ethnic groups, the Malaysians are able to co-exist harmoniously with tolerance of each other's religion, culture and customs in a multi cultural country. The three major ethnic groups selected in this study are the Malays, Chinese and Indians.

#### **4.3.3 Population**

The 2000 Census stated that Malaysia had a total population of 23.27 million with Johor State having a population of 2.74 million. Johor Bahru, as the capital of Johor underwent fast urbanisation and 91.2 per cent of its population lived in the urban areas with a current population of 1,278,000. (Refer to Table 4.3a).

The population consisted of 664,400 males and 613,000 females (Johor Structure Plan, 2003). The population of Johor Bahru City Council alone for the year 2005 was

estimated at 670,000 with a growth of 2.9 percent. By the year 2010, Johor Bahru's population was expected to increase to 760,000 (Jabatan Perancang Bandar MPJB, 2000).

**Table 4.3a: Projected Population of Johor Bahru City Council 2000-2010**

**Source: (From explanatory Document, published by Jabatan Perancang Bandar, Majlis Bandaraya Johor Bahru, 2000)**

	2000	2005	2010
Johor Bahru City Council	580,000	670,000	760,000
Average Annual Growth Rate	3.4%	2.8%	2.5%
Rest of Johor Bahru District	507,000	542,200	820,000
Total of Johor Bahru District	1,087,000	1,278,000	1,580,000
Average Annual Growth Rate	4.8%	4.2%	3.4%
Percentage of District Population in Johor Bahru City Council	53%	50%	48%

#### **4.3.4 Implication for Adolescents in the City**

The number of adolescents who were between the ages of 10 and 18 years old formed 31% of Johor Bahru's population in 2004 (Jabatan Statistik, 2004). They are among Johor Bahru urbanites who uses the public facilities and spaces within the city and they are also affected by urban problems. Rapid urban growth caused or ushered in urban problems such as traffic and environmental problems within the urban environment. Thus, educational, cultural, sports and recreational facilities were deemed necessary to counter the impacts of environmental problems and to promote a healthy and conducive environment in Johor Bahru (ISI, 1999) for the city dwellers including adolescents. The high number of adolescents within the city indicates the need to look into their living environments to ensure that they get proper social and physical facilities amidst the stresses of life in a busy city.

#### **4.3.5 Housing in Johor Bahru**

The socio-economic growth of Johor Bahru also largely contributed to an increase in the population and led to an influx of migrants, affecting the demand for housing. The

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housing developments, open space provision is a requirement which the developer has to abide by in order to obtain the Certificate of Fitness for Occupation. The type of open spaces provided within the new housing development are neighbourhood parks, play and recreational facilities and community facilities.

Long-term Land Use Planning outlined in the Structure Plan and Local Plan are used in the provision of open spaces and landscape environment. This is supported by "A Manual for Local Plan" drawn through the Town and Country Planning Amendment of 1995, Act A33, Section 2(F). Part of the manual indicates the requirement for 30% green open spaces and 10% of effective usable area for recreational needs from the total development areas. This clause improved the previous provision for land allocation which was only 10% (Jabatan Perancang Bandar, 2005). However, it has yet to be enforced and developers can still adhere to the previous requirement. For the provision of open spaces and recreational facilities, development control and recent guidelines are used and one of the relevant guidelines are the landscape guidelines.

The scope of landscape guidelines includes the preservation of natural resources, conservation of historic areas, planting schemes and environmental visual quality. Even though open space guidelines have fulfilled the planning standards in terms of size, population capacity and distance, provision for adolescents is absent. Issues about the provision of spaces according to the needs of adolescents have been overlooked. This has resulted in the provision of landscape elements which do not necessarily fulfil the needs of adolescents.

#### **4.5.3 Open Space Planning in Johor Bahru**

The city of Johor Bahru faces the problem of having only 9.46 % of open spaces within the city to serve the population within its urban areas which was clearly a shortage according to the planning guidelines (See Table 4.5a and Figure 4.5.1.). Even though the Local Authority recognises the problem, the provision of open space is still unsatisfactory. One of the alternatives taken by the government has been to impose long-term government land reserves to partly address the problem of open space shortage. Most of the bigger open spaces are located in the southern part of the city,

close to the city centre. There are some open spaces near to some neighbourhoods. The only large stretches of open spaces within the city which make up most of the 9.46% of the city's open spaces are the city's Urban Forest, the Zoo, the Royal Palace Botanical Garden, Danga Bay and the city's stretch of Lido Beach waterfront. These open spaces are near old neighbourhoods and the residents from these neighbourhoods are lucky to be able to benefit from this proximity because they can easily access these open spaces. However, this is not the case for newer neighbourhoods including Taman Pelangi and Bandar Baru UDA because they are at a disadvantage of being further away from the open spaces. They can only depend on the open spaces provided within their housing area and neighborhood.

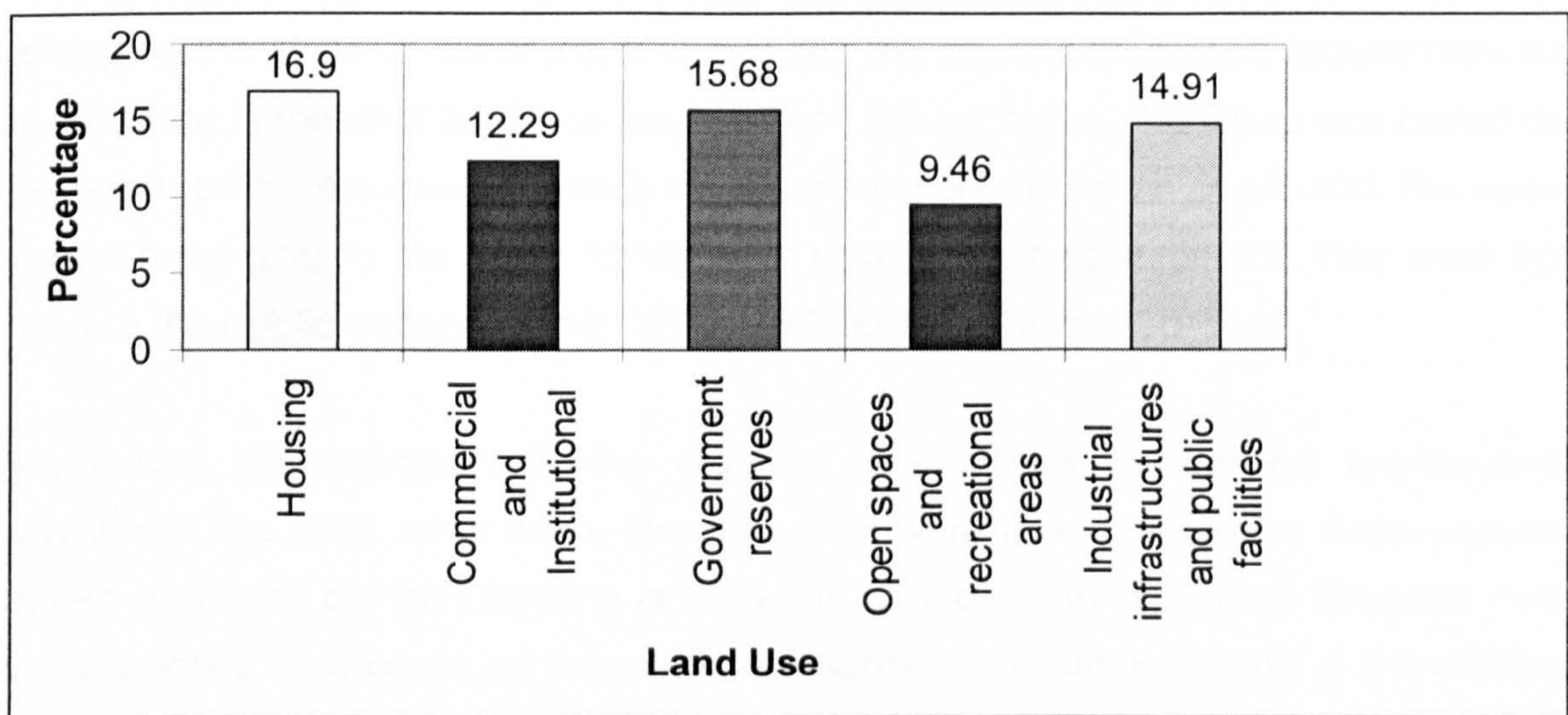


Figure 4.5.1 : Percentage of open spaces among other land uses in Johor Bahru  
 Source: Johor Structure Plan, 2003

#### **4.5.4 Open Space Policies**

With the ever increasing requirement for more open spaces within the city for the benefit of the city dwellers, several policies have been formulated to assist in the provision of recreational open spaces and green spaces. There is a hierarchy of open spaces within the urban development of Johor Bahru. The types of open spaces range from formal parks and gardens, recreational water parks, urban parks, neighbourhood and pocket parks and plazas or squares.

There are about 560 hectares of public and private open spaces in Johor Bahru which belong to the State of Johor Royal family but the current estimated requirement for open space in the year 2005 was targeted at 1100 hectares. This figure was based on the open space requirement needs targeted for the population of 670,000. The open spaces belonging to the Royal Family were private open spaces and they were not open to the public except for the Old Royal Palace Botanical Garden.

In previous developments in the eighties, the policies concerning recreational provision in the 1985 Johor Bahru Structure Plan were used. However, these policies lacked emphasis on the planning and design aspects. An amended Structure Plan was proposed to improve on this weakness. Some of the amendments in the policies highlighted the need to improve the conservation of green natural areas, to utilise the natural resources within the city as well as maintaining the ecosystem within the city. A recommendation was also included for an increase of another 10 to 20% from the existing 9.46% in open spaces within the city centre and the improvement of regional public recreational facilities (Pelan Struktur Johor, 2003).



#### **4.5.5 Adolescent's Environment: Issues and Problems**

The planning and design of outdoor environment within urban areas should consider the ways adolescents use open spaces to ensure that the designed environment becomes one that can be utilised by adolescents and other users. It is helpful to know the adolescents, to understand their needs, how they use the environment, to identify their preferences in the environment and where they go for their activities.

Adolescents of the 1960's, 1970's and even right through the 1980's, as recalled by some adults of today, relate their memory of how easily they were able to access a natural environment which was the 'natural adventure playground' that provided opportunities for different activities (Abu Bakar, 2001). Not only were the activities fun but such experiences provided opportunities for interaction with friends. Assumptions are made by Malaysian adults that the adolescents of today, by right, should be able to enjoy a better environment based on scientific and technological advances (New Straits Times, 2002). Instead, what is seen today in modern Malaysia is adolescents spending more time on computers, videogames, watching television and less on physical and social outdoor activities such as sports, recreation and mingling with friends and peers (<http://www.mygfl.net.my>). Many of the old children's traditional and heritage games such as top spinning and kite flying have either been forgotten or are rarely played (Dewan Bahasa dan Pustaka, 2000). Changes in the city have their effects on the whole of society including young adolescents. Rapid urbanisation has had an impact on the physical, social, economic and technological aspects of life incorporating the environment and the quality of life especially in new neighbourhood areas. One of the main immediate needs of the city adolescents in the improvement of their quality of life is to have good facilities within the housing areas. What exists or is currently provided within newer housing estates are limited conventional playgrounds that do not afford exciting and fun play settings and it would be even less frequented when not strategically located. Clearly, the provision of facilities for

adolescents in neighbourhood parks has not been made with consideration of the actual adolescents' needs.

#### **4.5.6 Adolescents' Environments in the context of Urban Planning**

With the ever increasing population and increase in the demand for houses, the government introduced the Eighth Malaysia Plan (2001-2005) that proposed a target of 800,000 units of houses to be built within the country until the year 2005. Johor Bahru has recorded a housing growth rate of 5.68% (Johor Structure Plan, 2003). A special focus was set on providing affordable and good quality housing through housing planning and development programmes. To increase the number of homes within a development in order to meet the targeted number of homes to be built, the plot ratio for land utilisation was set at 41 units per hectare (EPU, 1996). The government also identified the issues of squatters in urban areas and proposals were made to relocate them to low cost housing. Much of the low cost housing within a housing development consists of high rise housing. The density of residents within a housing development has increased and more recreational facilities are required to support a higher population density. However, the provision of the recreational facilities and open spaces has not followed the increase in the density of residents. The Johor Bahru Local Authority is responsible for the provision of urban services and recreational spaces in Johor Bahru.

The Malaysian Planning Standards (Department of Town and Country Planning, 1997) were formulated by the Malaysian Department of Town and Country Planning to provide a guideline for planning open spaces in terms of the hierarchy of open spaces, minimum requirements, size of area, location and recreational facilities based on the total population of an area. In order to get a clear and standard definition of the term 'open space', the Planning Standard states that an 'open space' is any land either open or enclosed, reserved wholly or partially as a public park or garden, sport fields and public recreation place, for resting, public path or as a public space (Department of Town and Country Planning, 1997, p. 1). The provision of recreational facilities for adolescents was only spelled out as an adventure ground and paved areas for sports. (See Table 4.5b). Games courts which are appropriate for

adolescents were only indicated in neighbourhood parks located about 1.5 kilometres away from housing areas.

However, in the context of the study, most of the newer neighbourhoods within Johor Bahru are located more than 1.5 kilometres from the few neighbourhood parks of the whole city. Only the old neighbourhoods which are located near the city centre are close to the neighbourhood parks. However, attempts to provide minimal recreational facilities have been made but are not enough to serve the whole adolescent population within the city. For example, within the whole of Johor Bahru, there is only one skatepark which is located away from all housing areas, indicating access is only possible by public transport. Even though there is public transport to the skatepark, due to the distance, more time is needed to travel and it is costly to go there.

The planning standards, policies and guidelines have yet to address the provision of open spaces based on the hierarchy of urban housing neighbourhood areas. Many developers and even planners have an inaccurate concept of the provision of open spaces. Developers see the provision of open spaces as being an obligation in order to possess the certificate of fitness for their housing development, imposed by the local authorities. They do not understand the importance of open spaces and their benefits in terms of the social well-being of the residents within the housing areas. The current trend is to treat the provision of open spaces as an element that can add value to new high-end housing developments and as a marketing strategy to boost house sales. The attitude of the provision of open spaces as a social obligation and as a marketing strategy among many developers and planners should change and be more sympathetic towards contributing to the well-being of society. Open spaces are not an obligation but form part of man's basic needs amounting to a better quality of life. Developers should realise that the provision of open spaces goes beyond social commitment and should accept them as important supporting elements that contribute to the fulfilment of some of the basic needs of the young people in terms of their physical and social development.

Type and hierarchy	Minimum requirement	Size of area	Total Population	Distance of service	Area of service	Location	Recreational Facilities
Play Lot	0.2 hectare (0.5 acre)	0.2-0.5 hectare (0.5-1.5 acre)	1. Every 300 population and 2. every additional 300 population require 0.2 hectare (0.5 acre)	Within 0.5 km (0.3 mile)	Neighbourhood centre	Small neighbourhood Centre within walking distance	1. Grass area 2. Sand Area 3. Sheltered area and seating 4. Play equipment
Playground	0.6 hectare (1.5 acre)	0.6-2.0 hectare (1.5-5 acres)	1. Every 1000 population and 2. Every additional 1000 population require 0.6 hectare	Within 1.0 km (0.6 mile)	Neighbourhood centre	Small neighbourhood centre within walking distance	1. Sheltered park 2. Paved area and lighting for sport and playground 3. Playground 4. Adventure Playground 5. Parking Lots 6. Public Telephone Booth
Neighbourhood Field	2.0 hectare (5.9 acres)	0 to 8.0 hectare (20-100 acres)	1. Every 3000 population and 2. Every additional 12000 population require 8.0 hectare (20 acres)	Within 1.5 km (0.9 mile)	Neighbourhood Centre	In or near the neighbourhood centre within cycling and walking distance	1. Children Playground 2. Football field 3. Badminton court, tennis, takraw (local sport) and others 4. Jogging area 5. Park and sheltered areas 6. Resting area, Parking Lots 7. Public telephone booth 8. Bus stop 9. Public toilet
Local Park	8.0 hectare (20 acres)	8.0-40.0 hectare (20-100 acres)	5000 and above	Within 3.0 km (1.8 mile) Half and hour journey	Town	In or near the service centre. Accessible by walking, cycling and public or private transport	1. Various play courts in form of small sport complex 2. Swimming pool 3. Park and children playground 4. Picnic areas and adventure game 5. Paved area 6. Food stall 7. Public toilet 8. Shelters

Town Park	40 hectare (100 acres)	40-100 hectare (100-250 acres)	Whole town and region population	Within one hour journey with vehicle	Town centre	Near Town Centre	<p>9. Telephone Booth 10. Bus Stop 11. Parking Lots</p> <p>1. Field for annual sport 2. Play courts 3. Sports Complex 4. Swimming Pool 5. Golf Practice 6. Children Playground 7. Water Sport 8. Garden and recreational forest 9. Public toilet, telephone booth and praying facilities 10. Parking lots for cars 11. Bus stop</p>
Regional Park/ State Park	100 hectare (250 acres)	100 hectare (250 acres and above)	Whole country	Whole country	Regional centre	At the fringe or outside of Town Area	<p>1. Facilities such as picnic area, camping, hiking and boating etc. 2. Open sports complex 3. Limited sport such as golf 4. Natural attraction area for population such as lake, waterfall, etc. 5. Having natural environment for recreational such as jungle tracking, recreational forest and area for nature environmental research 6. Lodging facilities 7. Shops and stalls 8. Toilet, public telephone and praying facilities 9. Parking lots 10. Bus stop</p>
National Park	No limit	No limit		Whole country	No limit	Located at suitable area which is unique for wildlife and resources for environmental research	<p>1. Resources for environmental conservation 2. Lodging facilities and transportation without affecting ecology and wildlife 3. Parking for cars and buses 4. Praying facilities and shelters 5. Toilet and public telephones 6. Bus stop</p>

Table 4.5 Malaysian Planning Standard for Open Spaces and Recreation  
Source: Adapted from Planning Standard, Department of Town and Country Planning, 2000  
Ministry of Housing and Local Government, Malaysia

#### **4.5.7 Adolescent's Environments in the Context of Open Space Planning**

Previous studies show that recreational facilities within urban areas are either minimally provided or totally ignored (Aziz, 1999). There were many public complaints that adolescents were invading playgrounds meant for children and public spaces that they believed were not meant for adolescents (ILAM, 2004). Even though the adolescents enjoy going to shopping complexes and retail areas, some of them go there because they are bored with their neighbourhood which does not have many open spaces for their activities (Lateh, 2004). Research also indicates that planning policies have underestimated the needs of the adolescents and decisions concerning adolescents' use of public open spaces have been based on their own assumptions and not on any specific studies aimed at identifying adolescents' needs.

The minimal facilities provided for the adolescents have been formally designed through planning. Adolescents' environments are now not only for physical but also for social needs as well. The presence of an environment that provided play opportunities can help them to expend their energy. During adolescence, especially in the mid and late stages, friendship groups become more prominent (Santrock, 2001). The process of playing with friends helps children and adolescents to socialize. If playgrounds are seen as a ground to nurture young children, they should also be a place for children to observe and to share with the older children, the adolescents.

It is a current trend that most developers focus on getting as much potential land in a new development to be utilized for houses and commercial spaces. The developer's compulsory fulfillment of the 10 % requirement for open spaces are normally those which are left over land which are not suitable to be developed as recreational spaces. This has led to the recreational spaces being located in inappropriate places. Furthermore they provide play space and equipment for young children only, ignoring the needs of the adolescents.

With the current characteristics of most housing environments being unsafe, lacking maintenance, access and poor planning of open spaces, the physical aspects of the housing environment have become unappealing to most of the residents including the adolescents (Abu Bakar, 2001). As a result, adolescents vent their

frustrations with the neighbourhood environment through vandalism or by using the play spaces meant for young children (ILAM, 2004; Chawla, 2002; Malone, 1999; Percy-Smith; 2004). The adolescents' hanging out in public areas such as shopping complexes and children's playgrounds have become a source of concern among the Malaysian general public because they perceive hanging out as a negative activity for young people (Berita Harian, 2005; ILAM, 2004). 'Hanging out' among adolescents should be understood as an activity to mark the evident increase in interest in peer involvement especially in the mid and late adolescent stages. Instead of being too concerned about the activity, it is necessary to examine the reasons behind adolescents' inclination to this activity. As an important user group among the public the adolescents have their own preferences in terms of activity choices. The issues of open space in urban housing areas not only relate to poor planning, minimum provision, lack of maintenance, design, and access but become indicators that urban planning in Malaysia has failed to ensure that the needs of the public including the adolescents were given priority. The approach of the current standard open space allocation should be tuned to a more contemporary and relevant approach. Prior to open space provision, there should be a review of the contemporary issues and problems and an understanding of adolescents' concepts of outdoor activities and environments with respect to their housing and neighbourhood environments. Some of the information that can be utilised is adolescent activity patterns, environmental settings and their views on the environmental quality and preferences. This information is part of the findings of this research and will be discussed in the following chapters. Identifying the patterns of open space use among the adolescents which fulfill their needs can provide useful information which can be integrated in planning policies and guidelines.

#### **4.6 Conclusion**

Malaysian adolescents face the same predicaments as adolescents in many countries around the world. They have limited access to open spaces and in open space planning, they face 'exclusion' in indirect ways. Even though current policies and guidelines include adolescents as their users, facilities have not been provided for them within the housing neighbourhood landscape.

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## **CHAPTER 5:**

### **Malaysian Adolescent Daily Activities**

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#### **5.0 Introduction**

Findings on the Johor Bahru Malaysian respondents' socio economic background, their activities and their daily lives will be presented in this chapter. The chapter will present the types of activities the respondents spend their time on as part of their daily lives on a weekday and at the weekend. In addition, their favourite activities will also be extracted from the results of the questionnaire survey, time diaries and interviews conducted among the respondents of two major housing areas and neighbourhoods, Taman Pelangi and Taman Bandar Baru UDA in Johor Bahru, West Malaysia.

Activities become an essential part of everyday life and form part of growing up. Certain activities take place in certain places. Not much is known on how young Malaysian adolescents spend their time and what sort of activities they engage in during their after school free time. Research which specifically concentrates on adolescents in the developing countries is sparse (Mensch, 1998), particularly in the context of Malaysia. As far as multidimensional research from different disciplines on Malaysian adolescents is concerned, the focuses are found to be specific and focus on certain areas or domains of adolescents' life involving education, health, reproduction and psychology (Lai, 2007; Teoh, 2004; Law, 2005). Thus, this leaves a large vacuum of research opportunities in the areas of social science and geography on adolescents. Consequently, there still exists a large gap in knowledge on understanding Malaysian adolescent time use and specifically, their use of out of school hours for activities. Thus, one of the objectives of this research is also to understand Malaysian adolescents' activity patterns in the housing, neighbourhood and the city of Johor Bahru. The findings could also indicate the presence of resources within the outdoor landscape which the adolescents could access, experience or use.

In Malaysia, the number of adolescents spending time at home and more of their life extensively in housing neighbourhoods, has increased (Abu Bakar, 2001). Thus, outdoor housing setting forms an important space supporting and integrating their everyday life patterns and activities. For adolescents, the activities are part of their everyday life and the neighbourhood landscape forms the immediate

environment for the adolescent to move in and interact with. Bronfenbrenner (1979,1998) asserts that there is a link between the environment and adolescents. Adolescents can gain positive effects from their outdoor environment if the environment has the resources which cater for their needs. Therefore, understanding how the adolescents behave through their activities is necessary. The environment should be able to create opportunities for a range of activities parallel to what adolescents need physically as well as socially (Driskell, 2002). Thus, the data on their activities could help us to understand how adolescents move and identify the types of places they go to for their outdoor activities.

Statistical analyses were carried out on the survey data to determine whether there were associations between the activities and factors such as ethnic background, gender and age group. The information gathered from the respondents would answer the following research questions:

- 1. How do adolescents experience their daily lives in terms of time spent and the day's activities within their housing areas and neighbourhoods?**
- 2. What were their favourite activities within the housing area and neighbourhood?**

The analysis of Malaysian adolescents' time use of their daily activities was based on different periods of time of the day in relation to their after school hours and leisure. It helps to understand how Malaysian adolescents in two specific neighbourhoods, Taman Pelangi and Bandar Baru UDA, spend their everyday lives in the process of growing up in Johor Bahru. Apart from identifying their everyday activities, the chapter will also convey findings on their favourite activities outside of their school hours.

## **5.1 Results**

The results from the research project were from the three methods used, the questionnaires, time diaries and interviews and were sorted carefully. Even though the researcher had given clear instructions in the procedure, misinterpretation still occurred and some of the questionnaires and diaries were incompleting. Those with missing and incomplete tasks were excluded from the analysis. The final number of respondents who managed to finish the tasks were indicated in Table 5.1 a.

The time frames used in this research were earlier explained in Chapter 3, and the number of responses of this study is summarised in Table 5.1a. The time use data was compiled from one part of the survey questionnaire and for the researcher to get more information on the activities of the respondents as well as to confirm or verify the sequence of the activities, the use of time diaries was included. The time use diary of a 24-hour recall in one hour increments was the other research tool used to capture facets of the respondents' daily lives. The same respondents were chosen from the list of respondents who completed the survey questionnaires. Every one of the respondents was asked to complete the time use diary for a 7-days period. Even though 131 respondents completed the time use diaries, some of the time diaries were found to be incomplete.

**Table 5.1a: Final responses of the study**

	Number of Responses		Time Diaries		Interview	
	Questionnaire	% of total		% of total		% of total
<b>Gender Ratio</b>						
Male	217	51	70	53	48	50
Female	206	49	61	47	48	50
Total	423	100	131	100	96	100
<b>Age</b>						
10-11	76	18	30	23	24	25
12-13	113	27	32	24	24	25
14-15	114	27	34	26	24	25
16-17	120	28	35	27	24	25
Total	423	100	131	100	96	100
<b>Ethnic background</b>						
Malay	282	66	72	55	32	33.3
Chinese	77	18	31	24	32	33.3
Indian	64	16	28	21	32	33.3
	423	100	131	100	96	100

Only 96 time diaries were fully completed and the incomplete ones were put aside. In-depth interviews were then conducted with the same 96 respondents who had completed the time diaries, aimed at checking through the information entered into the time diaries. The information on respondents' activities, and what made them chose the activities was then analysed.

### 5.1.1 Aspects of Socio-economic Status of the Respondents

The adolescents in this study come from different socio-economic groups. Most of their parents have completed primary and up to secondary education (Malay: 68%; Chinese: 69%; and Indian: 75%) and the remaining have either completed college or university education (Malay: 26%; Chinese: 32%; and Indian; 25%) (Table 5.1b). It is expected that those from less educated background will earn less as they belong to unskilled or semi-skilled worker of lower and moderate "middle class" society. The Chinese adolescents are slightly better off in term of their way of lives and in material terms is substantially higher than that of the Malay and Indian adolescents generally. The financial status of parents is not wholly reflected in the types of residence they live in. Children's residences are scattered within the inner-city location and the amorphous portion of the western and eastern suburb of the city location. The inner city housing areas are mainly either high class low density at the central area or a high density neighbourhood at the western part of the city.

**Table 5.1b: Education levels of the adolescents' parents in the study**

Parent Education Level	Ethnic Groups (%)			Gender		Total
	Malay	Chinese	Indian	Male	Female	Sample
Primary School	15	19	15	22	25	21
Secondary School	53	50	60	47	44	49
College	14	12	9	17	12	15
University	12	20	16	14	19	15
	100%	100%	100%	100%	100%	100%

The majority of the adolescents in this study live in terraced houses (65%) in housing schemes (Malay: 63%; Chinese: 71%; and Indian: 66%). Other housing types like detached houses (11%), semi-detached house (10%), and other types of houses (14%). (See Table 5.1c).

Level of education does not necessarily determine the housing types but does influence the location and the living environment whether of higher or low class or poor living environment. Both the types of housing or residence and locations reflect the advantages and disadvantages to adolescents as the surrounding environments may differ in other ways. Different parts of the city vary in

landscape quality. A new urban housing schemes of various density are often built with minimum outdoor spaces particularly for adolescents. Low density high class housing areas within the inner city have 'rich' open spaces and vegetation and seafront views. High density flat have basic amenities fulfilling standard planning requirements for living environment of low and medium income groups. This standard requirements include provision for basic internal spaces and external facilities such as playgrounds for children and adolescents, small open spaces for park and garden, parking facilities for the residents. Other facilities include community centre, religious building such as a mosque, temple or church.

**Table 5.1c: Adolescents' housing type**

Parent Education Level	Ethnic Groups (%)			Gender		Total Sample
	Malay	Chinese	Indian	Male	Female	
Terraced	63	71	66	67	64	65
Bungalow/Detached	10	11	10	12	9	11
Semi-detached	13	8	9	11	13	10
Others (Other types of houses with percentages of less than 5%)	14	10	15	10	14	14
	100%	100%	100%	100%	100%	100%

The other findings of the study for this chapter will be presented firstly by providing an overview of the respondents' daily lives in terms of the sequence of activities on a weekday and at the weekend. The emerging trends in the respondents' types of activities, particularly those of sports and recreation, education and other activities, both on weekdays and at the weekend as well as those constituting their favourite activities would be clearly illustrated in the form of tables and charts.

The three broad time use categories used were necessary time, contracted time and free time as explained in Chapter 3. These findings will also be presented according to their correlation by ethnic background, gender, and age group and statistical analyses were run to examine whether there were significant

differences between the three variables and the respondents' activities at specific times; a school weekday and at the weekend. The relationship between the three factors and two specific types of activities, sports and recreational activities and their favourite activities were analysed further to see whether there were significant differences. Before presenting the results through tables and figures, a brief overview of the daily life of the Malaysian adolescent in Johor Bahru is given based on the extracts from the primary and secondary research data.

## **5.1.2 An overview of the daily life of a Malaysian adolescent in Johor Bahru, Malaysia**

### **5.1.2.1 Time frames and types of activities**

This overview of the daily life of Malaysian adolescents in Johor Bahru is based on the information gathered from the time diaries of the respondents and survey questionnaires. The daily life of the respondents from all three selected ethnic backgrounds, gender and age groups in both housing areas, Taman Pelangi and Bandar Baru UDA, started from the early time of 5.30 in the morning and continued right up to the late hours in the evening. On a weekday, school life took up most of their time. School plays an important role in Malaysian society, not only by providing education to the students but also by inculcating moral values and behaviour among them. Teachers will look out for the student's welfare in the endeavour to develop a common national identity and promote integration among the students. All Malaysian schools followed a common curriculum and syllabus. In terms of the language of instruction in Malaysian schools, the Malay language (or Bahasa Malaysia) is the main national language but English is a compulsory second language.

Malaysian children and adolescents have to undergo eleven years of compulsory education. There are six years of a primary school education as a Malaysian student starts formal compulsory primary education at the age of seven and ends in year six when the student is twelve years old. Secondary education takes up another five years. The students start their secondary school education at the age of thirteen and end at seventeen years old. There are two formal school sessions in the Malaysian Education System, the morning and the afternoon session, and each respondent attends either one of them. The school authorities are solely responsible for assigning the respondents' school session.

The respondents were assigned either the morning or afternoon sessions. The primary school session was mainly in the morning. It is only when the students' enrollment is high, that there would be an additional afternoon school session. In Johor Bahru's secondary school system, the upper forms, forms four and five, are normally assigned to the morning school sessions and the lower forms, the afternoon session.

The respondents who attend school in the morning session, have the afternoon from 1 o'clock as their free time for other activities. Those who attend the afternoon school session, have the whole morning up to the time before they go to school for other activities. A full formal morning school session starts at 7.25 in the morning and ends at 12.55 noon. The afternoon full school session starts at 1 o'clock in the afternoon and ends at half past six in the evening. Some of the Malay students have the alternative of attending three hours of additional religious school in the afternoon or morning. Religious school is not mandatory or compulsory for the adolescents. However, the formal school curriculum does provide religious education subjects but the hours are fewer compared to the full curriculum of a religious school. However, among the local Muslim community within Johor Bahru, they strongly believe that providing religious education could provide solid moral grounding for their young children. The children are taught subjects such as the etiquette of praying, good behaviour and eating which are integrated in everyday life. Only a few of the Indian respondents had indicated that they attended private sessions of religious classes in temples. Their prayers at the temple are normally held on a Friday evening.

About 75% of the respondents' waking time (in both Taman Pelangi and Bandar Baru UDA) is spent on school life. The morning, afternoon and evening daily life of the respondents is examined to understand the way they spend their time and how much time is actually spent on outdoor physical and social activities within the environs of their neighbourhood. The analysis is based on three time periods; between their waking up time in the morning until 1 o'clock in the afternoon; from 1 o'clock in the afternoon up to 7 o'clock in the evening and 7 o'clock in the evening and beyond. The activities examined are those within their waking up hours at around 6 o'clock in the morning up to the time when they go to bed at 10 o'clock in the evening.

Statistical analysis was carried out to see whether there were significant differences between the activities at different times of the day and the ethnic

background, gender and age factors. The other activities comprise indoor activities carried out within the home of the respondent and the outdoor activities are those carried out outside of their homes, within the housing area and its neighbourhood. The activities of the respondents mentioned in the questionnaire are categorized into 5 main groups of activities. (See Table 5.1d: Type of Activities and Time)

**Table 5.1d: Type of Activities and Time**

Type of Activities	Time
Cleaning Up, Meals, Washing Up, Sleeping Time	Necessary Time
Formal School, Religious School, Tuition	Contracted Time
Other Activities Reading House Chores Sports and Recreation Other activities	Free Time

1. Formal school-Compulsory formal school in the Malaysian context means primary and secondary public schools. A formal school session in Johor Bahru's school system lasts for 5½ hours. Even though the normal schooldays are from Monday to Friday, it is normal to have an additional school session on a Saturday morning for extracurricular activities such as school clubs, uniformed groups such as girl guides and boys scouts and also sports activities.
2. Religious school: In Johor Bahru, there are both public and private religious schools and there are sessions which the respondents could choose from, one in the morning session and another two in the afternoon. Each public religious school session lasts for about 3 hours. The three religious school time periods are 7.30 to 10.30 in the morning, 2.30 to 5.30 in the afternoon and 3.30 to 6.30 in the afternoon. There are also private religious classes which are normally held either in the afternoon or evening.
3. Educational activities  
Educational activities include attending private tuition and going to the library
4. Sports and recreation



This group has the widest scope of activities ranging from all sports and recreational activities. Some of the activities given in the responses are as follows-

Some of the sports activities mentioned by the respondents are:

Football, badminton, skateboarding, swimming, table tennis, lawn ball, netball, basketball, cycling and jogging.

Recreational activities mentioned by the respondents:

Passive activities such as strolling and visiting parks and natural areas

#### 5. Home activities

All activities, both carried out indoors which do not fit in the previous categories are listed as 'other' activities. Some of the 'other' activities are home activities such as watching television, playing home videos, doing house chores and resting.

### 5.1.3 Correlation of activities by ethnic background

Weekday and weekend activities were analysed according to ethnic background to determine whether the percentages of activities between a weekday (school day) and a weekend (a non schoolday) were associated with ethnic background. The activities by ethnic background were examined according to those carried out on a weekday and at the weekend; the specific types of activities, carried out within the necessary time, contracted and free time. Within a day, the activities were examined according to the morning, afternoon and evening time frames. Apart from the everyday activities, the favourite activities by ethnic background were also analysed.

#### I. Weekday activities by ethnic background

There were significant differences ( $p < 0.01$ ) between weekday activities in the morning, afternoon and evening according to ethnic background. (See table 5.1b). Most of the respondents' time in the morning on a weekday was spent in formal and religious schools and other activities were minimal. This applied to the respondents from the three ethnic backgrounds. Sixty-five percent of the Malay respondents were in religious school in the morning. The Malays' sports and recreational activities were lowest in percentage terms (1%). Similarly, for the Chinese respondents, 71% of them were in formal school and their activities with the lowest percentage were sports and recreation (3%). Seventy-one percent of the Indians were also in school and only 6% of their activities were sports and

recreational activities. On a weekday morning which was also a school day, the Chinese and Indian respondents had more free time compared to the Malay respondents.

On a weekday afternoon, some of the respondents were still in school, for those who were enrolled in the afternoon school session. Fifty-two of the Malay respondents spent their time on other types of activities of which the highest percentage was allocated to educational activities (20%) but only 9% was spent on sports and recreational activities. (See Table 5.1e). Thirty percent of the Chinese respondents were in formal school and another 70% were doing other activities. Among their activities, the highest percentage was for educational activities (29%) and the lowest percentage was for other activities. Eighteen percent of their activities were for sports and recreation. This percentage was highest compared to the Malays and Indians' percentage for sports and recreational activities. Twenty percent of the Indians were in formal school and 80% of them were doing other activities of which educational activities (34%) were the highest. Sports and recreational activities made up 8% of the Indian respondents' activities. Thirty-one percent of the Indian respondents went out for other outdoor non-play social activities in the afternoon.

**Table 5.1e: Weekday activities and ethnic background**

Weekday Activities	Row %								
	Morning			Afternoon			Evening		
	Malay	Chinese	Indian	Malay	Chinese	Indian	Malay	Chinese	Indian
Formal school	24	70	70	26	30	30	0	0	0
Religious school or class	65	0	0	24	0	0	1	0	2
Educational activities	3	9	14	18	29	25	59	36	53
Sports and recreation	1	3	7	9	18	8	9	1	16
Home activities	0	0	0	13	19	6	28	62	26
Other outdoor non-play social activities	7	18	9	10	4	31	2	1	3
Non response	0	0	0	0	0	0	1	0	0
Total %	100	100	100	100	100	100	100	100	100
Total count (N=423)	282	77	64	282	77	64	282	77	64

In the evening, the activity with the highest percentage was educational activities (59%) and the lowest was other non-play outdoor activities (2%). The Chinese respondents were more inclined to carry out home activities (62%) in the evening compared to other activities. The activities with the lowest percentage among the Chinese were sports and recreation (1%) and other non-play outdoor activities (1%). Educational activities (53%) formed the main activities for the Indian respondents and the least common was non-play outdoor activities (3%).

## **ii. Weekend activities by ethnic background**

Statistical analysis of the results showed significant differences ( $p < 0.01$ ) between ethnic background and evening weekend activities (See table 5.1c). Most of the morning activities of the Malay respondents were home activities (58%) and the activities with the lowest percentage were educational (9%) and other non-play outdoor activities (9%). (See Table 5.1c). For the Chinese respondents, most of them spent their morning on home activities (47%) and the activity with the lowest percentage was educational activities (10%). Forty-two percent of Indian respondents spent their morning on home activities. The activity with the lowest percentage among the Indians on a weekend morning was other non-play outdoor activities (16%).

Weekend afternoon activities of the respondents were mainly home activities. Forty-three percent of the Malay respondents spent their afternoon on home activities and the lowest percentage for the activities were non-play social activities (10%). (See Table 5.1f). The Chinese respondents were also spending most of their afternoons on home activities (43%). Other non-play outdoor activities (10%) were lowest among the afternoon activities for the Chinese respondents. The Indian respondents were also more inclined towards home activities (42%) on a weekend afternoon and non-play social activities (14%) having the lowest percentage.

**Table 5.1f: Weekend activities by ethnic background**

	ROW %								
	Morning			Afternoon			Evening		
	Malay	Chinese	Indian	Malay	Chinese	Indian	Malay	Chinese	Indian
Formal school	5	0	0	0	0	0	0	0	0
Religious school	0	0	0	0	0	0	0	0	0
Educational activities	9	10	25	19	15	20	36	18	33
Sports and recreation	19	25	17	26	20	23	21	16	20
Home activities	58	47	42	43	43	42	31	56	23
Other non-play social activities	9	18	16	10	17	14	9	5	24
Non response	0	0	0	2	5	0	3	5	0
Total %	100	100	100	100	100	100	100	100	100
Total count (N=423)	282	77	64	282	77	64	282	77	64

**iii. Favourite activities by ethnic background**

Sports and recreational activities formed the majority of all favourite activities across all the samples from the three ethnic backgrounds. (See Table 5.1g). The least favoured were home activities. Seventy-eight percent of the Malay respondents' favourite activities were sports and recreation and the favourite activities with the lowest percentage were home activities (7%). Seventy-three percent of the Chinese respondents' favourite activities were sports and recreation and the lowest percentage of favourite activities were home activities (12%). Similarly, seventy-two percent of the Indian respondents' favourite activities were sports and recreational activities and the lowest percentage of favourite activities were also home activities (9%).

**Table 5.1g: Favourite activities by ethnic background**

Favourite Activities	Row %					
	Ethnic background					
	Malay		Chinese		Indian	
Sports and recreation:						
Badminton	21		8		17	
Football	21		27		13	
Cycling	11		12		19	
Other sports and recreational activities: Sepak takraw, motorcycling, jogging, pingpong, Exercising, bowling, kite flying, remote control car, swimming, playing at the playground, running	25		26		23	
Total % for sports and recreational activities		78		73		72
Home activities		7		12		9
Other non-play outdoor activities		15		15		23
Total %		100		100		100
Total count (N=423)		282		77		64

By ethnic background, the highest overall percentages for the three favourite sports activities of the Malays were badminton (21%), football (21%) and cycling (11%). For the Chinese, their favourite sports were football (27%), cycling (12%) and badminton (8%). Cycling (19%) was the most favoured sports activity among the Indians. It was followed by badminton (17%) and football (13%).

#### 5.1.4 Correlation of activities by gender

##### I. Weekday activities by gender

On a weekday, the morning was mostly spent in either formal or religious schools. A total of 84% male respondents were in school in the morning while in the afternoon another 36% of them went to school again. (See Table 5.1h). Religious school was only attended by Muslim adolescents and among the respondents in this study, only the Malays were Muslims. Statistical analysis of the data showed significant statistical differences between weekday afternoon and evening activities and gender ( $p < 0.001$ ).

**Table 5.1h: Percentage of weekday activities and gender**

	Row %					
	Morning		Afternoon		Evening	
	Male	Female	Male	Female	Male	Female
<b>Activities of a weekday</b>						
Formal school	41	38	19	21	0	0
Religious school	43	43	21	20	1	1
Educational Activities	4	8	22	25	50	58
Sports and recreation	3	1	15	5	13	4
Home activities	0	0	15	20	34	36
Outdoor non-play social activities	9	10	8	9	1	1
Non- response	0	0	0	0	1	0
Total %	100	100	100	100	100	100
Total count (N=423)	217	206	217	206	217	206

On a weekday afternoon, 19% of the male respondents attend formal school and another 21%, religious school. (See table 5.1h). The remaining 60% of the male respondents spent their time on other types of activities, of which the highest percentage was spent on educational activities (22%) and the lowest was other non-play outdoor activities (9%). In the afternoon, 21% of the female respondents were in formal school and another 20% were doing other activities of which educational activities had the highest percentage (25%) and the lowest were sports and recreational activities (5%).

In the evening the activity with the highest percentage was educational activities (50%) and the lowest was other non-play outdoor activities (1%). The activity with the highest percentage among the female respondents were educational activities (58%) and the lowest was sports and non-play outdoor activities (1%).

## **ii. Weekend activities by gender**

Statistical analysis of the results showed significant differences ( $p < 0.001$ ) among gender and weekend morning and afternoon activities only. (See Table 5.1i). The respondents were accorded more free time at the weekend and the percentage of activities increased substantially.

**Table 5.11: Weekend activities by gender**

			Row %			
	<b>Morning</b>		<b>Afternoon</b>		<b>Evening</b>	
	Male	Female	Male	Female	Male	Female
Formal school	4	3	0	0	0	0
Religious school	0	0	0	0	0	0
Educational activities	11	12	21	17	29	36
Sports and recreation	23	17	33	16	24	17
Home activities	53	56	32	53	35	34
Other outdoor activities	9	12	11	12	9	11
Total %	100	100	100	100	100	100
Total Count	217	206	217	206	217	206

Even though schooldays for Malaysian adolescents are from Monday to Friday, Saturday is still used for extracurricular activities in school, once a fortnight in the morning. Extracurricular activities in the Malaysian Educational system refer to sports and non-sports activities, such as uniformed school bodies, for example, the boy scouts and the girl guides, were conducted by the school within the school grounds.

On a weekend morning, 4% of the male respondents attended formal class. The rest of the male respondents (96%) spent their time on other activities. (See table 5.1j). The activity with the highest percentage was home activities (50%) and the lowest was other non-play outdoor activities (4%). Three percent of the female respondents attended formal school and the rest spent their weekend morning on other activities. The activity with the highest percentage among the female respondents was home activities (56%) and the lowest was non-play outdoor (12%) and educational activities (12%).

**Table 5.1j: Favourite activities by gender**

Favourite activities	Male		Female	
	Row %		Row %	
Sports and recreational activities:				
Badminton	15		28	
Football	33		2	
Cycling	11		15	
Other sports and recreational activities: Sepak takraw, motorcycling, jogging, pingpong, Exercising, bowling, kite flying, remote car, swimming, playing at the playground, running	21		26	
Total % for sports and recreational activities		80		71
Other Favourite Activities:				
Home activities: Video games, house chores, reading		7		13
Seeing and hanging out with friends, gardening, shopping, discussion and studying with friends, going to the shopping complex, religious activities, community activities		9		20
Total %		100		100
Total count		217		206

On a weekend afternoon, most of the males spent their time on sports and recreation activities (33%) with the lowest being on other non-play outdoor activities (11%). Fifty-three percent of the females spent the weekend afternoon on home activities. The activity with the lowest percentage among the female respondents was non-play outdoor activities (12%).

### **iii. Favourite activities by gender**

Sports and recreational activities formed the majority of all favourite activities for both male and female respondents. (See Table 5.1j). The least favoured were home activities. Eighty percent of the male respondents' favourite activities were sports and recreation and the least favoured activities were home activities (7%). Seventy one percent of the female respondents' favourite activities were sports and recreation and the lowest percentage of favourite activities were home activities (13%). By gender, the highest overall percentages for the three favourite sports activities of the male respondents were football (33%), other sports (21%) and badminton (15%). For the female respondents, their favourite sports were badminton (28%), other sports (25%), cycling (15%) and badminton (8%).



### **5.1.5 Correlation of activities by age group**

#### **i. Weekday activities by age group**

Statistical analysis was performed for weekday and weekend activities and age. This was intended to observe whether the activities of a school day and a weekend were associated with age. Statistical analysis of the results showed significant differences ( $p < 0.001$ ) among age group and morning and afternoon weekday activities. (See table 5.1k).

Fifty-one percent of the 10 to 11 year-olds attended formal school and another 44% of them went to religious school. There were no other activities among the 10 to 11 year-olds except for educational activities (5%). For the 12 to 13 year-olds, 45% of them were in formal school in the morning and another 27% in religious school. Twenty-eight percent were spent on other activities and the highest was on other outdoor non-play social activities (18%). Forty-two percent of the 14 to 15 year-olds attended formal school and another 35% attended religious school. The activities which had the highest percentage among the 14 to 15 year-olds were other outdoor non-play social activities (12%). Attendance of religious school was highest among the 16 to 17 (67%) year-olds while 25% of them attended formal school. The remaining activities were educational (4%) and other outdoor non-play social (4%) activities.

Statistical analysis of the results showed significant differences ( $p < 0.001$ ) between age groups and afternoon weekday activities. (See Table 5.1k). Among the 10 to 11 year-olds, 37% of them attended formal school and none attended religious schools. Thirty-two percent of the 10 to 11 year-olds' activities were educational and the lowest were home activities (6%). Thirty-five percent of the 12 to 13 year-olds were in formal school and another 37% attended religious school. Among their other activities, the highest percentage was for educational activities (16%). The other activities which had the highest percentage were educational (15%) and other non-social (15%) outdoor activities. Thirteen percent of the 14 to 15 year-olds attended formal school and another 38% were in religious school. Three percent of the 16 to 17 year-olds attended religious school in the afternoon. Thirty-three percent of their other activities were educational and 27% were home activities.

## **ii. Weekend activities by age group**

Statistical analysis of the results showed significant differences ( $p < 0.001$ ) between age group and weekend morning activities. (See Table 5.11). Despite not having formal school sessions, the activities of the respondents were mainly home activities and the percentages were high across all age groups. The percentage was as high as 70% among the 16 to 17 year-olds. The lowest was 40% among the 10 to 11 year-olds. However, the 10 to 11 year-olds had the highest percentage of sports and recreational activities (41%) in the morning and it was lowest among the 16 to 17 year-olds (10%).

Statistical analysis of results showed very significant differences ( $p < 0.001$ ) between age groups and afternoon weekend activities. The dominance of home activities among the respondents was obvious with the high percentages recorded among respondents in all the age groups. This was reflected in the number of respondents who chose to stay at home at the weekend. The percentage was highest at 48% among the 14 to 15 year-olds whilst the minimum was 33% among the 10 to 11 year-olds. The percentage for sports and recreational activities did not differ much between the four age groups. The highest was 28% for the 10 to 13 year-olds. The lowest percentage (17%) was for sports and recreational activities among the 14 to 15 year-olds. The percentage of respondents who went out for non-play social activities was lowest among the 14 to 15 year-olds and highest among the 16 to 17 year-olds. There was a high 13% non response in the 10 to 11 year-olds.

Statistical analysis of the results also showed significant differences ( $p < 0.001$ ) between the age group and evening weekend activities. There were high percentages of educational activities among the respondents of all age groups except the 10 to 11 year-olds. Educational activities were lowest (16%) in the 10 to 11 year old and highest (41%) in the 12 to 13 year-olds. The percentage of sports and recreational activities was lower among the younger respondents of ages 10 to 13 years old and higher, ranging from 23% to 25%, among the older respondents from age 14 to 17 years old. Other non-play social activities on weekend evenings decreased according to the age group. It was highest (22%) in the 10 to 11 year-olds and lowest (6%) among the 16 to 17 year-olds.

Row %												
Weekday activities	Morning				Afternoon				Evening			
	10 to 11	12 to 13	14 to 15	16 to 17	10 to 11	12 to 13	14 to 15	16 to 17	10 to 11	12 to 13	14 to 15	16 to 17
Formal school	51	45	42	25	37	35	13	0	0	0	0	0
Religious school	43	27	35	67	0	37	38	3	0	1	0	0
Educational activities	5	6	8	4	32	16	15	33	41	54	62	54
Sports and recreation	0	4	3	0	14	4	8	16	9	6	5	13
Home activities	0	0	0	0	6	4	11	27	46	34	27	32
Other non-play social activities	0	18	12	4	11	4	15	21	4	3	5	1
Total %	100	100	100	100	100	100	100	100	100	100	100	100
Total count (N=423)	76	113	114	120	76	113	114	120	76	113	114	120

Table 5.1k: Weekday activities by age

**Table 5.1: Weekend activities by age**

	Row %											
	Morning				Afternoon				Evening			
	10 to 11	12 to 13	14 to 15	16 to 17	10 to 11	12 to 13	14 to 15	16 to 17	10 to 11	12 to 13	14 to 15	16 to 17
Formal school	0	0	0	0	0	0	0	0	0	0	0	0
Religious school	0	0	1	0	0	0	0	0	0	0	0	0
Educational activities	11	15	22	11	15	19	27	13	16	41	33	35
Sports and recreation	41	24	11	10	28	28	17	27	16	15	25	23
Home activities	40	46	55	70	33	41	48	44	33	36	33	35
Outdoor non-play social activities	8	15	10	8	11	12	8	16	22	8	9	6
Non response	0	0	0	0	13	0	0	0	13	0	0	2
Total %	100	100	100	100	100	100	100	100	100	100	100	100
Total count (N=423)	76	113	114	120	76	113	114	120	76	113	114	120



### iii. Favourite activities

Sports and recreational activities formed the majority of the favourite activities for respondents of the four age groups especially the younger age groups of 10 to 13. (See Table 5.1m). The least favoured were home activities. Eighty-six percent of the 10 to 11 year-olds' favourite activities were sports and recreation and the lowest percentage was for home activities (7%). Similarly, eighty-six percent of the 12 to 13 year-olds' favourite activities were sports and recreation with the lowest percentage of favourite activities being for home activities (4%). Meanwhile, sixty-six percent of the 14 to 15 year-olds' favourite activities were sports and recreation and the lowest percentage was for home activities (16%) and other non-play social activities (16%).

The highest overall percentages for the three individual favourite sports activities of the 10 to 11 year old respondents were other sports and recreational activities (28%), football (26%), and badminton (21%). For the 12 to 13 year-olds, their favourite sports were badminton (25%), cycling (22%) and football (21%). For the 14 to 15 year-olds, their favourite sports were other sports and recreational activities (24%), badminton (16%) and football (15%). For the 16 to 17 year-olds, their favourite sports were badminton (25%), cycling (22%) and football (21%).

**Table 5.1m: Favourite activities by age groups**

Favourite activities	Row %			
	Age			
	10 to 11 years old	12 to 13 years old	14 to 15 years old	16 to 17 years old
Sports and recreational activities				
Badminton	21	25	16	27
Football	26	21	15	13
Cycling	11	22	11	7
Other sports and recreational activities	28	18	24	21
Total	86	86	66	68
Home activities	7	4	5	16
Other outdoor activities	7	10	29	16
Total %	100	100	100	100
Total Count (N=423)	76	113	114	120

## 5.2 Discussion

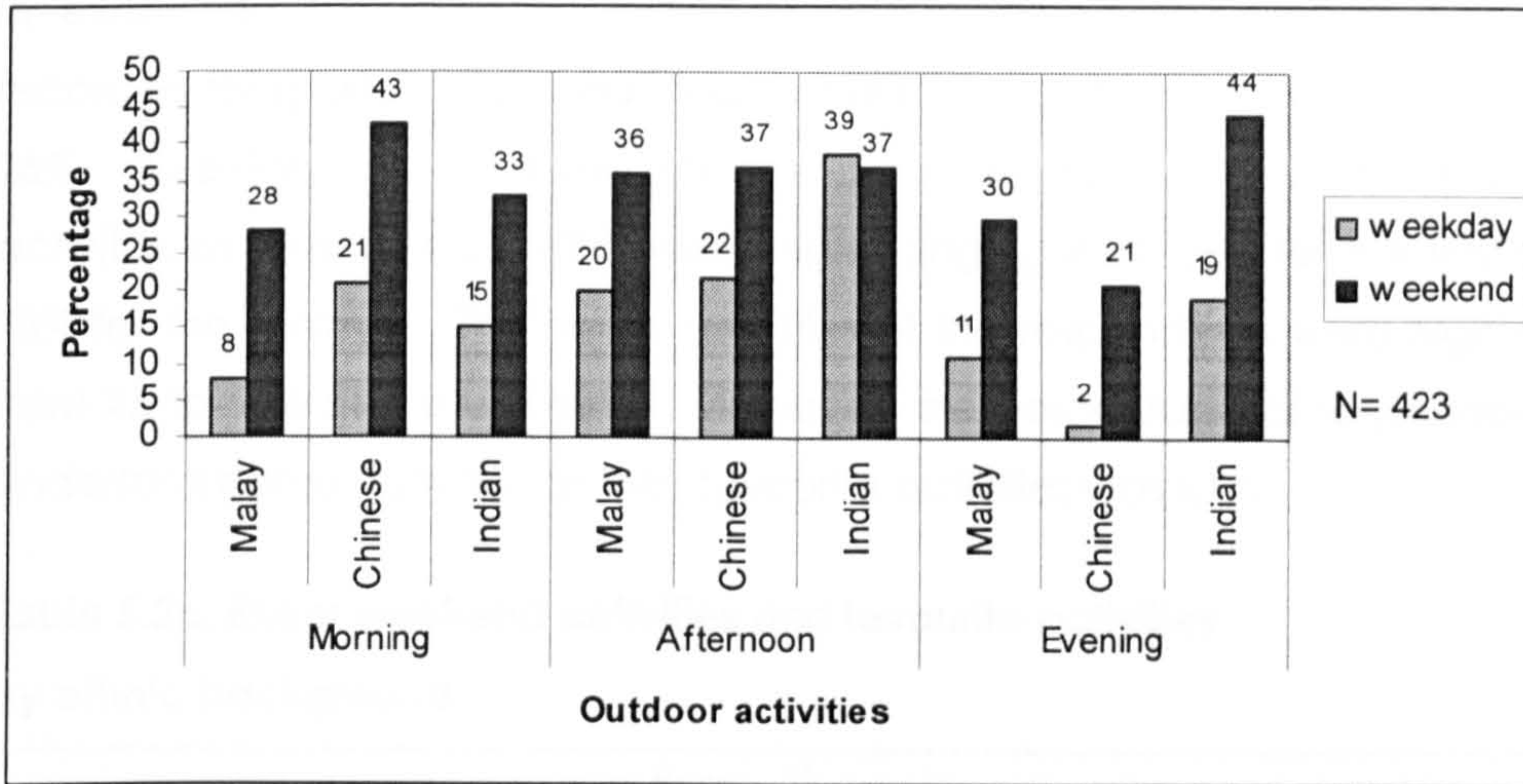
The activities within the necessary, and contracted time took up most of a weekday, leaving very little free time for the respondents to indulge in activities of their preference. In general, the findings, confirmed that on a weekday, the time

available for outdoor activities was limited as most of the respondents' time was spent in school or at home. Activities at home mentioned by the respondents were watching television, listening to music, playing video games, computer, having a short nap, helping the family with the house chores and doing their schoolwork. The morning was spent in school which started as early as 7.30 in the morning. Malaysian students, are normally provided with schoolwork to do every day which they are committed to doing either in the afternoon or evening for those who were in the morning session school and vice versa for those who attend school in the afternoon session.

The main activities beyond their school hours were educational (such as attending private tuition), sports and recreational activities, home and other outdoor activities. Of the four main types of activities, most comprised educational and home activities. The percentage of outdoor activities were lowest in the morning. The afternoon saw a substantial increase in outdoor activities. Even though the evening was normally a time when most of the respondents stayed indoors to do their schoolwork, some respondents did go out for certain outdoor activities such as playing football, badminton or going to the cyber café for Internet browsing or just to hang out with friends.

The study examined whether there were significant differences between the respondents activities both on a weekday and a weekend, and the three variables, ethnic background, gender, and age group. The percentage of Malay respondents who went out for outdoor activities was lower on a weekday than at the weekend.

Among the respondents of the three ethnic groups, the Malays had the least percentage of activities on a weekday morning and afternoon. The least percentage of outdoor activities for the Malay respondents was in the morning of a weekday and at the weekend. (See Figure 5.2.1) This was because, most of the respondents attended both formal and additional religious schools. Going out for some outdoor activities was almost impossible with their tight time schedules. Due to not having much free time in the daytime, the percentage of Malays who went out in the evening was substantially higher than in the morning. The highest percentage of outdoor activities for the Malays was in the afternoon, followed by the evening and the least was in the mornings.



**Figure 5.2.1: Comparison of weekday and weekend outdoor activities by ethnic background**

The Chinese respondents' time for outdoor activities differed slightly from that of the Malays and Indians. Most of the Chinese went out for outdoor activities in the morning and afternoon. The percentage of Chinese who went out on weekday mornings was highest (21%) among the three ethnic backgrounds. The percentage of outdoor activities for weekday evenings increased to 21% but it was still the lowest among the three ethnic groups. In fact, the highest percentage of outdoor activities among the Chinese respondents was on a weekend morning (43%). However, there were fewer Chinese who went out for outdoor activities in the evening especially on a weekday (2%) as more of their time was spent on educational and home activities.

The respondents who went out the most for outdoor activities were the Indians and they had a consistent percentage for outdoor activities on a weekday and at the weekend. The findings verified that the lowest percentages of outdoor activities among the Indians were recorded on a weekday morning (15%) and evening (19%). On a weekday, the Indian respondents went out more often than the Malays and Chinese. The Indians went out more in the afternoon (39%) on a weekday but at the weekend in the evening the percentage rose to 44%. The findings showed that their preferred time for activities was in the evening, followed by the afternoon and morning.



In examining the exact activities at the weekend the highest percentage recorded for sports and recreational activities ranged from 16% to a maximum of 26%. (See Table 5.2a). However, the percentages of sports and recreational activities as favourite activities were high, ranging from 68% for the Indians and 78% for the Malays. The home activities of the respondents were high ranging from 23 to 58% at the weekend. However, the percentage of respondents who undertook home activities as their favourite activities was low.

**Table 5.2a: Exact weekend activities and favourite activities by ethnic background**

Row %												
	Morning			Afternoon			Evening			Favourite activities		
N=423	Malay	Chinese	Indian	Malay	Chinese	Indian	Malay	Chinese	Indian	Malay	Chinese	Indian
Formal school	5	0	0	0	1	0	0	0	0			
Religious school	0	0	0	0	0	0	0	0	0			
Educational activities	9	10	25	19	14	20	36	18	33			
Sports and recreation	19	25	17	26	20	23	21	16	20	78	73	68
Home activities	58	47	42	43	43	42	31	56	23	7	12	9
Outdoor non-play social activities	9	18	16	10	17	14	9	5	24	15	15	23
Non response	0	0	0	2	5	0	3	5	0			
Total %	100	100	100	100	100	100	100	100	100	100	100	100
Total count (N=423)	282	77	64	282	77	64	282	77	64	282	77	64

The maximum was 12% among the Chinese respondents and lowest was among the Malays (7%). Among the three ethnic groups, the Malays spent the most time on sports and recreational activities, followed by the Chinese and Indian respondents. The disparity in figures showed that even though the inclination of the respondents from all three ethnic backgrounds for sports and recreational

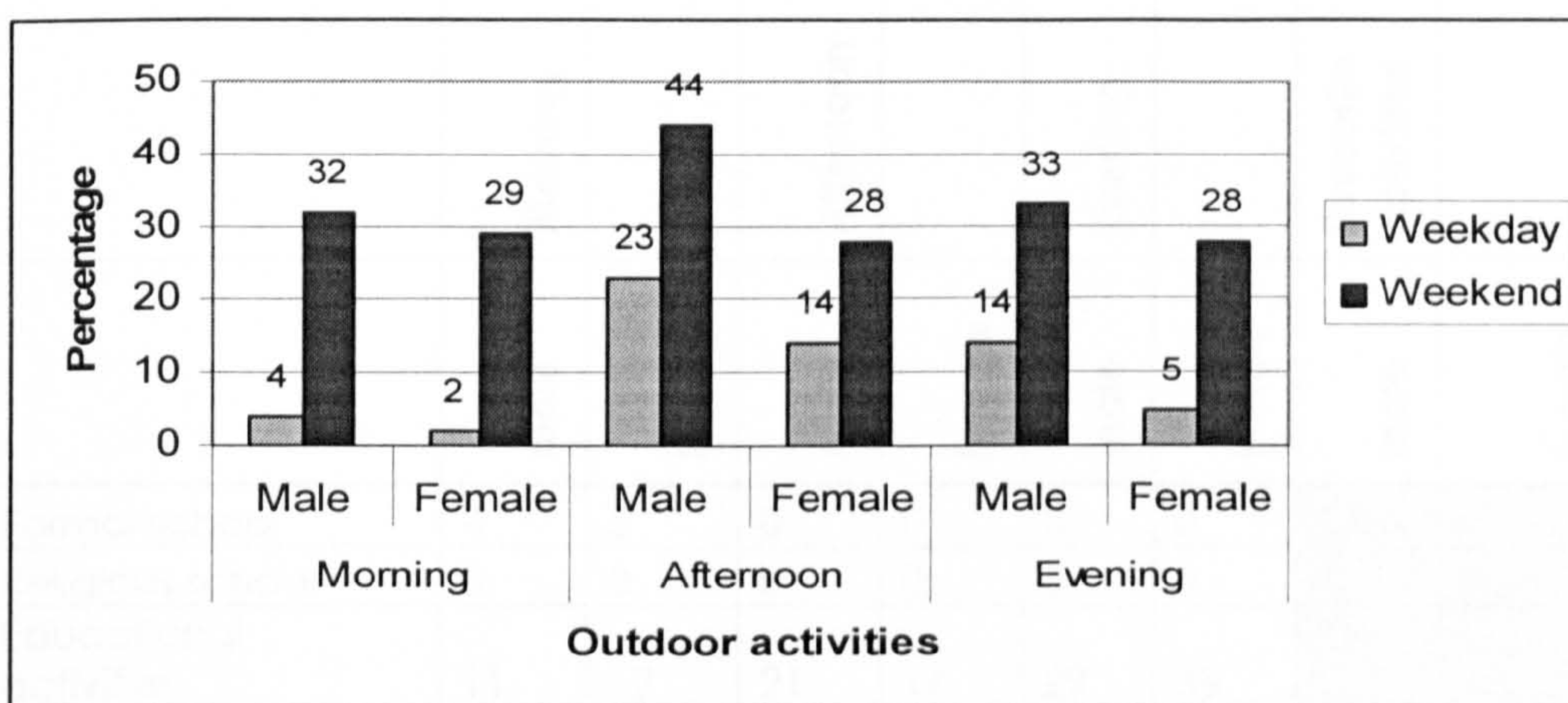
activities was high, they had limited opportunities and again had to resort to home activities to occupy their free time.

When the activities were examined by gender, there were varying significant differences between the activities at specific times of the day, whether morning, afternoon or evening. Variations in activities existed on a weekday and at the weekend. A weekday for the respondents did not provide much free time for them to indulge in outdoor activities due to the tight 'contracted time schedule' when they were either in school or doing other necessary activities.

Statistical analysis found that the results indicated that there was no significant difference between weekday morning activities ( $p > 0.05$ ) but it was the opposite at the weekend in the morning ( $p < 0.001$ ). There was significant differences between gender and activities on a weekday and weekend afternoon and evening. The outdoor activities were sports, recreational and other outdoor non-play social activities. The outdoor non-play social activities were passive activities such as hanging out, visiting friends, strolling or spending time at the shopping complex or commercial areas, visiting the cyber café or just going out for a meal. The cyber café was one of the places that the respondents went to for Internet browsing and meeting up with friends. Malaysian adolescents were found to be heavy domestic computer users in comparison to the other age groups and the computers are used for personal and household purposes such as entertainment (Jaafar, 2005). The male respondents were more inclined towards physical activities such as sports and recreational activities. The female respondents were more inclined towards non-play social activities such as going out and meeting friends and doing home activities.

The results showed that the males spent more time on outdoor activities than the females on both weekdays and weekend. There are a number of studies that presented information on the time spent in three major domains: work, school and leisure. Published data on the amount of time adolescents spend on different activities by gender is rare. However, the few related previous research findings contended that there were significant differences in the way male and female adolescents spend their time. Larson and Verma's (1999) review of studies of time use among adolescents documented the widespread tendency for boys to have more free time than girls. Boys typically were the ones who spent less time on domestic work (Larson, 1999).

In terms of outdoor activities, the findings of this study concurs with those studies as the male respondents' time spent on outdoor activities was higher than the female respondents irrespective of the time of the day. (See Figure 5.2.2). The male respondents also spent less time on home activities compared to the females. Outdoor activities were lowest on a weekday morning but they were higher on a weekend morning. The higher percentages of activities at the weekend were possible as they were able to get access to resources and facilities for their activities beyond the housing areas and neighbourhood. More outdoor activities were carried out in the afternoon. There were also some outdoor activities carried out in the evening. Due to the limited time to go out on a weekday afternoon, the evening became the alternative time for them to have some outdoor activities. The overall trend saw an evidently high increase in outdoor activities at the weekend compared to those on a weekday.



**Figure 5.2.2: Comparison of weekday and weekend outdoor activities by gender**

In examining the actual or exact activities which were carried out by the respondents and comparing them with activities which they listed as their favourite activities, the trend showed a difference in percentages. There is a wide difference in the percentage of sports and recreational activities as favourite activities and the percentage of those respondents who actually carried out the activities.

The male respondents' involvement in sports was high for the weekend and the percentage of activities in sports activities during their free time ranged from the lowest (17%) to the highest, 33%. The percentage of those quoting sports and recreational spaces as their favourite activities was much higher than the females. Among their favourite activities, sports and recreational activities were preferred

most by the respondents from both genders, 80% for the males and 71%, for the females.

The findings demonstrated gender differences in the type of activities preferred by the respondents. The male respondents' inclination towards physically active leisure sports and recreational activities while the female more on social based leisure or activities were similar across other time use studies on adolescents conducted in other countries such as France (Chenu, 2003) and Belgium and the Netherlands (Stevens, 2003)

**Table 5.2b: Exact weekend activities and favourite activities by gender**

	Row %							
	Morning		Afternoon		Evening		Favourite activities	
	male	female	male	female	male	female	male	female
Formal school	4	3	0	0	0	0		
Religious school	0	0	0	0	0	0		
Educational activities	11	12	21	17	29	36		
Sports and recreation	23	17	33	16	24	17	80	71
Home activities	53	56	32	53	35	34	7	9
Outdoor non-play social activities	9	12	11	12	9	11	13	20
Total %	100	100	100	100	100	100	100	100
Total Count (N=423)	217	206	217	206	217	206	217	206

The percentage of respondents quoting sports and recreational activities as their favourite activities was high but the percentage of those who actually had the opportunity to do the activities was relatively low. Among the favourite activities, only 7% of the males and 9% of the females chose home activities as their favourite activities. However, the exact percentage of respondents who mentioned carrying out home activities was high, between 32% to 56%.

In both exact weekend and favourite social activities, the percentage was higher among the females. This disparity in figures provides an indication that home

activities might not be the activities that they preferred but they had to accommodate them because of a lack of opportunities and physical resources for sports and recreational activities. During the interviews, the respondents mentioned the lack of places to go to for their activities and this might be the reason for the current patterns or trends in the respondents' activities in both neighbourhoods.

The lower percentage of exact sports and recreational activities among female respondents might not be due to a lack of interest but again because of the lack of opportunities and resources available in their housing area and neighbourhood. This statement could be supported by the female respondents personal views during the interview concerning their interest in sports activities. Nevertheless, during adolescence, females were said to become increasingly bound by gender roles, and this became a key issue among the posited reasons for the decrease in physical and outdoor activity (Pipher, 1994; Stemmermann, 1993) which seemed to apply to the Johor Bahru female adolescents of this study.

More female respondents were inclined to choose home and other outdoor non-play social activities partly because there were limited resources and fewer opportunities for sports activities among the female respondents. For the female respondents, less participation in sports activities was evident compared to the male respondents. The female respondents of this study had a higher inclination towards social leisure compared to the male respondents and this concurred with the findings on adolescents in other countries (Hendry, 1983; Altman, 1980). Culture and religion were found to be some of the contributing factors for the patterns of activities among female adolescents in Johor Bahru, Malaysia.

Due to different cultural settings, Johor Bahru female adolescents' social networks were limited and normally restricted to the domestic sphere. They were considered safe within the home rather than being outside. Nevertheless, through school life, they managed to gain new friends and alliances. With the presence of their own circle of friends or peers which formed their social networks the need to be with friends arose. Restrictions on mobility for female adolescents in Johor Bahru were present in all three ethnic groups but were particularly stronger among the Malay Muslim female adolescents. It was common among Malay Muslim parents to 'protect' their daughters by restricting their mobility more than

that of their sons for good valid reasons such as protecting them against the dangers existing within the housing area and neighbourhood.

Among the dangers were general violence and unapproved activities, such as drug abuses and even the watchful gaze of males. Therefore, unlike male adolescents, the Muslim female adolescents' chances of full participation in public life were narrowed. As a result, Malay Muslim female adolescents were often invisible and less welcomed in public spaces. They had limited safe space for social and physical development as they had more domestic responsibilities compared to the Muslim male respondents. However, the restriction of Malay female adolescents in physical and recreational activities was imposed out of a misinterpretation of the teachings of Islam on recreation by the Malay Muslim community at large.

In reality, recreation is encouraged by Islam but, of course, within certain restrictions. The teachings of Islam indicate a balance between the life of this world and the life of the next. While often seen as a radical or extreme religion, Muslims consider it the middle road.

*"Thus have we made of you a community justly balanced...?"*

(Qur'an 2:143).

According to the Quran, Muslims do not live this life selfishly, with complete disregard for God. Nor do they neglect the world to devote themselves solely to worship. Muslims are required to strike a balance by fulfilling the obligations in life and enjoying this life, being always mindful of their duties to Allah and to others. Muslims are reminded that extremity in either direction is frowned upon and Islam enjoins upon mankind the use of all clean, healthy and useful things, and Muslims are not supposed to deprive their bodies of clean food and healthy recreation.

The scholars of Islam have also attested to the importance of lawful recreation in the healthy development of a person's character. Al-Ghazâli writes:

*"After completing his bookwork, a child should be allowed to play in a nice manner so that he can relax from the fatigue of his studies. His play should not tire him out. If the child is forbidden to engage in play and forced to spend his time in perpetual study, this will result in his heart dying, his intelligence waning, and his manner of living becoming so wretched that he will seek from it any escape he can find."*

Further to that, another Muslim scholar, Ibn Miskawayh, wrote:

*"A child should be permitted on occasion to engage in nice play so that he can relax from the fatigue of his proper upbringing. His play should neither cause injury nor be very tiring."*

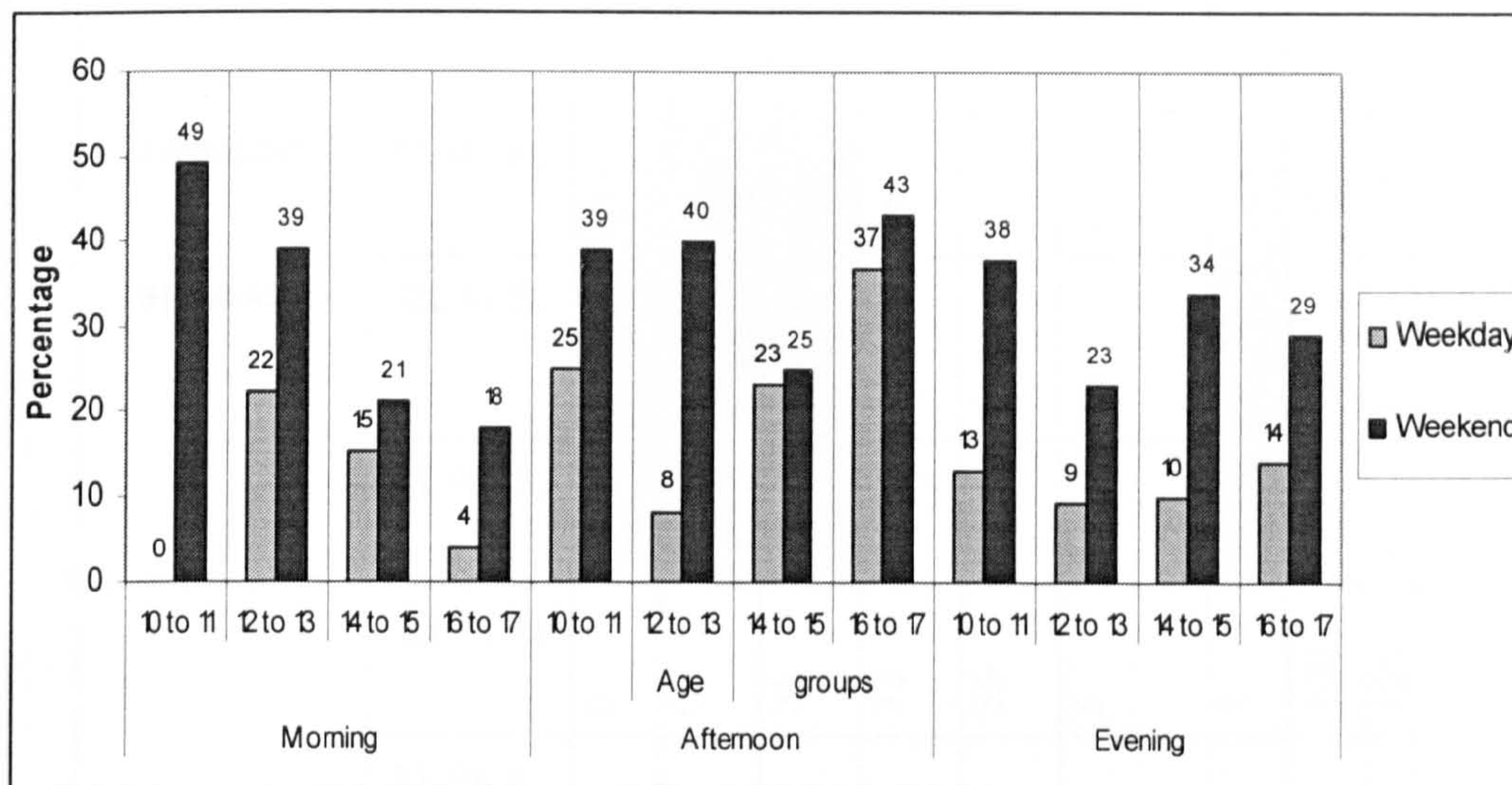
Ibn Jamā`ah observes:

*"There is nothing wrong with the student resting himself, his heart, his mind, and his eyes – if any of these grows tired or languid – with play and recreation. This will return him to his proper state so that his time will not be wasted. There is nothing wrong with it being strenuous and exercising his body, for it has been said that this refreshes the metabolism, rids the system of excess toxins, and revitalizes the body."*

Within the specific ethnic background, for the Malays, sports were not widely encouraged among the female Malays because of the misinterpretation of recreation. An analysis of the activities and ethnic background substantiated that there was an association or relationship between ethnicity and outdoor activities. (See figure 5.2.2) In general, the percentages of outdoor activities for all respondents of the three ethnic groups were higher at the weekend than on a weekday except for one situation. The Indians spent more time outdoors on a weekday afternoon than a weekend afternoon.

The age factor was found to be strongly associated with outdoor activities. (See Figure 5.2.3). The outdoor activities comprised both the physical and social. Weekend activities were higher than weekday activities for all respondents across all age groups. There were fewer outdoor activities for the 10 to 11 year-olds on a weekday and none in the morning. However, the percentage of 10 to 11 year-olds who went out for outdoor activities was consistently high on the weekend morning (49%), afternoon (39%) and evening (38%). For the 12 to 13 year-olds, their outdoor activities were mostly in the morning (39%) and afternoon (40%). The 14 to 15 year-olds went out more on the weekend evening (34%) compared to the afternoon and morning. For the oldest respondents, the 16 to 17 year-olds, the highest percentage of outdoor activities was on a weekend afternoon (43%).

When statistical analysis was conducted for age factor in relation to the actual weekend activities, there were significant differences between the two variables. The percentage of sports and recreational activities as favourite activities was as high as 86% among the 10 to 11 year-olds. The minimum percentage of 66% was among the older respondents from the age of 14 to 17 years old. As the age of the adolescents increased, their activities became more diverse such as social activities and other outdoor activities. Home activities were higher among the older respondents especially in the morning and afternoon. The actual home



**Figure 5.2.3: Comparison of weekday and weekend outdoor activities by age group**

activities ranged between 33% to a high of 70%. These high percentages revealed that the respondents spent a lot of their time at home, even at the weekend but home activities might not be their favourite activities. The older respondents were also able to go out freely in the evening on their own and with friends compared to the younger respondents between the ages of 10 to 13. The younger ones could only go out accompanied by the adults. The age factor imposed restrictions on the range of activities among the younger adolescents. As parents would allow them to go out for their activities within the proximity of the home, the neighbourhood landscape became more relevant and beneficial for them. The findings revealed that even though many of them prefer to go out for sports activities, they would still have to spend more time at home partly because of the limited availability of resources within the neighbourhood which were not enough to attract them to go out.

The findings of this study have also illustrated that, indeed, football and badminton were the most popular games among these young people. Sports preferences among Malaysian adolescents and adolescents in the West appeared to differ. For instance, ball games are popular among Belgian boys and Belgian girls prefer swimming. In the Netherlands and Belgium, the male adolescents spent more time on sports in sports clubs than their female adolescents (Steven, 2003).



		%															
		Morning				Afternoon				Evening				Favourite activities			
		10 to 11	12 to 13	14 to 15	16 to 17	10 to 11	12 to 13	14 to 15	16 to 17	10 to 11	12 to 13	14 to 15	16 to 17	10 to 11	12 to 13	14 to 15	16 to 17
Formal school	0	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Religious school	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Educational activities	11	15	11	9	15	18	27	13	16	41	33	35	16	86	86	66	66
Sports and recreation	41	24	11	10	28	28	17	27	16	15	25	23	7	4	5	16	16
Home activities	40	46	55	70	33	41	48	44	33	36	33	35	7	4	5	16	16
Outdoor non-play social activities	8	15	10	8	11	12	8	16	22	8	9	6	7	10	29	16	16
Non response	0				13	0	0	0	13	0	0	2					
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total count	76	113	114	120	76	113	114	120	76	113	114	120	76	113	114	120	120

**Table 5.2c: Actual weekend activities and favourite activities by age group**

#### 5.4 Summation

The findings revealed that Malaysian adolescents in Johor Bahru did not spend much time on outdoor activities within their neighbourhood. In comparison to adolescents in the West, who on average spent about 40% of their time indoors, the respondents of this study spent an average of 55% of their time at home (Verma and Larson; 2003).

Nevertheless, the interest in physical activities was relatively high among the respondents regardless of gender, ethnicity and age. As many as 80% of them quoted sports and recreational activities as their favourite activities but the percentage reflected in the actual activities that they carried out did not support this interest. The high interest expressed in sports was in line with a statement made by the AFS ([www.afs.org](http://www.afs.org), 2003) that Malaysian adolescents love sports. In reality, the percentage of respondents who managed to engage in sports was only between 10 to 40% which varied according to gender, ethnicity and age factors. A trend exists whereby the percentage of sports activities decreases when the age increases, but the percentage of home activities increases with an increase in age as well. The percentage for outdoor non-play social activities was low in all age groups. It was lowest among the 16 to 17 year-olds and the 10 to 11 year-olds. However, they faced a hindrance to being able to be more active outdoors.

In the findings, the busy schedule and limited resources and facilities within their neighbourhood were the prime reasons for the lack of socio spatial movement within their housing neighbourhood landscape. One of the reasons was the busy schedule of compulsory activities which they were committed to doing within necessary and contracted time. These committed activities became the main reason for the meagre free time left for the respondents on a weekday which was hardly enough to enable them to engage in outdoor activity due to the major activities that took up most of their life in a weekday. It became a contributing factor for the lack of outdoor activities among the respondents. The activities were educational activities which were deemed important and necessary in achieving educational excellence. It is a form of pressure not only from parents but also the education system in Malaysia. Success in educational pursuits is deemed necessary for the adolescent in order to secure a good future in terms of job opportunities as well as to improve their economic status. This is reflected in the time allocated for school and educational activities. Apart from

the compulsory formal schooling, it is a trend in Malaysian families to ensure adolescents attend extra classes at weekends provided by the public schools or by the private tuition institutions.

Apart from the commitment towards education, an examination of weekend activities reinforced the fact that even though the respondents had more free time, the percentage of respondents who stayed at home was high. With the busy schedule, the presence of public spaces within the neighbourhood would enable the adolescents to go out within a short distance. The findings in this chapter points out that the use of the immediate environment, the housing area and neighbourhood landscape was rather limited. The following chapter would further look into the resources and facilities which were currently available to the respondents.

## CHAPTER 6:

### Adolescents' Favourite Places and People

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#### 6.0 Introduction

This chapter summarises findings relating to the places in the housing areas and the neighbourhoods that adolescents normally choose to go to as their preferred social-spatial places in the context of their everyday life. In addition, the respondents' social circle can be identified by gathering information about the people they go out with and the frequencies of going out. This provides evidence with which the study sought to provide evidence of the presence of respondents' favourite places within their housing area and its neighbourhood.

One of the objectives of the study was to explore places used by adolescents for different reasons and at different times. Many studies strive to recognise, understand and explain the relevance of places for adolescents by identifying the types of places they go to and the kind of experiences each place can offer in terms of using space (Smith, 1992; Cooper-Marcus, 1995; Chapman and Robertson, 2002). Several studies have produced evidence or findings linking experiences, emotions and self regulation in children's favourite places while others study adolescents' attachment to favourite places for restorative experiences (Korpela and Hartig, 1996) and adolescents' preference for different places for reasons such as retreat and social interaction (Clark and Uzzell, 2002; Owens, 1988; Schiavo, 1988). However, this particular study will only identify the respondents' places frequented outside of their school hours. This chapter defines the term place before presenting some of the findings of this study relating to the following main research question.

- 1. What are the places the adolescents go to during their out of school hours within their housing area and neighbourhood?**

Two secondary questions evolved from the primary research question because some of the places they liked best were linked to certain activities such as meeting or playing in the company of certain people they were comfortable to be with.

2. **Where are their favourite places within their housing area and neighbourhood?**
3. **Who are the people they like to go out with in their housing area and neighbourhood?**

## **6.1 Results**

### **6.1.1 Johor Bahru Adolescents' favourite places**

Statistical analyses were carried out on the data of the respondents' favourite places to find out whether the selection of favourite places was associated with gender, ethnic background and age group. Whilst previous studies attempted to understand the relationship between the qualities and effects of places to the young people (Chapman and Robertson, 2001; Korpela, 1992), this study placed an emphasis on identifying and categorising the respondents' favourite places according to specific themes or groups and listing them in terms of preference or choice hierarchy.

The question in the questionnaire which related to favourite places is as follows;

***Question 2a: What is your favourite place within your housing area and neighbourhood?***

The favourite places specified by the respondents in the survey were numerous and diverse. The analysis of favourite places was undertaken according to two levels incorporating firstly, identifying, and classifying the theme or group of favourite places and secondly identifying specific most mentioned favourite places based on the respondents' comments.

For statistical analysis purposes, the favourite places were firstly themed or grouped. The responses were found to be within five main groups, each of which comprised places with a specific theme which included sports, and recreational places together with commercial areas, institutions, friends and relatives' places as well as other places. Other places are places which did not fall into the five main categories. The five main groups are summarised in Table 6.1a.

**Table 6.1a: Groups of Favourite Places**

<b>Group</b>	<b>Theme</b>	<b>Type of Places</b>
Group 1	Sports and recreational	<ol style="list-style-type: none"> <li>1. Playground</li> <li>2. Public spaces with water bodies</li> <li>3. Public spaces without water bodies</li> <li>4. Sports courts</li> <li>5. Playing fields</li> <li>6. Parks</li> <li>7. Other spaces used for recreation</li> </ol>
Group 2	Commercial areas	<ol style="list-style-type: none"> <li>1. Shopping complexes and malls</li> <li>2. Cyber cafes</li> <li>3. Local shops</li> </ol>
Group 3	Institutions	<ol style="list-style-type: none"> <li>1. Schools</li> <li>2. Community halls</li> <li>3. Places of worship</li> <li>4. Clubs</li> </ol>
Group 4	Friends' and relatives' places	<ol style="list-style-type: none"> <li>1. Friends' houses</li> <li>2. Relatives' houses</li> </ol>
Group 5	Other places	This category included all the other favourite places mentioned in the survey responses which did not fall into any of the groups above, with percentages of 5% or less.

**6.1.1.1 Correlation between group of favourite places and ethnic background**

Statistical analysis showed that there was a very significant relationship ( $p < 0.001$ ) between ethnic background and their selected group of favourite places. (See Table 6.1b) The overall general results from the questionnaires showed that sports, and recreational spaces together with commercial areas were two groups of favourite places valued by the respondents from all three ethnic backgrounds.

**Table 6.1b: Group of favourite places by ethnic background**

Group of Favourite Places	Row %		
	Ethnic background		
	Malay	Chinese	Indian
Sports and recreational spaces	46	44	50
Commercial areas	18	26	23
Institutions	9	0	3
Friends' and relatives' places	13	6	6
Other places	14	23	17
Total % within ethnic	100	100	100
Total count (N=423)	282	77	64

For the Malays, the most mentioned group of favourite places were the sports and recreational spaces (46%). For the Chinese respondents, sports and recreational spaces received the highest percentage (44%). It was the same among the Indians, their group of favourite places with the highest percentage was also sports and recreational spaces (50%).

#### **6.1.1.2 Correlation between group of favourite places and gender**

Statistical analysis showed that there was a significant relationship ( $p < 0.05$ ) between gender and group of favorite places. (See Table 6.1c) The results from the questionnaires showed that sports and recreational spaces together with commercial areas were the two top groups of favourite places favoured by the respondents from both genders.

For the male respondents, the most mentioned group of favourite places was sports and recreational spaces (42%). It was the same for the female respondents, 49% of their groups of favourite places were sports and recreational spaces.

**Table 6.1c: Group of favourite places by gender**

Group of favourite places	Row %	
	Gender	
	Male	Female
1. Sports and recreational spaces	42	49
2. Commercial areas	20	21
4. Friends and relatives' places	12	10
3. Institutions	7	6
5. Other places	19	13
Total % within gender	100	100
Total count (N=423)	217	206

**6.1.1.3 Correlation between group of favourite places and age group**

There was a strong significant difference between the group of favourite places and age factor ( $p < 0.001$ ). (See Table 6.1d). The results showed that the highest percentages for group of favourite places in all age groups were sports and recreational spaces and the lowest was institutions.

**Table 6.1d : Group of favourite places and age factor**

Group of favourite places	Row %			
	Age Groups			
	10 to 11	12 to 13	14 to 15	16 to 17
Sports and recreational spaces	47	37	52	48
Commercial areas	26	20	18	19
Institutions	3	11	8	3
Friends' and relatives' places	14	14	11	6
Other places	9	18	11	23
% within age	100	100	100	100
Total Count (N=423)	76	113	114	120

For the 10 to 11 year-olds, 47% of them chose sports and recreational spaces as their group of favourite places. Sports and recreational spaces (37%) were also the top



group of favourite places among the 12 to 13 year-olds. Fifty two percent of the 14 to 15 year-olds like the group of sports and recreational spaces. For the 16 to 17 year-olds, 48% of them chose sports and recreational spaces.

#### 6.1.1.4 Correlation between most mentioned favourite places and ethnic background

Some of the most mentioned favourite places were also analysed and displayed through the use of graphs. From the diverse responses to their favourite places, four of the most mentioned places were found to be the playground, shopping complex, playing field and friend's house. (See Figure 6.1.1)

The playground was the favourite place of the respondents from all three ethnic backgrounds, particularly, the Indians. Among the Malay respondents, the highest percentage of mentions of favourite place was for playground (27%). Fourth were shopping complex (9%) and playing field (9%). The playground (19%) was also the most mentioned favourite place among the Chinese respondents and fourth was friend's house (6%). Among the Indian respondents they liked the playground (28%) most and fourth was friend's house (2%).

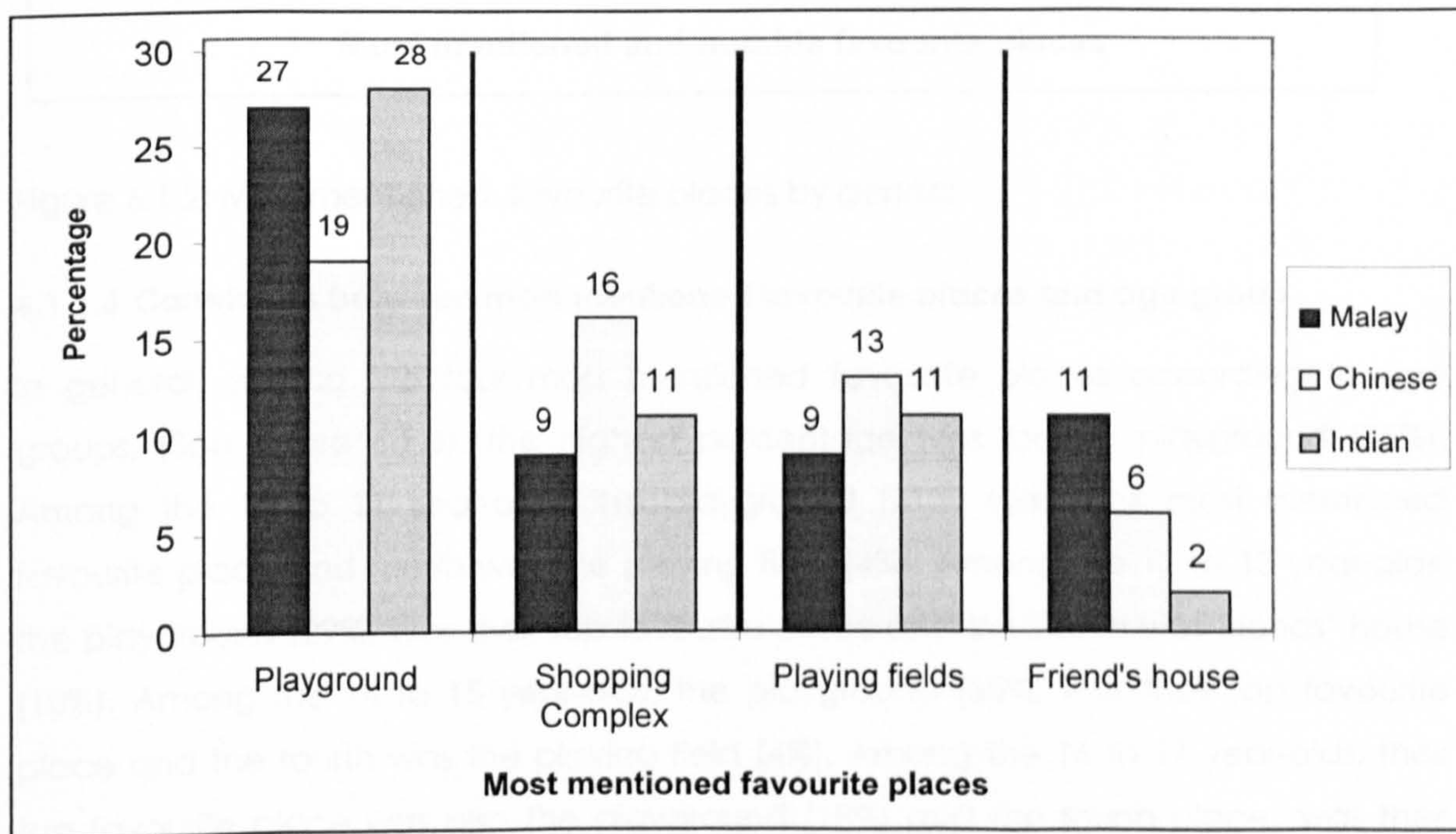


Figure 6.1.1: Most mentioned favourite places by ethnic background

### 6.1.1.5 Correlation between most mentioned and notable favourite places and gender

Of the most mentioned favourite places by gender, the playground was also the top favourite place of the male (24%) and the shopping complex was fourth (8%) in ranking. (See Figure 6.1.2). For the female respondents the playground was their most mentioned favourite place (28%) and playing field was in fourth place (6%).

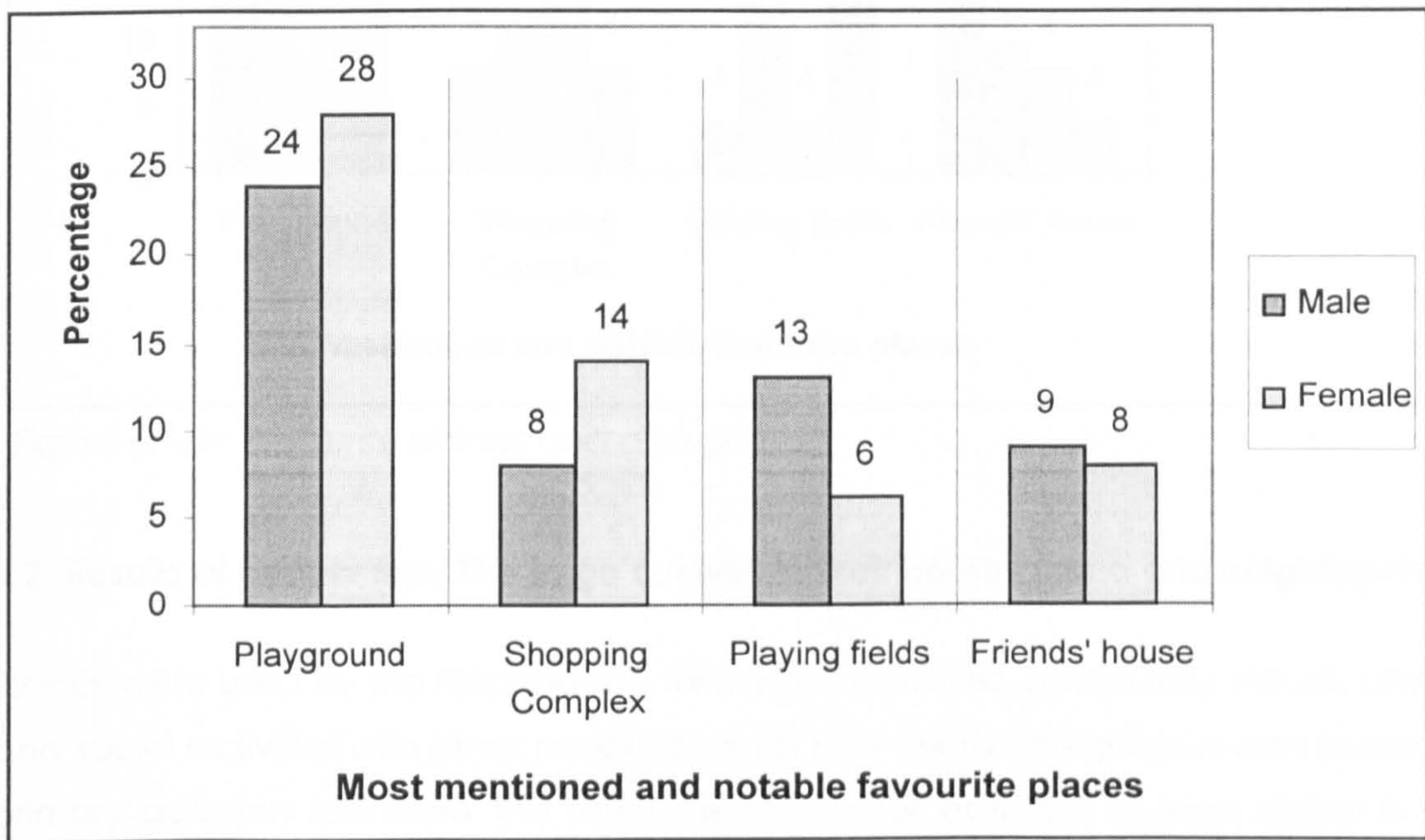


Figure 6.1.2: Most mentioned favourite places by gender

### 6.1.1.6 Correlation between most mentioned favourite places and age group

In general, among the four most mentioned favourite places according to age groups, (See Figure 6.1.3), the highest percentage was for the playground (35%). Among the 10 to 11 year-olds, the playground (21%) was their most mentioned favourite place and fourth was the playing field (4%). Among the 12 to 13 year-olds, the playground (29%) was their top favourite place and the fourth was friends' house (10%). Among the 14 to 15 year-olds, the playground (35%) was their top favourite place and the fourth was the playing field (4%). Among the 16 to 17 year-olds, their top favourite place was also the playground (18%) and the fourth place was their friends' house (4%).

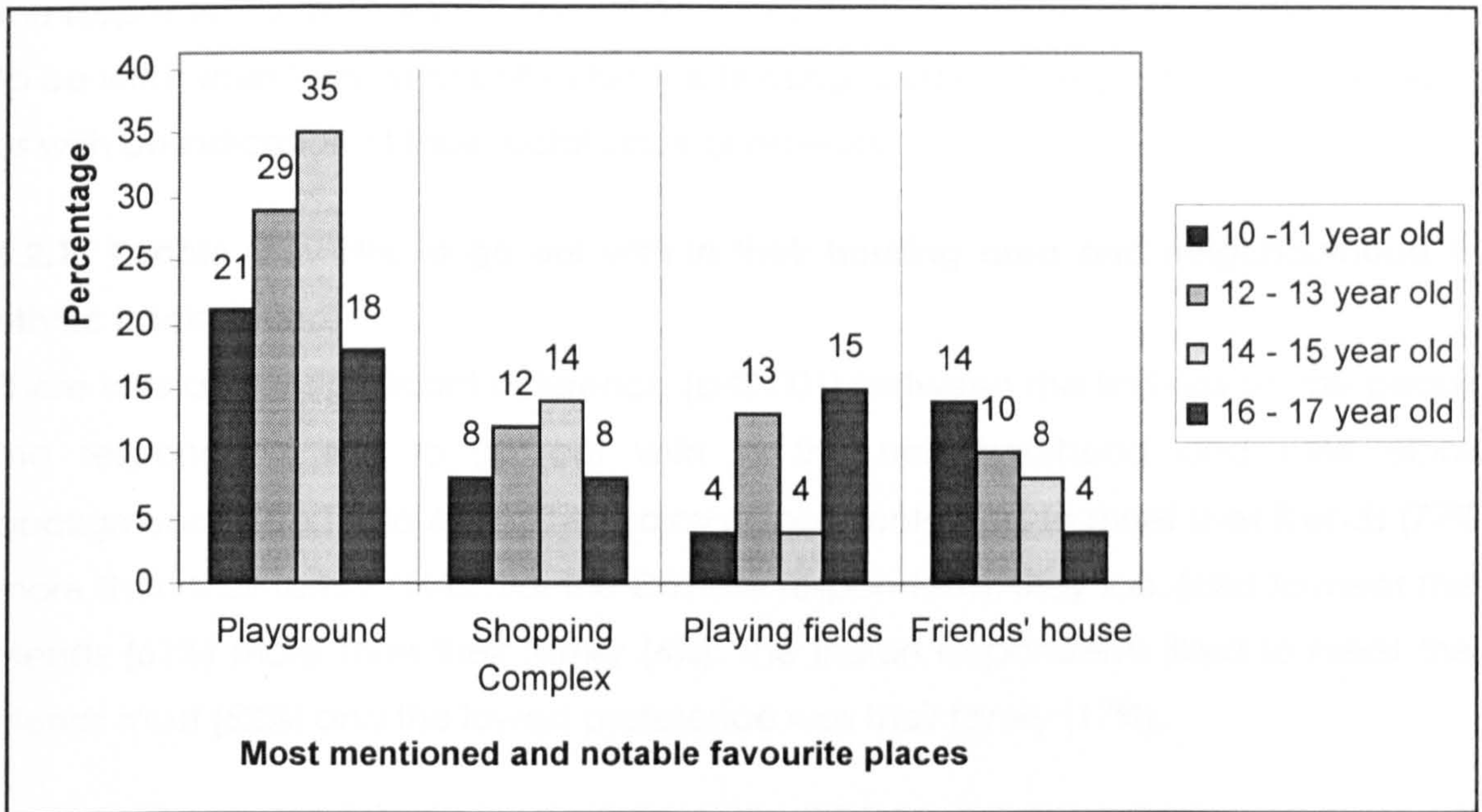


Figure 6.1.3: Favourite places and age group

## 6.2 Results of people they like to go out with in their housing area and neighbourhood

Places were used by the respondents for various activities, particularly leisure, physical and social activities with other people such as their friends, neighbours and family. The primary question identified the favourite places for activities to take place in and partly sought to understand the social life of the adolescents by identifying the key people who were with them within the outdoor spaces of their neighbourhood. The knowledge of the people the respondents liked to go out with in their neighbourhood provided some evidence of the respondents' social life and network. Beyond school hours and outside of their home, the people they were with outdoors within their neighbourhood were relevant to the needs and demand for public spaces as well as the type of settings that could support both the adolescents' social and physical activities. The places became imperative in providing 'niches' or 'spots' to promote interaction and socialisation activities for users including the adolescents.

The respondents were asked the following question in the questionnaire:

**Question 2b: Who are the people you like to go out with or meet when you are within your housing area and neighbourhood?**

The responses to this question conveyed information on the types of people they liked to be with when they went out within the housing area and neighbourhood, providing us with an indication of their social circle or network.

### 6.2.1 People they like to go out with in their housing area and neighbourhood by ethnic background

There was a very significant difference ( $p < 0.001$ ) between the findings on the people the respondents like to go out with in the neighbourhood and their ethnic background. (See Table 6.2a). The Malay respondents liked to meet their friends (77%) more than their family (11%). For the Chinese respondents, they too, liked to meet their friends (61%) more than their family (6%). The Indian respondents liked to meet their friends most (52%) and the lowest preference was their family (17%).

**Table 6.2a: People they like to go out with in the neighbourhood and ethnic background**

People they like to go out with	Row %		
	Ethnic background		
	Malay	Chinese	Indian
friends	77	61	52
neighbours	12	32	30
family and relatives	11	6	17
non response	0	0	2
Total % within ethnic background	100	100	100
Total Count (N= 423)	282	77	64

### 6.2.2 People they like to go out with in their housing area and neighbourhood by gender

There was a significant difference ( $p < 0.05$ ) between the people they liked to meet within their neighbourhood and gender (See table 6.2b). Both male (73%) and female respondents (67%) expressed that they liked to meet their friends most compared to their neighbours and family. Family was the group they liked to go out with the least in the neighbourhood for both male (12%) and female (11%) respondents.

**Table 6.2b: People they like to go out with in the neighbourhood and gender**

People they like to go out with	Row %	
	Gender	
	Male	Female
Friends	73	67
Neighbours	15	22
Family	12	11
Non response	1	0
Total % within gender	12	11
Total Count (N=423)	217	206

**6.2.3 People they like to go out with in their housing area and neighbourhood by age group**

The inclination to meet friends was very high across all age groups. (See Table 6.2c). The 10 to 11 year-olds chose to meet their friends most (70%) and their neighbours (8%) least. The 12 to 13 year-olds like to meet their friends (73%) most and the lowest preference was also for their neighbours (8%). For the 14 to 15 year-olds, they liked to meet their friends (70%) most and the least favoured group was their family and relatives (6%). The 16 and 17 year-olds liked to meet their friends most (67%) and their family least (4%).

**Table 6.2c: People they like to go out with in the neighbourhood and age group**

People they like to go out with	Row %			
	Age groups			
	10 to 11	12 to 13	14 to 15	16 to 17
Friends	70	73	70	67
Neighbours	8	8	24	29
Family and relatives	20	19	6	4
Non response	3	0	0	0
% within age	100	100	100	100
Total count (N=423)	76	113	114	120

### 6.3 The frequency of going out with people

Apart from identifying the key people, the study delved further into the respondents' frequency or regularity of going out to meet people. The issue was related to the second question.

#### Question 2c: How often do you go out and meet people within the neighbourhood?

The findings provided information on how often the respondents go out to meet and socialise with friends, neighbours or relatives outside of their school time. The responses were coded according to three time frames of once a week, more than once a week and once a month. Statistical analysis was carried out to examine whether there were significant differences between the frequency of going out with specific people within gender, ethnic background and age group.

There were only significant differences in frequency of meeting and ethnic background and age groups. Only findings with significant differences will be shown.

#### 6.3.1 Frequency of meeting by ethnic background

Statistical analysis showed that there was a significant difference ( $p < 0.03$ ) between the frequency of meeting and ethnic background. (See table 6.3a). Most of the respondents across the three ethnic backgrounds went out at least once a week with people they liked in the neighbourhood.

**Table 6.3a: Frequency of meeting and the ethnic background**

Frequency of meeting	Row %		
	Ethnic	background	
	Malay	Chinese	Indian
Once a week	52	45	44
More than once a week	27	35	30
Once a month	16	20	18
Non response	5	0	8
Total %	100	100	100
Total count	282	77	64

Among the Malays, the frequency of meeting once a week was highest (52%) and the least was once a month (16%). The Chinese met at least once a week (45%) and the least was also once a month (20%). A similar pattern of responses was conceived for the Indians' frequency of meeting once a week being highest (44%) and the least was once a month (18%) too.

### 6.3.2 Frequency of meeting by age group

There was also a very significant difference ( $p < 0.001$ ) between frequency of meeting and age group. (See table 6.3b). The percentage for meeting at least once a week was high, between 50 to 59% for those between the ages of 12 to 17 year-olds but for those between the ages of 10 to 11 years old, it was only 25%.

**Table 6.3b: Frequency of meeting people and the age group**

Frequency of meeting	Row %			
	Age group 10 to 11	Age group 12 to 13	Age group 14 to 15	Age group 16 to 17
Once a week	25	50	59	54
More than once a week	33	28	25	30
Once a month	30	16	12	16
Non response	12	6	4	0
Total %	100	100	100	100
Total count (N=423)	76	113	114	120

For the 10 to 11 year-olds, most of them chose to go out more than once a week (33%) and the least percentage was once a month (30%). The 12 to 13 year-olds went out once a week (50%) and the least was once a month (16%). Fifty-nine percent of the 14 to 15 year-olds chose to go out once a week and the least percentage was once a month (12%). Similarly, most of the 16 to 17 year-olds chose to go out once a week (54%) and the least percentage was once a month (16%).

## 6.4 Discussion

Chapter 6 presented three sets of findings relating to the adolescents' favourite places and their social circle of people they go out with, and the frequencies of their going out in the housing area and neighbourhood. Based on the objective of identifying the adolescents' favourite places, the responses were identified according to specific themes or groups and listed in terms of preference or choice hierarchy.

The responses were analysed according to themes and specific notable favourite places were also identified based on the respondents' mentions. Five main groups of favourite places were identified and the relationship with three variables were examined. The variables were ethnic background, gender and age group. The results were also compared to previous research findings of valued places. This study's adolescents' favourite places, which equated to being their valued places, were all outdoor spaces or places outside of their home. (See Table 6.4a). It is noted that there are eight favourite places in this study which are similar to the places mentioned in the other research findings of Silbererriesen (1986), Schiavo (1988) and Owen (1988, 1993).

**Table 6.4a: Valued Places**

Valued Places	Silbererriesen (1986)	Schiavo (1988)	Eubanks-Owens (1988)	Eubanks-Owens (1993)	Hamidah (2006)
Developed Parks/ Sports Facilities	•	•	•	•	•
Places at Home	•		•	•	
Commercial Areas	•	•	•	•	•
Natural Parks	•	•	•	•	•
Places at School		•	•	•	
Undeveloped Open Space			•	•	
Urban Hardscapes/Street	•	•		•	•
Theme Parks				•	
Places with Views			•	•	
Friend's House		•			•
Neighbour's House		•			•
Institutions		•			•
Communal Greenbelts	•		•		•
Youth Centre	•				



The places were developed parks and athletics facilities, commercial areas, natural parks, institutions, streets, friend's and neighbour's house and greenbelts. Three valued places were mentioned in all five studies and they were commercial areas, natural parks, developed parks and sports facilities. The streets become valued places in four of the five studies including this study. There were six places which were not mentioned by the respondents in this study. They were youth centres, places with views, theme parks, undeveloped open space and places at school. However, this study did not produce any specific valued places which were not mentioned in any of the other four studies.

In terms of hierarchy, according to ethnic background, all respondents from the three ethnic groups placed sports and recreational spaces in top placing and the percentages were high, ranging from 44% to 50%. The second favourite places of all respondents from the three ethnic backgrounds were similar too, commercial areas. The percentage ranged from 15% to 26%. It was highest among the Chinese and lowest among the Malays. Institutions was the least mentioned group of favourite places. There was little interest in institutions being one of their favourite places because it was only mentioned by the Malays. Compared to the Chinese and Indian respondents, the Malay respondents showed a higher inclination towards places which support social activities. It was reflected in the percentage of respondents who chose friends' and relatives' houses as favourite places. It was highest among the Malays and very low among the respondents from the other two ethnic backgrounds, especially the Indians.

By gender, there was a strong significant difference between the male and female and the group of favourite places. The hierarchy of group of favourite places was the same for both genders but there was some variations in the percentages. The percentage of sports and recreational spaces being the group of favourite places was higher among the female respondents of this study compared to the male respondents. It was 49% among the females and 42% among the males. Even though male respondents were normally associated with being the more active of the two genders, the percentage for sports and recreational spaces in this study, was higher among the females. Commercial areas as favourite places were also higher among

the females. However, the inclination to choose institutions as the group of favourite places was lower among the female respondents (6%).

Similarly, there was a very significant difference between the group of favourite places and the age group. The group of favourite places' hierarchy was not the same for respondents from the four age groups. Even though the results showed that the highest percentages of the group of favourite places for all age groups were sports and recreational spaces, there were variations in the second group of favourite places. The percentages for sports and recreational spaces was highest (52%) among the 14 to 15 year-olds. The findings indicated that commercial areas were the second group of favourite places for three of the age groups. The oldest age group, the 16 to 17 year-olds had chosen 'other places' as their second favourite group of places. Commercial areas were also found to be most popular among the youngest age group, the 10 to 11 year-olds. The percentages for the two groups of favourite places, the commercial areas and friends' and relatives' houses, decreased as the age of the respondents increased. Selection of institutions as favourite places was lowest for all age groups. The percentage was as low as 3% among the youngest age group, the 10 to 11 year-olds and the oldest age group, the 16 to 17 year-olds.

The findings relating to the most mentioned favourite places also analysed four of the most mentioned places according to hierarchy. Playground was placed first, followed by the shopping complex, playing field and friend's house. The playground was the favourite place of all the respondents regardless of ethnic background, gender and age group.

The playground was the favourite place of the respondents from all three ethnic backgrounds and it was highest at 28% among the Indians. The shopping complex was favoured more by the Chinese respondents compared to the Malays. More Chinese respondents (13%) too had placed playing field as their favorite place to only 11% among the Indians and the least at 9% among the Malays. The Malays had indicated they had a higher inclination to socialize with friends than the Chinese and Indian respondents when the findings showed that more (13%) Malay respondents chose friend's house as their favourite place compared to only 6% among the Chinese and 2% among the Indians.

By gender, the findings indicated that playground was mentioned more by the female respondents (28%). This is probably due to limited sports and recreational spaces in their housing area and neighbourhood. The playground in the housing area became the main recreational facility available for the respondents to go to. The female respondents (14%) were also found to have a higher inclination to go to shopping complex compared to only 8% among the males. The males were more inclined to choose playing fields (13%) and friend's house (9%) as their favourite places compared to the females.

By age group, the most mentioned favourite place were the playground. However, the highest percentage to choose playground as their favourite place did not come from the younger age groups. It was highest among the 14 to 15 year-olds. The playground was a place not only seen as a venue that offered opportunities to play among the children but also a place for socialising. The findings showed that the playground did not only appeal to young children but those in the older age groups, the adolescents. Subsequently, playgrounds should be designed and provided for children up to the age of 18. In the context of the study area particularly, in the two neighbourhoods, the playgrounds were designated for younger children, under the age of twelve. The provision indicated that the older children and adolescents were deprived of a basic facility which they liked.

For the shopping complex, the highest percentage was registered among the 14 to 15 year-olds. Even though the percentage for commercial areas as the group of favourite places was highest among the youngest group, the 10 to 11 year-olds, it was not so for shopping complex. The lowest percentage (8%) was among the youngest age group, the 10 to 11 year-olds and the 16 to 17 year-olds. There is a decreasing percentage for friend's house as the favourite place as age increased. Friend's house was favoured more by the younger age group than the older age groups. It was highest among the youngest age group of 10 to 11 year-olds (14%) and lowest (4%) among the 16 to 17 year-olds. The findings indicate that the respondents from the younger age groups were more inclined to go to their friends' houses to socialise and in the context of this study, within their housing area and neighbourhood.

The study also presented findings relating to the people the respondents like to go out with in their neighbourhood apart from identifying places used by the respondents for various activities, particularly, leisure activities. The respondents were asked about the people they liked to go out with or meet when they were within their housing area and neighbourhood. The responses to the question conveyed information on the types of people they liked to be with when they went out within the neighbourhood.

Friends were found to be the main people the respondents would choose to go out with in the housing area. Regardless of ethnic background, gender and age group, the respondents indicated that they would most likely chose to go out with their friends. Second were their neighbours and their family, last.

The findings on the people the respondents like to go out with in the neighbourhood and their ethnic background showed a significant difference ( $p < 0.01$ ). The findings indicated that the respondents from the three ethnic background, were more inclined to go out with their friends more than their neighbours and family, especially the Malays. Neighbours were the second group of people the respondents liked to go out with within their housing area and neighbourhood.

The findings again showed significant difference ( $p < 0.05$ ) between the people the respondents liked to meet within their housing area and gender. Both male (73%) and female respondents (67%) expressed that they were more inclined to choose to go out with their friends in the housing area compared to their neighbours and family. Neighbours were placed second and the percentage showed that there was a higher inclination for the females (22%) to choose to go out with their neighbours. The lowest percentage was family, indicating it being the least popular group, for both genders to choose to go out with. It was lower among the females (11%).

By age group, the inclination to want to meet friends was very high across all age groups. High percentages of the respondents choosing friends to go out with ranged from 67% among the 16 to 17 year-olds with the highest being among the 12 to 13 year-olds (73%). Neighbours were favoured more by the 14 to 15 year-olds (24%) and 16 to 17 year- olds age groups (29%) compared to only 8% among the other two young age groups. The findings demonstrated that the younger age groups, the 10 to 11 year-olds (20%) and 12 to 13 year-olds (19%) were still more attached to their family.

They had shown a higher inclination to choose their family compared to the older age groups, the 14 to 15 year-olds (6%) and 16 to 17 year-olds (4%).

The study delved further into the respondents' frequency of going out to meet and socialise with friends, neighbours or relatives outside of their school time and there were significant differences in frequency of meeting and ethnic background and age groups only. By ethnic backgrounds, the respondents went out at least once a week with people they liked in the neighbourhood. The percentages ranged from 25% to 52%. However, more of the 10 to 11 year-olds went out within their housing area at a frequency of more than once a week within the housing area compared to the other age groups.

### **6.5 Summation**

Physical and social activities among friends or peers need not necessarily be within the home settings but they can take place at other places such as in sports and recreational areas, commercial areas or in institutions. The findings on favourite places provided an indication that the adolescents were attracted to many places especially those relating to sports and recreation. The commercial areas were also places where many of their social activities took place, either with friends or peers, on their own or with their family members.

The findings discussed in this chapter demonstrated that regardless of ethnic background, gender and age group, a majority of the study's respondents' group of favourite places were sports and recreational spaces. The following chapter will present more findings on adolescents and places they go to in the city.

The findings were summarized in Table 6.5a. By ethnic background, the percentage for sports and recreational spaces was highest among the Indians. By gender, it was higher among the females. It showed that even though the female respondents' access to sports and recreational spaces was restricted compared to the male respondents, they still favoured and wanted more opportunities for sports and recreation. Very high percentages for sports and recreational spaces were also recorded among respondents in all age groups and the highest was 52%, among the 14 to 15 year-olds.

Of the four most mentioned favourite places analysed, the playground was placed first, followed by, shopping complex or mall, playing field and fourth was friend's house. Table 6.5b summarises the study's findings indicating the highest percentages for four of the most mentioned favourite places by ethnic background, gender and age group.

Of the three categories of people they go out with, friends were the most important followed by neighbours and the family, in last place. (See Table 6.3c). It was similar by gender. By age group, the percentage for friends was high in all age groups but it was highest among the 12 to 13 year-olds. However, the importance of family members and relatives decreased as age increased. It was highest among the 10-11 year-olds but lowest among the 16 to 17 year-olds. While family was still closer to the younger respondents, it was the reverse for the older adolescents. The younger adolescents' attachments to family were stronger compared to the older adolescents.

**Table 6.5a: Summary of Favourite Places and Highest Percentages by ethnic background, gender and age group**

<b>Highest Percentages</b>				
<b>Ranking</b>	<b>Group of Favourite Places</b>	<b>Ethnic background</b>	<b>Gender</b>	<b>Age Group</b>
1	Sports and Recreation	Indians (52%)	Female (49%)	14-15 year-olds (52%)
2	Commercial areas	Chinese (26%)	Female (21%)	10-11 year-olds (26%)
3	Friends' and Relatives' Places	Malays (13%)	Male (12%)	10-11 year-olds 11-12 year-olds (14%)
4	Other Places	Chinese (23%)	Male (19%)	12-13 year-olds (18%)
5	Institutions	Malays (9%)	Male (7%)	12-15 year-olds (11%)

**Table 6.5b: Summary of Most Mentioned Favourite Places and Highest Percentages by ethnic background, gender and age group**

Highest %				
Ranking	Most Mentioned Favourite Places	Ethnic background	Gender	Age Group
1	Playground	Indians (28%)	Female (28%)	14-15 year-olds (35%)
2	Shopping complex or Mall	Chinese (16%)	Female (14%)	14-15 year-olds (14%)
3	Playing Field	Chinese (13%)	Male (13%)	16-17 year-olds (15%)
4	Friends' and Relatives' Places	Malays (11%)	Male (9%)	10-11 year-olds (14%)

**Table 6.5c: Summary of people they like to go out with and highest percentages by ethnic background, gender and age group**

Highest %				
Ranking	Categories of People	Ethnic background	Gender	Age Group
1	Friends	Malays (77%)	Male (73%)	12-13 year-olds (73%)
2	Neighbours	Chinese (32%)	Female (22%)	16-17 year-olds (29%)
3	Family	Malays (11%)	Male (12%)	10-11 year-olds (20%)

An inquiry into the frequency of meeting found that in general, they meet up more within their housing area and neighbourhood, at least once a week. (See Table 6.5d). The findings on the frequency of meeting reflected the existence of intentional social meetings among the adolescents with other people on a substantially regular basis of at least once a week within the neighbourhood.



**Table 6.5d: Summary of highest percentages in frequency of meeting by ethnic background, gender and age group**

		Highest	%
Ranking	Frequency of meeting people	Ethnic background	Age Group
1	Once a week	Malays (52%)	14-15 year-olds (59%)
2	More than once a week	Chinese (35%)	10-11 year-olds (33%)
3	Once a month	Chinese (20%)	10-11 year-olds (30%)

The findings of this research showed that there were variations in preference for favorite places, and also among the people they liked to spend their time with in the outdoors, in their housing area and neighbourhood among the adolescents according to ethnic background, gender and age group. Hence the outdoor neighbourhood environment should be one that could provide settings to support physical and social activities among adolescents and other residents as well. The choice of the settings should be according to those required by the users of the facilities and open spaces. The next chapter will look at the specific spots or places frequented by the respondents in the city of Johor Bahru.

## **CHAPTER 7:**

### **Adolescents' Environmental Experience in the city of Johor Bahru, Malaysia**

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#### **7.0 Introduction**

The previous chapter discussed the places adolescents went to within their housing area and neighbourhood. Chapter 7 presents and discusses the research findings on adolescents' environmental experiences of the city, Johor Bahru, relating to the places the respondents went to apart from their school, housing area and neighbourhood. Apart from getting the information from the in-depth interviews, the study also explored further with visits to some of the places the respondents frequented in the city.

As mentioned in Chapter 6, adolescents use and choose to be in certain places for certain reasons and at different times because a place is not just a destination but a space with tangible and intangible attributes. The place in the context of adolescents can offer multidimensional physical and psychological environmental attributes which can create or generate activities and provide experiences (Smith, 1992; Cooper-Marcus, 1995; Chapman and Robertson, 2002). This research identified the places frequented by the respondents outside of their school hours within the city of Johor Bahru. The findings presented in this chapter answer the following research question.

**What are the places the adolescents frequented during their out of school hours within the city of Johor Bahru?**

The methodology used to collect information on the adolescents' places was through interviews. The in-depth interviews were used to further probe not only as to the places they go to in the city, but also those places which they like and dislike. In the interviews with the respondents, they were asked specifically about places in the city they liked to go to and where they spent time on certain activities. The in-depth interviews managed to reveal some of the respondents' preferences in terms of socio-

spatial spaces and their range of action in the city, how far they are willing to travel to do activities which reflected the respondents' capacity to travel to places of their choice they anticipated could provide them with the preferred spaces and activities. The researcher managed to visit the places mentioned by the respondents. The visits were made to enable the researcher to experience and get a closer look at the places as well as to take note of the place's character that appealed to the respondents. The places in the city mentioned by the respondents would be examined from the wider perspective of the city then zooming more closely into specific parts of the city landscape as indicated in Plate 7.1. Selected excerpts from the interviews are included in this chapter. The names of the respondents are included using the assigned pseudonyms.



Plate 7.1: A panoramic view of Johor Bahru City Centre

## **7.1 Results**

### **7.1.1 Results from the Interviews**

The respondents mentioned three zones within the city (apart from their housing area and neighbourhood) which became the places they would normally go to with friends, family or sometimes alone. The zones visited by the respondents were the city centre, the waterfront areas and the green areas comprising the parks and green spaces within the city. (See Figure 7.1.1). The respondents managed to list their activities and other issues relating to the city.

#### **7.1.1.1 Johor Bahru's City Centre**

The study area, Johor Bahru, was described at length in Chapter 4. It is a city with its city centre bordered by the Straits of Johor in the south, the Old Government Offices, in the West, and the railway tracts in the East. About 30 years ago, the city centre used to be much polluted, congested and visually unattractive (MPJB, 2005). However, over the past three years, the city centre landscape has undergone a dramatic change to realise the city's vision to create a city within a garden. Previously, the bus terminal was responsible for part of the traffic congestion within the city centre but it was relocated to another part of the city. Most of the major planned developments which were partly responsible for causing traffic congestion and pollution were also completed. As a result, the city's traffic congestion has subsequently eased considerably.

The research found the city centre to be an important place in Johor Bahru for the respondents as it is one of the main places the respondents normally go to during their free time or at the weekend other than places within their housing area and neighbourhood. The city centre was a place they enjoyed going to for specific reasons or even to pass through when they travelled from home to school and vice versa. They also perceived the city centre as a venue for most of their consuming activities such as shopping, watching movies at the cinema and eating out either with friends, family or on their own. Some of their social activities took place in the city centre. The main places visited by the respondents in the city centre were shopping malls and small urban spaces along the city's canal. Two specific shopping malls

which were frequently visited by the respondents were the City Square Shopping Mall and the Holiday Plaza Shopping Mall.

The researcher's visits to the shopping malls found that the shopping malls were, indeed, favoured more by the adolescents as they were seen at different spots in the shopping malls. (See Plate 7.3 and 7.4). The respondents admitted being happy to be in the shopping malls because they found the shopping malls' environments pleasing, safe and comfortable. The adolescents particularly enjoyed being in shopping complexes due to the presence of the small urban spaces in the shopping centre. There were other spaces in the periphery of the buildings frequented by the respondents as spaces for activities. Apart from liking the 'life' and hustle bustle of the shopping malls, the respondents particularly appreciated the 'pleasant' and 'cool' ambience created by the shade and greenery provided by the green plants in planter boxes to complement the spaces. The clean and well maintained surroundings were also a reason for a place being comfortable to be in.

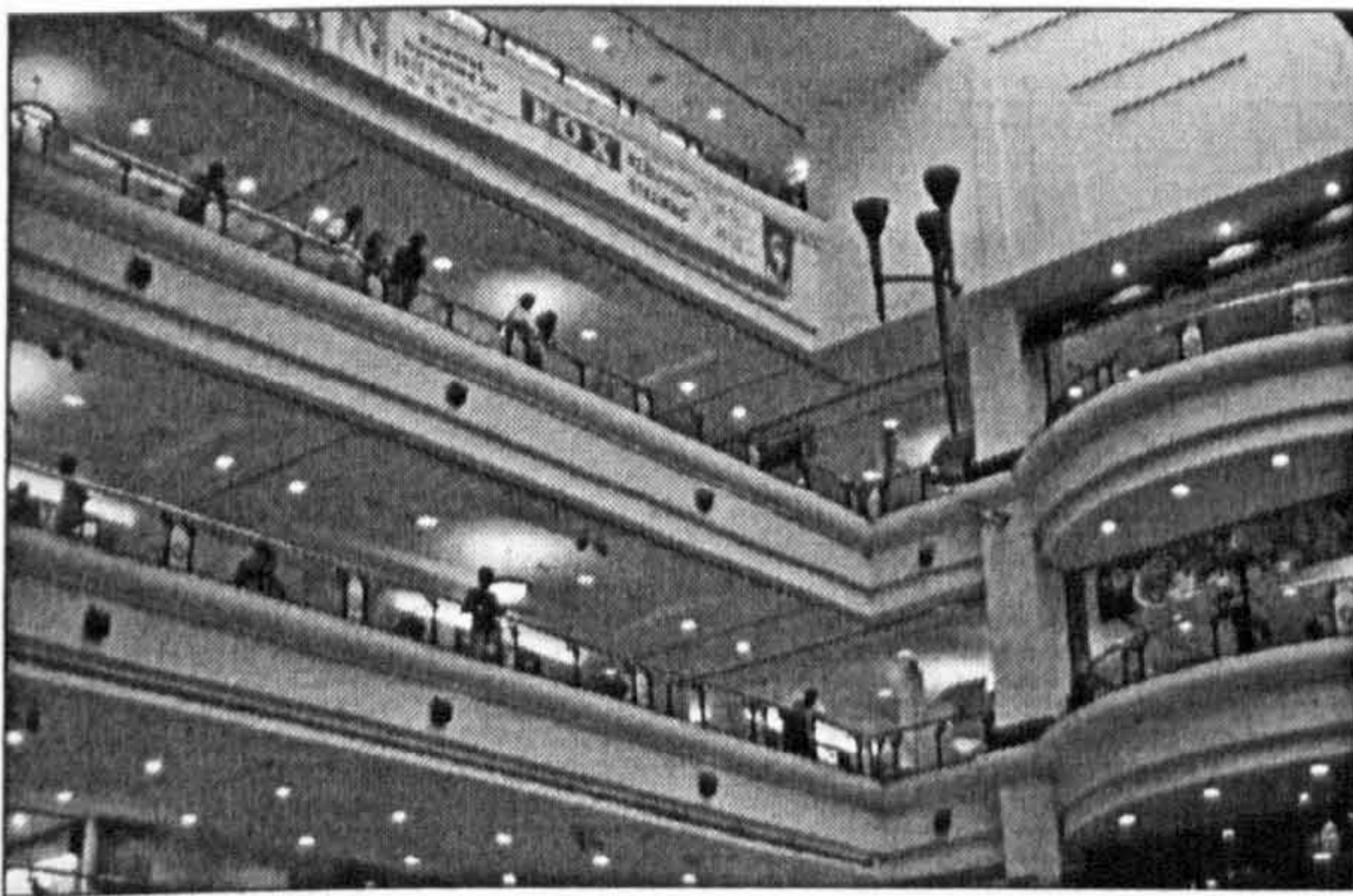


Plate 7.2 Adolescent in a shopping complex

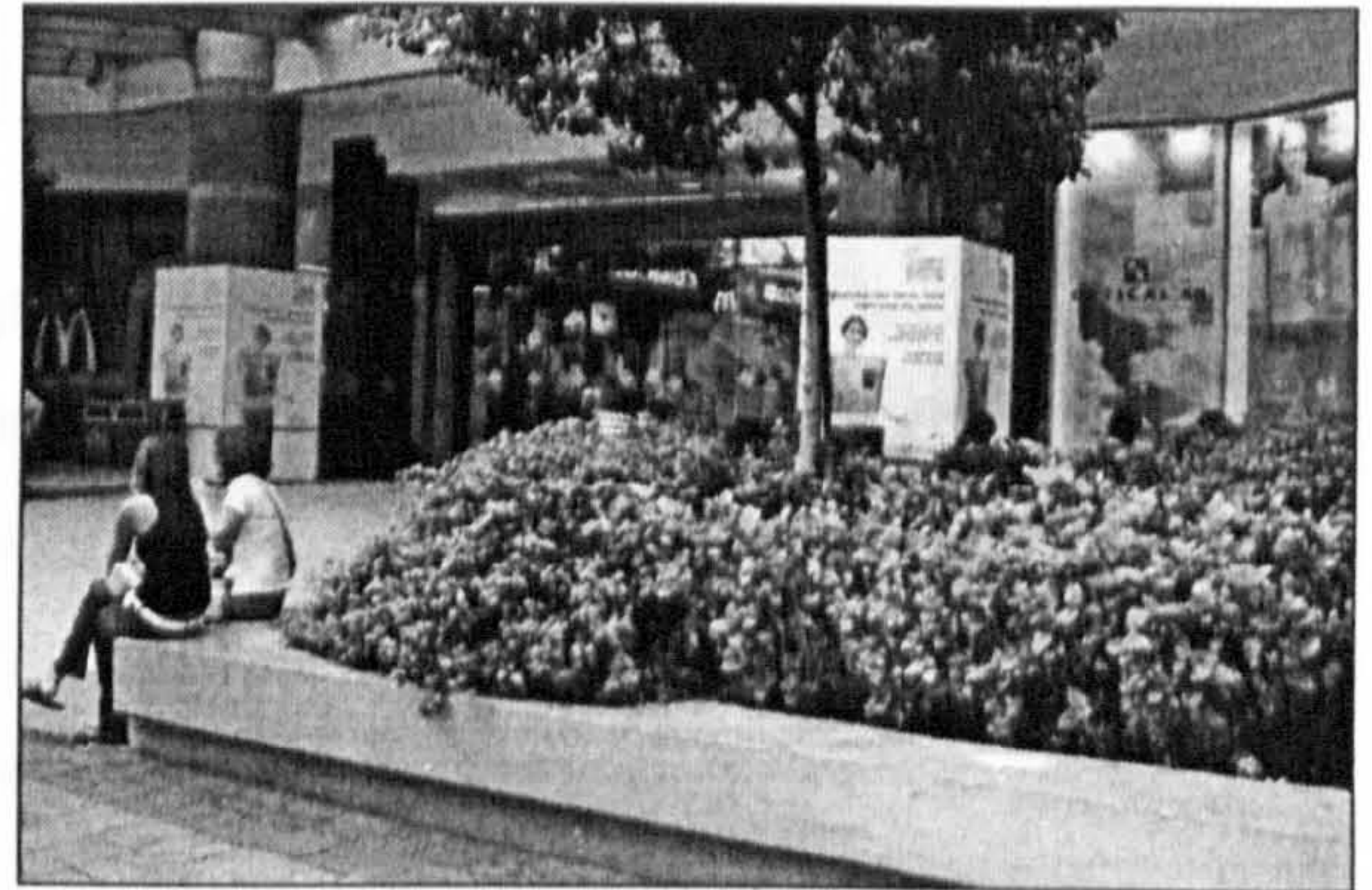


Plate 7.3: Female adolescents in the city

### **a. Activities in the City Centre**

When the respondents were specifically asked about what their activities were in the city centre, the results demonstrated that they went to the city centre specifically for some form of activities could be grouped into 4 main types. They were:

1. Consuming activities such as shopping, patronising cinemas to watch movies and eating at restaurants, fast food restaurants and food stalls
2. Sitting and watching people

3. Meeting friends and hanging out with friends or peers
4. Other activities apart from the above

The results were examined by ethnic background, gender and age group. Consuming activities formed the most favoured activities in the city centre for respondents from all three ethnic backgrounds. (See Table 7.1a).

**Table 7.1a: Activities in the city centre by ethnicity**

<b>Adolescent Activities in the City centre</b>	<b>Ethnic background (%)</b>		
	<b>Malay</b>	<b>Chinese</b>	<b>Indian</b>
Meeting up with friends	25	24	25
Sitting and watching people	29	21	20
Consuming activities: shopping, watching movies, eating out	32	43	42
Other activities	14	12	13
Total %	100	100	100
Total count (n=96)	32	32	32

The consuming activities (43%) were highest among the Chinese adolescents' activities in the city centre and second were meeting up with friends (24%). For the Malays, their most favoured activities in the city centre were consuming activities (32%) and second was sitting and watching people (29%). The Indian respondents' most favoured activities in the city centre were also consuming activities (42%) and second were meeting up with friends (25%).

According to gender, the most preferred activities in the city centre among the male respondents were consuming activities (32%) and the least preferred were meeting friends (29%). (Refer to Table 7.1b) For the female respondents, the percentage for consuming activities was highest at 39% and the lowest was sitting and watching people (15%). Sitting and watching people was more popular among the males (31%). The percentage was more than double that of the female respondents (15%).

The 10 to 11 year-olds' activities in the city centre were mainly consuming activities (54%) and the least common were meeting up with friends (8%) and sitting and watching people (8%). (See Table 7.1c). For the 12 to 13 year-olds, their most favoured

activities were also consuming activities (43%) and least popular were sitting and watching people (13%). For the 14 to 15 year-olds, among the highest percentage were consuming activities (42%) and the lowest were other activities. Similarly, for the 16 to 17 year-olds, consuming activities were the highest at 40% and the lowest were other activities (12%).

**Table 7.1b: Activities in the city centre by gender**

Adolescent Activities in the city centre	Gender (%)	
	Male	Female
Meeting up with friends	29	36
Sitting and watch people	31	15
Consuming activities: shopping, watching movies, eating out, cyber café, snooker centre	32	39
Other activities	8	10
Total %	100	100
Total count (n= 96)	48	48

**Table 7.1c: Activities in the city centre by age group**

Adolescent Activities in the City centre	Age (%)			
	10-11	12-13	14-15	16-17
Meeting up with friends	8	20	29	29
Sitting and watching people	8	13	25	29
Consuming activities: shopping, watching movies, eating out	54	43	42	40
Other activities	18	24	14	12
Total %	100	100	100	100
Total count (n=96)	28	28	28	28

It was observed that the percentage for meeting up and hanging out with friends increased with age as the lowest percentage (8%) was among the youngest age group, the 10 to 11 year- olds and the highest was among the 14 to15 and 16 to 17 year-olds. The same applied to sitting and watching people in the city centre

whereby the percentage for the activity was higher among the older age group especially the 16 to 17 year-olds (29%) and lowest (8%) among the 10 to 11 year-olds.

## **b. Other Issues on the City Centre**

Apart from discussing their activities, the respondents raised some of Johor Bahru's city issues. The respondents raised issues on the city's traffic, its life, cleanliness, maintenance and the safety of the city centre.

### **i. Traffic**

The young respondents were not particularly happy with the current condition of the traffic in Johor Bahru's city centre. They thought the traffic should be better controlled in order to make the streets safer for the people in the city. However, one of the respondents commented that the condition of Johor Bahru's traffic could be acceptable compared with other cities in the country but the aspect of the city's cleanliness was another issue which they thought the local authorities needed to consider.

The respondent's comments on the traffic;

*"I think the traffic in Johor Bahru is not that bad compared to bigger cities like the capital, Kuala Lumpur. It is expected of being in a city. Nevertheless, I do find the dusty streets and overall air pollution in the city distressing to be in."*

**(Mahmud, a 15 year old Malay respondent from Bandar Baru UDA)**

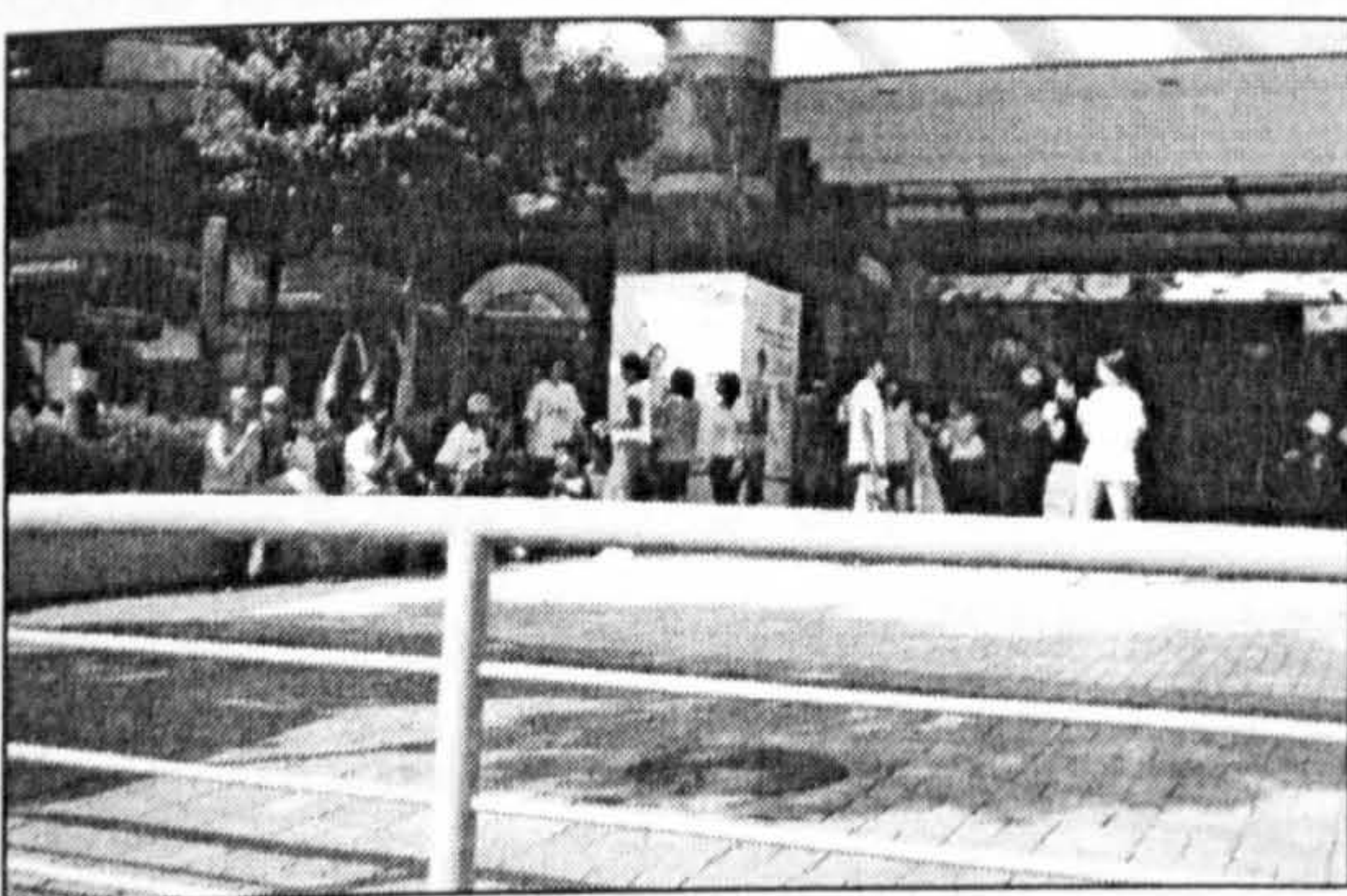


Plate 7.4: Adolescents outside City Square Shopping Complex

### **ii. Life in the City Centre**

The respondents also mentioned 'life' within the city's urban spaces. According to them, some of these spaces lack vivacity when it became just a 'passing through' route instead of being a place with activities which could attract people to stop within the space or make walking through the space more appealing.



Most of the activities they could actually do within the city centre were mostly passive activities such as hanging out and meeting friends, sitting, watching people and shopping. The respondents admitted that Johor Bahru's public spaces within the city centre were almost 'dead' and there was not much 'happening' within these spaces. 'Happening' was a word repeatedly mentioned by the respondents in the interview and they clarified that it was a word that many local Malaysian adolescents in Johor Bahru used today to mean events or activities at a certain place.



Plate 7.5: One of the local adolescents gathering spaces in the city centre

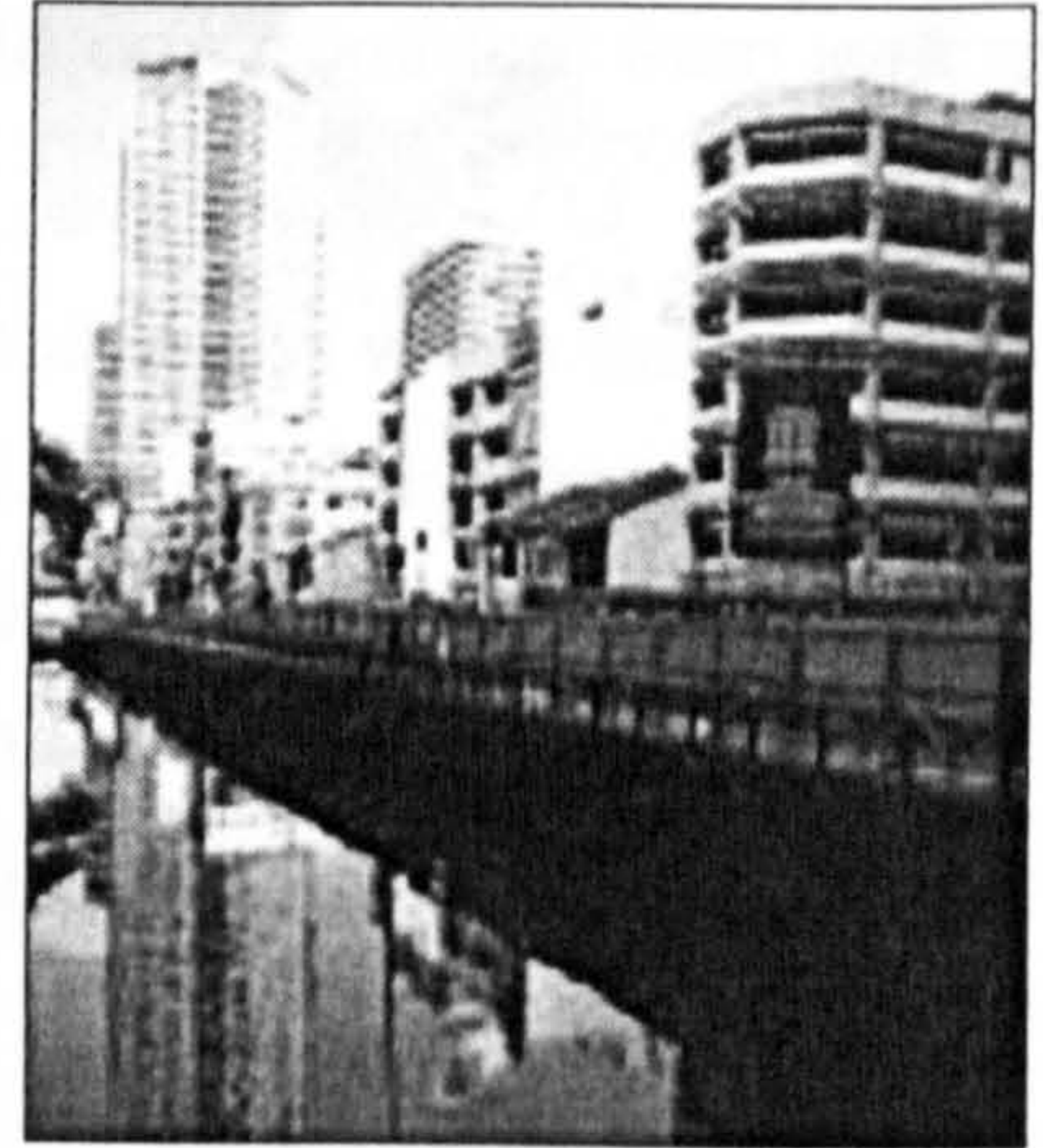


Plate 7.6 : Adolescents' hanging out place along the city's canal

They further suggested extreme ('x-treme') games and performing arts, both traditional and contemporary, such as music, as being some of the activities they found lacking in the outdoor urban spaces in the city centre. Extreme games such as skateboarding were not seen in urban public spaces in Johor Bahru city centre. In the West, the city centre became a place for skateboarders but the scenario in Johor Bahru was different. When asked for their opinions on the absence of adolescents skateboarding in the city centre, they commented that the City Centre was not suitable for skateboarding. When asked further whether there were any facilities which could support extreme games, the respondents replied they knew the Ministry of Youth and Sports provided facilities for extreme sports for young people. Nevertheless, they were not totally accessible to them as these facilities were contained within buildings, controlled, monitored or supervised by adults and limitations were imposed on their use. They mentioned liking one particular public skateboarding facility in the Mid Valley Shopping Mall in Malaysia's capital, Kuala Lumpur.

### **iii. Cleanliness, maintenance and safety**

When probed about the current changes in the city landscape such as the upgrading of landscape features within the city, they made comments on what they would like to see in the city. The respondents agreed that efforts in 'making the city beautiful' in terms of upgrading the city's landscape were a good move. but they raised the issue of dirty and unmaintained spaces. Dirty and unmaintained spaces between alleys were another concern among the adolescents especially the female respondents because they made the places unsafe. According to one comment from a female respondent;

*"I have always tried to avoid passing through certain alleys within the city as they are dirty and have no street lights. Even though the city has improved in terms of the provision of more public spaces, the existence of such alleys is an eye sore. I would rather take a longer route than pass through the alleys."*

**(Amalina, 16 year- old, female Malay respondent from Bandar Baru UDA)**

#### **7.1.1.2 Adolescent Places along the Waterfront**

Apart from the city centre, another place frequented by the adolescents within the city during their free time was the city waterfront. The city's waterfront faces the Straits of Johor which separates Johor Bahru and their neighbouring country, Singapore. The 2 kilometres stretch of waterfront is connected to the city centre by linear and pocket spaces with seating spaces, a playground, and a mini skate park. The respondents looked upon the waterfront as a place providing them with an avenue to unwind, to relax and spend some enjoyable moments with their friends or peers. However, it was only the older adolescents of age 14 and above who mentioned visiting the waterfront with their friends. For the younger adolescents of ages between 10 to 12, they admitted enjoying going to the waterfront but they could only normally go there with their family. The waterfront offered places for many activities ranging from social to physical passive and active activities. The social activities were mainly sitting on the grassed area with friends, chatting or discussing or to just looking out into the sea and enjoy its serenity. According to one respondent interviewed about his visits to the waterfront:

*"I like to sit by the sea with my friends when we go out to the city on weekends. Actually it is a much needed time away from home and schoolwork after days of school."*

**(Shauqi, a 15 year-old Malay respondent, Bandar Baru UDA)**

For Shauqi, the waterfront was a place that he chose to go to with friends during their outings at the weekend. According to him, at times, young people would search for a place with a calm and tranquil ambience to give them some pleasant private time to be away from the home and school environment. Places with such a setting and ambience were not available within the housing area that he lived in, Bandar Baru UDA.

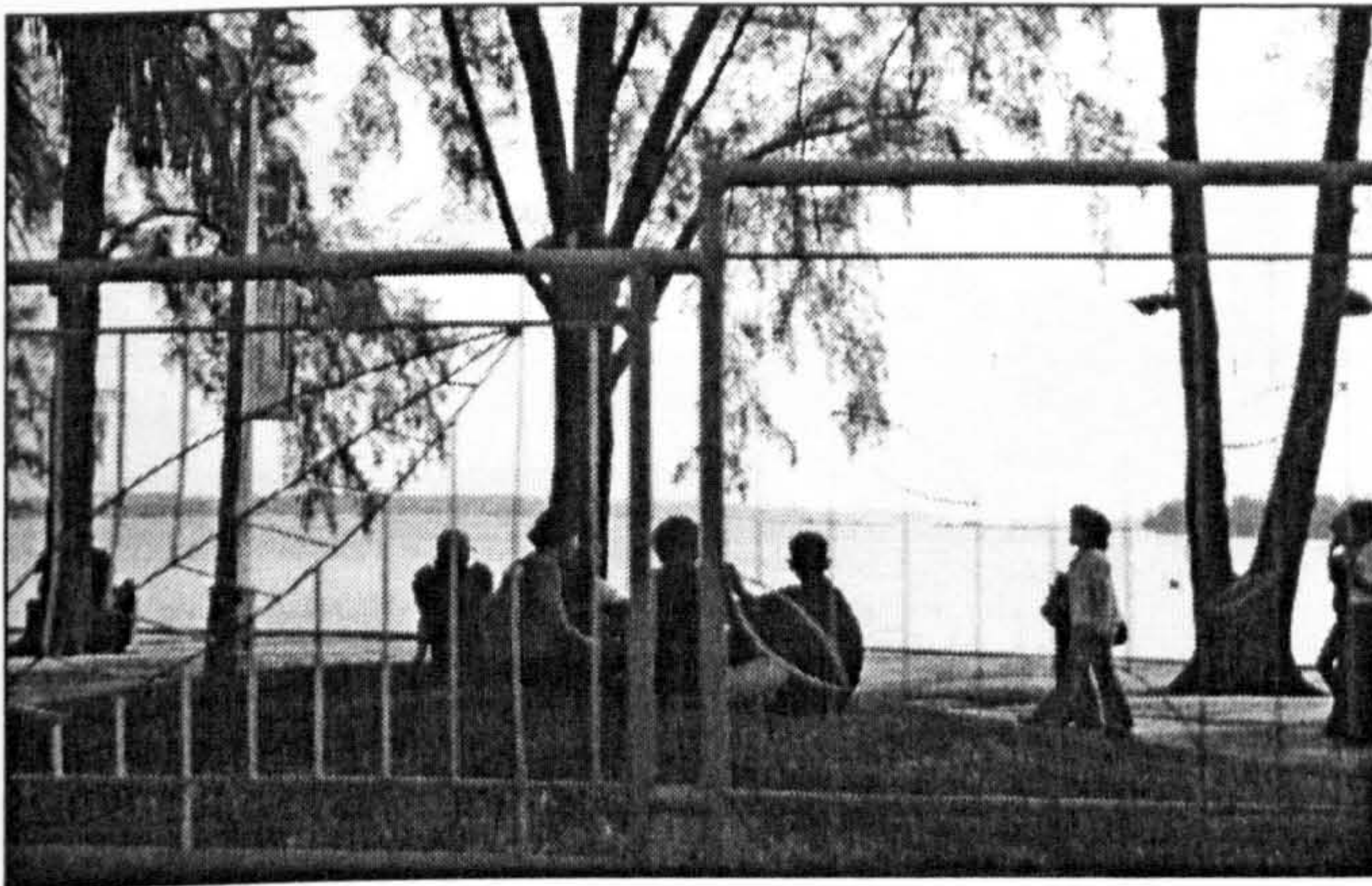


Plate 7.7: A popular adolescent gathering spot near the city's waterfront

Hence, he would still go to the waterfront at weekends. Even though the distance between the waterfront area and Bandar Baru UDA was only about one and a half kilometers away, he would still need to take a bus as there was no proper cycling track or pedestrian pathway linking the housing area and the waterfront. Many of the respondents (35%) stated that even though there were public spaces and playgrounds along the

waterfront, there were no other spaces specifically provided for their activities apart from the mini skate park. The playground was built to totally cater for the needs of children and adolescents under the age of 12. The respondents would like some challenging play equipment within the playground which would be more appropriate for their age. (See Plate 7.8)

In addition, they thought the waterfront was a good potential recreational area to support some of the city's adolescents' physical activities such as cycling and skateboarding. In their opinion, upgrading the waterfront by providing more open spaces would help to generate more physical activities which could be of benefit not

only to adolescents but also the other users, younger children as well as adults. The respondents commented on the lack of a cycling track to connect the whole waterfront and the other parts of the city. Fifteen of the respondents were extreme games enthusiasts and they mentioned going to the waterfront areas to find spaces to play extreme games.

They said that the city was not 'skateboard-friendly' as places to skate were very limited. One of the few places they could go and skate was at the waterfront. It was only in the last two years that a purposeful skate park was built within the waterfront to cater for Johor Bahru's skateboard enthusiasts' needs.



Nevertheless, the young respondents found it a positive effort on the part of the authorities in recognising their needs even though they thought access was still a constraint because of the distance.

Zaaba, a skateboarder mentioned this issue concerning skateboarding among adolescents along the waterfront;

Plate 7.8 A Playground located along the waterfront

*"I go to the waterfront to skateboard, either alone or with friends. For skateboarders around Johor Bahru, we are very much constrained by the lack of suitable places to skate. The sport itself has not received total approval from adults. Many still frown on us and consider the game to be dangerous for youngsters like us. Nevertheless, the new skate park, which is quite a recent addition on the waterfront is a testimony that the game is getting a more positive 'nod' from adults. It is only 2 years old but it is a delight to have at least this one. By far, it is the only public extreme facility that serves the city's young skateboarders but at least it is better than nothing. I have to come to this place to skateboard as there is none in my neighbourhood"*

**(Zaaba, a 16 year-old male Malay skateboarder from Taman Pelangi)**



Plate 7.9: The city's only Skateboarding Rink

Sometimes to try to get more challenges and to skateboard in privacy, he would search for abandoned spaces such as the corridors of empty shophouses as places to skate. The overall comments from the respondents on the waterfront revealed that these young adolescents were aware that the sea front had

a potential which had not been fully realised for beneficial sports activities.

According to Azmi;

*"The city has the sea but its potential have not been fully utilised. There are many adolescents who like swimming and kayaking (canoeing) but these sports are limited. Having a sea sports club for the public by the sea would provide us with more choices of water sports."*

**(Azmi, a 16 year-old Malay male respondent, from Taman Pelangi)**

The respondents thought the waterfront had immense potential and resources the Local Authorities could utilise to generate positive activities which would be attractive for the young adolescents to participate in. Physical activities along the waterfront were not provided for adolescents and the respondents interviewed thought they were under-represented users because existing facilities within the waterfront were provided only in consideration for very young children and adults. The next zone which became one of the respondents' preferred places were the green spaces within the city.

### **7.1.1.3 Adolescent Places and Green Spaces**

In order to identify the adolescents' preference for green spaces within the city, the respondents were again questioned as to which parks, gardens and recreational areas in the city they went to. There were in total three types of green spaces in Johor Bahru mentioned by the respondents. They were the Johor Bahru Urban Forest, the

Botanical Gardens and the other green spaces which included the local playgrounds in the neighbourhoods. Johor Bahru does not have many green spaces within the city. The following are the public green spaces existing within the city:

1. The Johor Bahru Urban Forest ( City Park / Neighbourhood Park)
2. The Royal Palace Botanical Garden (City Park)
3. Other small parks and recreational areas within the city (percentage of 5% and less)

The Urban forest was found to be popular among the respondents from the three ethnic groups and the percentage was highest among the Malays (35%). The percentage of respondents who frequented the Botanical Gardens was also highest among the Malays (26%). Most of the Chinese (55%) and Indians (61%) preferred to go to the smaller parks and recreational areas within the city centre. (See Table 7.1d and Figure 7.1.1)

**Table 7.1d: Green spaces frequented by respondents according to ethnic background**

Green spaces within the city frequented by the respondents	Ethnicity (%)		
	Malay	Chinese	Indian
Urban Forest	35	25	24
Royal Palace Botanical Garden (City Park)	24	18	15
Other parks and recreational areas within the city	41	57	61
Percentage within ethnic background	100	100	100
Total count (N=96)	32	32	32

From the interviews, 30% of the male and 35% of the female respondents mentioned the Urban Forest as one of the places they liked to go to with their friends, not only for recreational activities but also as a popular eating place after school. (See Table 7.1e).

**Table 7.1e: Green spaces frequented by the respondents according to gender**

Parks, gardens and recreational areas frequented by the respondents	Gender (%)	
	Male	Female
Urban Forest	30	35
Botanical Garden	15	13
Other parks and recreational areas within the city	55	52
Percentage within gender	100	100
Total count (N=96)	48	48

The highest percentage (37%) was for the younger respondents, the 10 to 11 year-olds, who went to the Urban Forest compared to the respondents from the older age groups. The percentage decreased as the age of the respondents increased. (See Table 7.2f). However, it was the reverse for the percentage of respondents who went to the Botanical Gardens. As age increased, the percentage increased. Thus, the percentage was lowest (18%) among the 10 to 11 year-olds and was highest among the 16 to 17 year-olds (22%). The percentage of those who went to the other parks and recreational areas was high across all age groups. The percentage ranged from 42% to 49%. It was highest (49%) among the 14 to 15 year-olds.

**Table 7.2f: Green spaces frequented by respondents according to age**

Parks, gardens and recreational areas frequented by the respondents	Age (%)			
	10-11	12-13	14-15	16-17
Urban Forest	37	35	31	31
Botanical Garden	18	20	20	22
Other parks and recreational areas within the city	42	45	49	47
Percentage within gender	100	100	100	100
Total count (N=96)	24	24	24	24

## **i. The Urban Forest**

Among the green spaces frequented by the respondents was the Johor Bahru Urban Forest. The Urban Forest is a new green park covering an area of 50 acres, located about 1.5 kilometres from the city centre. It was initially a forest reserve and was transformed into an Urban Forest in the late 1980's. Upon its completion, the Urban Forest became a neighbourhood park to serve the adjacent old Johor Bahru neighbourhoods. This park was provided and maintained by the Johor Bahru Local Council for Johor Bahru urbanites. Its development started in early 1987 and it became one of the city's best green lungs with a unique overall concept of development. The park design incorporated traditional recreational elements and local culture amidst ecologically balanced surroundings. The park concept managed to conserve most of the existing natural greenery with a minimum of tree felling. The park was conceived as a family recreational park and the spaces within the park were designed to accommodate activities for a range of users including adolescents. This park was also chosen as one of the recommended destinations of the programme for Cities organized by the WHO (World Health Organisation, 2004).

As stated by the respondents, the Urban Forest was one of their favourite green spaces within the city as there were opportunities for physical and social activities whenever they visited the area. They could stroll, sit by the man-made lake and the other sitting areas in the park, eat at the rows of food stalls, go boating, camping and play in the playground. (See Plates 7.11 and 7.12). Recently, the park has had the addition of an orchid garden. This park was the only one that provided play equipment and spaces for adolescents. (See Plates 7.13 and 7.14). Even though the play equipment was not sufficient in terms of quantity to cater for the needs of adolescents, still complemented the other facilities within the park. The adolescents who patronised the park were also from the adjacent schools. (See Plate 7.15). For the school going adolescents, the Urban Forest became a stopping place for the adolescents while waiting for the school to start and also provided a place to eat.

In terms of distance, there were two neighbourhoods (Kampung Taron and Kampong Baru) which were located close to the Urban Forest. However, the other neighbourhoods are located further away. In order to visit the park, the only way was for the respondents to use public transport as it was too far to walk. Despite the



distance being a hindrance, some of the respondents admitted that they would still visit the park, at least once in a month.



Plate 7.10: An aerial view of the Urban Forest



Plate 7.11: Johor Bahru Urban Forest Plate  
Man-made lake



7.12: Play space  
within Johor Bahru Urban Forest

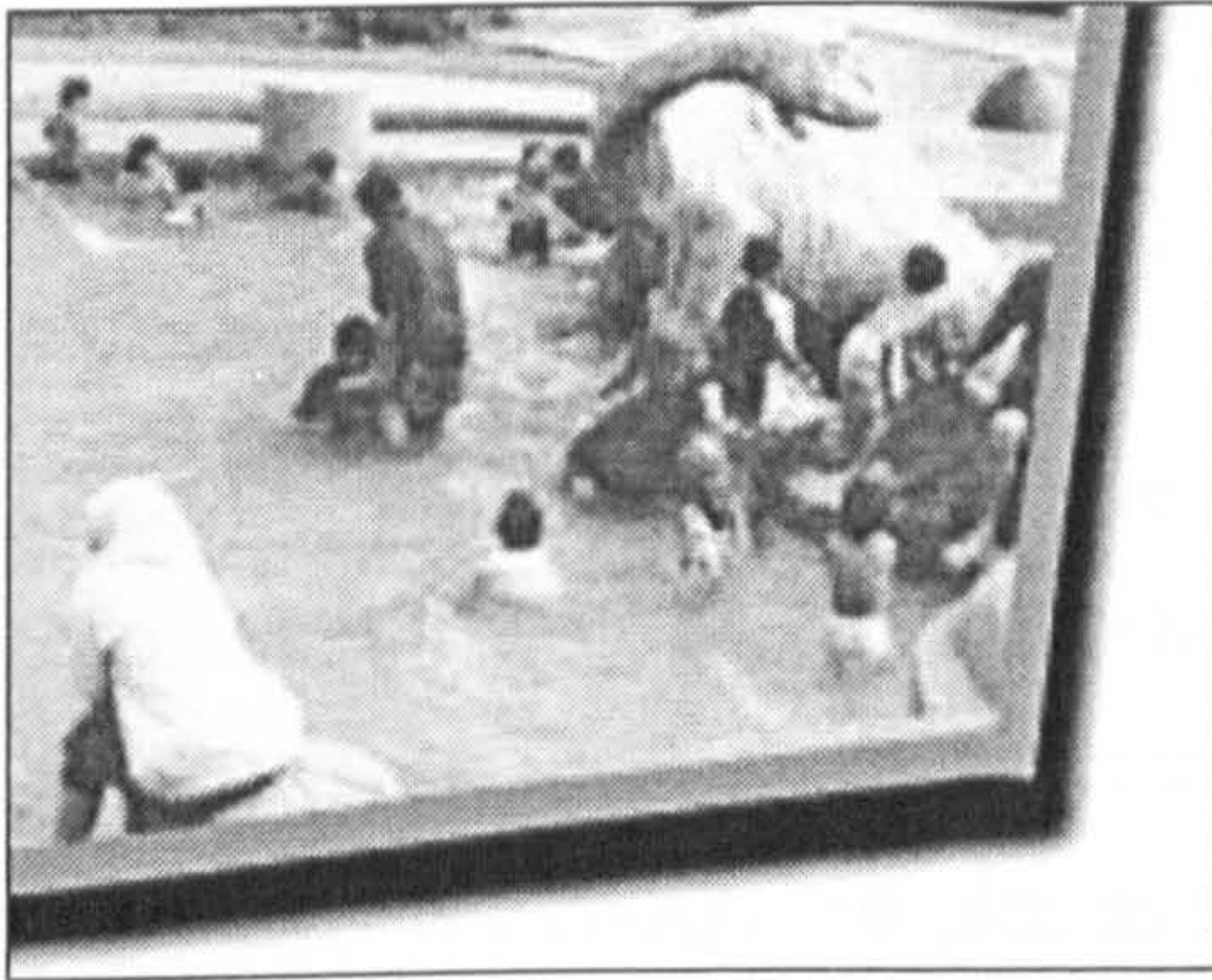


Plate 7.13: A popular water feature in the  
Urban Forest  
Urban Forest

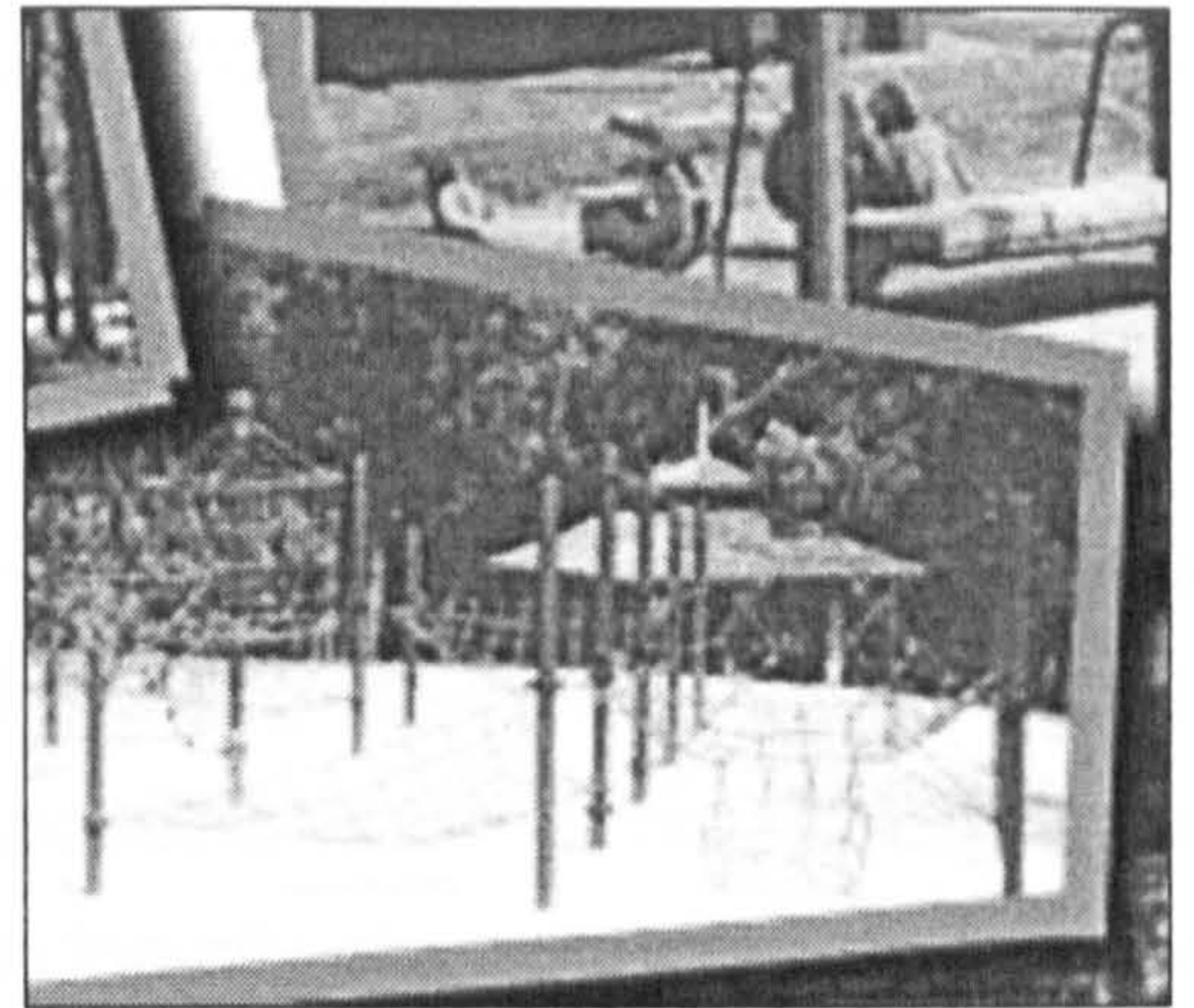


Plate 7.14: Play equipment

## ii. The Botanical Gardens

The next green space which the respondents frequented was the Royal Botanical Gardens. It is one of the oldest green spaces in the city. (Look at Plate 7.15). Indeed, the gardens became another place for the respondents to go to in the city. It was a historical park due to its past as a Royal Gardens which was used by the Johor Royal Family as their private strolling garden. However, it was converted into a public Botanical Garden in the 1960's. The number and varieties of plants had been increased to complement the function of the Royal Gardens as Botanical Gardens. The Botanical Gardens consist of vast open spaces which are currently used by the visitors including the respondents as places to jog, play and meet people. Even though the opportunities for playing were limited, it is still one of the city's green spaces which the respondents liked to go to from time to time.

## iii. The other small parks of Johor Bahru

The other small green spaces in the city were the Linear Park and Taman Merdeka. (See Figure 7.1.1. ). These green spaces provide facilities for park users such as playing spaces and seating areas. However, fewer respondents went to these green spaces because they lack play spaces for them. The play equipment was mainly for younger children and the seating spaces were actually meant for those

accompanying the young children. Despite the absence of facilities for adolescents in the small parks, some of the respondents would still visit them.

## **7.2 Discussion**

Chapter 7 has presented the findings of the study relating to the places the respondents go to within the city apart from their housing area and neighbourhood. The research managed to identify the public spaces and the action range of the respondents through the places they patronised in the city of Johor Bahru. The places they frequented were found to be those located in three specific areas within a comfortable distance from the housing area to the city, offering them the city centre, the city's waterfront and the small green spaces within its urban fabric. The places were found to be popular venues for their activities.

It was stated by the adolescents that the city offered a limited range of activities and each of the different parts of the city provided opportunities for different forms of activities. The respondents specifically mentioned three popular places; the city centre, the waterfront and the city's green spaces particularly the Urban Forest. The city centre was found to be a place of entertainment and socialising for the respondents. The physically-oriented activities such as cycling and skateboarding were totally lacking in the city. In the West, skateboarding took place substantially in the city centre and faced problems of creating public conflicts (Woolley, 1999; Owens, 2002), but the scenario in Johor Bahru, Malaysia differed. Even though the local authorities and the public did not impose any legal restrictions on this particular type of activity, the spaces within the city were not 'skateboarder friendly'. As a result, no skateboarding activities were seen within the city. However, the interest in extreme games among the adolescents was present as mentioned by the respondents because repeated requests within the interviews revealed concern for more facilities for extreme games, an issue which should be explored further and investigated in detail. Even though there were attempts by the Ministry of Youth and Sports to support extreme games among young people by providing some of the facilities on their premises, they were not easily accessible because of the restrictions imposed on their use.

In terms of activities, the respondents indulged in a range of social activities in the city centre such as meeting people, intentionally and unintentionally, shopping, sitting, relaxing or simply watching other people. These activities took place in the city's public spaces, in shopping malls and other smaller urban areas particularly along the city's canal. The choice of public spaces implied that specific places were preferred more than others according to a place's affordance or ability to accommodate some of the young people's activities.

The interview findings indicated that the respondents went to the city centre for a range of activities which varies according to ethnic background, gender and age group. There was also a difference in the choice of activities according to ethnic background. More Chinese respondents preferred consuming activities such as shopping and they spent more time in shopping malls compared to the Malays and Indians. The passive activities of hanging out, sitting and watching people appealed more to the Malays than consuming activities such as shopping. This was because the respondents found sitting and watching people to be activities which were not only relaxing but which also enabled them to socialize. However, the main intention for going to the city centre was because they wanted to go partly for reasons of boredom and having limited places which provided more physically oriented activities.

In analyzing gender differences, activities with friends were found to be higher among the female respondents. Consuming activities particularly shopping were also more popular among the females. The percentage of passive activities in the city centre such as sitting and watching people was twice as high among the males compared to the female respondents. The male respondents found passive activities such as sitting and watching people in the city centre more enjoyable and relaxing. This was probably because places accommodating activities for the adolescents were lacking in the housing areas and neighbourhoods. The findings supported the findings of previous research relating to issues of adolescents in shopping malls in other places such as that of Lateh (1994).

By age, the percentage of meeting up with friends in the city centre among young adolescents aged 10 to 11 was low compared to those in the older age groups of 12

to 17 years. The percentage for this activity in the city centre increased with age. Similarly, the activity of sitting and watching people was again low (8%) among the young 10 to 11 year-olds. When they were in the city centre, their activities were mainly consuming activities (47%) such as shopping and eating out but these activities were carried out in the company of their family instead of with friends. Respondents within this age group stated that they would go to the city centre with their family or friends but not alone. Activities with friends increased according to age as well and were highest among those of 15 to 17 years of age. The respondents also mentioned going to the city centre on their own or with friends and family. For the older adolescents, their action or roaming range to go out without the supervision of their parents was beyond their housing area. Consuming activities among the older respondents were lower compared to the younger respondents. They were highest among the 10 to 11 year-olds but lowest among the 16 to 17 year-olds. This was due to the activities being more of social activities with friends or peers.

The findings on their activities within the city centre specified that the respondents were contented with parts of the city. In recent years, the Johor Bahru municipal authorities have managed to improve many of its urban areas within the city centre. The improvement of the overall urban fabric was geared more towards improving the aesthetic quality of the urban spaces and to improve pedestrianisation (Majlis Bandaraya Johor Bahru, 2002). Urban spaces around one of the shopping malls in the city, the City Square Shopping Mall, was mentioned by many of the adolescent respondents as their favourite spot in the city centre. This shopping mall is by far the busiest in the city centre and attracts many adolescents compared to the other shopping malls. The shopping mall not only offers indoor but also outdoor spaces which makes it a popular place among the Johor Bahru adolescents. Johor Bahru adolescents regular use of shopping malls is similar to studies conducted in the West (Uzzell, 2002; Woolley, 1997) whereby shopping or leisure malls were frequently used by adolescents for many purposes. The presence of urban spaces generated human activities. The respondents use both spaces within the building and the outdoor spaces within the periphery for passive activities such as hanging out, sitting and watching people. The success of such places is in line with the ideas of Gehl (1968) who believed that physical planning could influence the extent and character of outdoor life.

Gehl stressed that there was a relationship between outdoor activity and outdoor quality and that people tended to attract other people and they were attracted to the company of other people. The findings of this study contend with the statement partly because one of the main reasons for the adolescents visiting these places was also due to their wanting places to relax in a comfortable setting. While many researchers such as Whyte (1988), have pointed out that one of the elements of importance for attractive streets is the elements that contribute to the making of comfortable settings in urban spaces such as the presence of sunlight, warmth and lack of wind. Similarly, in this study the Malaysian adolescents stated their preference for comfortable urban places by indicating a preference for cooler and windy spaces, with the presence of plants, which contribute to making a place pleasant and comfortable for them. Due to Johor Bahru's hot and humid weather, the respondents expressed a preference for cool and windy spaces in relation to comfortable spaces. Their preference was influenced by the weather, culture and geography of a place which dictated the way they used public spaces.

While many young people in other cities of the world complained of heavy traffic in the city (Chawla, 2002), it was also the concern for the Malaysian adolescents in Johor Bahru. They were concerned about traffic even though they thought that it was not as bad as the other bigger Malaysian Cities such as Kuala Lumpur. Johor Bahru was a fast developing city and attempts by the Local Authorities had been made to improve the city. Even though the upgrading works of the city centre's urban spaces improved some of the city's urban spaces, there were still voices of dissatisfaction among respondents on a few aspects of the city centre. One of them was the lack of life or vivacity in the urban spaces. They believed that lively urban spaces which had activities to attract young people would create or generate a diversity of social activities within the city and bring the city to life. Some of the activities which had the potential of injecting life within the spaces were performing arts, sports and other outdoor exhibitions which were currently limited and those that were available were confined within buildings.

Another aspect that became a concern among the respondents was the presence of dirty, unmaintained spaces. There was also a comment on the presence of dirty,

narrow, unlighted alleys within the city's fabric which caused a concern among the respondents particularly the females. Not only were the places sore eyes, but the respondents also felt threatened as they anticipated such places as being unsafe especially at night with the absence of proper street lighting. They were not happy with this issue and would like the authorities to act on it and would like to see cleaner and safer city spaces and less pollution in the city. This concern was similar to the repeated comments of other adolescents in other cities of the world (Chawla, 2002; Malone, 1999).

The city's waterfront was another important place for the city's adolescents. In fact, it was one of the zones within the city that offered some recreational activities for the other urbanites. Currently, the spaces and facilities within this zone partly cater for some of the recreational needs of the whole city's population. However, the spaces along the waterfront were not continuous and the zone was split up into sub zones. The existing facilities mainly cater for passive social activities such as strolling and sitting which was meant for all types of users. Johor Bahru adolescents' favourite places along the waterfront were the sitting areas, grassed areas, playground and skate park. Due to the limited sea sports activities, the respondents expressed their need for more opportunities for sea sports such as swimming, kayaking or canoeing. They also identified the lack of a proper cycling track along the waterfront which would otherwise be able to attract more young people to cycle along the city's waterfront. Cycling was seen as a good physical activity to indulge in providing an opportunity for the respondents to practise a healthy and active way of living.

The interviews also enquired about the green spaces adolescents went to in the city. Green spaces in the city were places visited by the respondents particularly the Urban Forest, the Botanical Gardens and the other smaller green parks. The Johor Bahru Urban Forest is a popular place for the respondents because it is a green space that provides some of the recreational needs of the adolescents to support their physical and social activities. Even though the Urban Forest attracts the adolescent group, the location is still a long way from the newer neighbourhoods. Indeed, only two neighbourhoods could benefit from the distance as they were found to be located adjacent to the park. The adolescents from those neighbourhoods were at an advantage because they could just walk to the park. The success of the Urban Forest

among the adolescents should be used as a reference or precedence in terms of design consideration by the Local Authorities for the future provision and development of a more adolescent-friendly green space within the city.

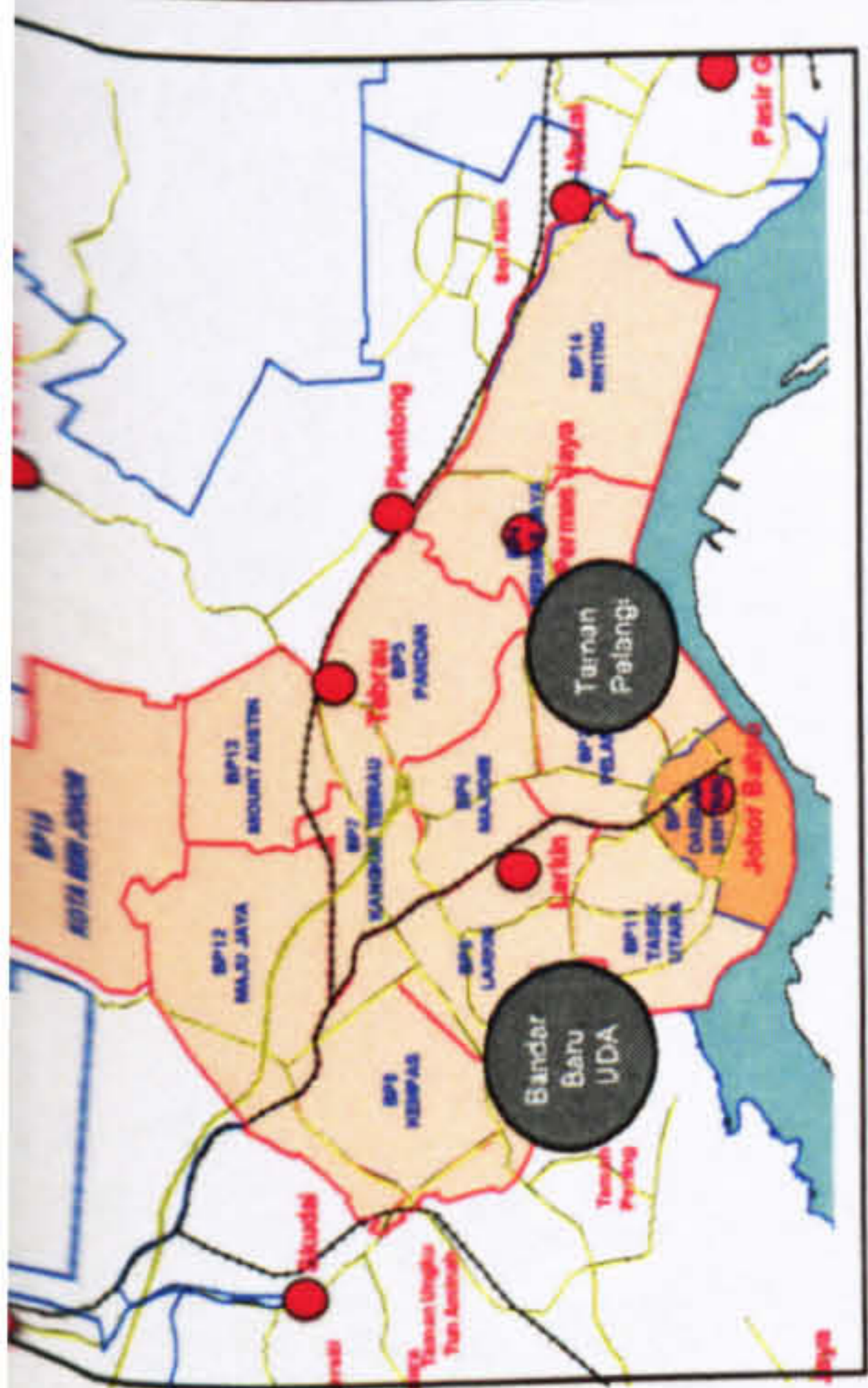
The findings by ethnic background found that the Malay respondents went to the Urban Forest and Botanical Gardens more than the Chinese and Indian respondents. By gender, more females went to the Urban Forest compared to males. However, there were more male respondents who went to the other green spaces. According to age group, the Urban Forest was preferred more by the younger adolescents of 10 to 13 years with a percentage ranging from 35 to 37% as compared to 31% for the older adolescents. This was because the Urban Forest had many play spaces for the younger children. The water play space was the most popular among the young children and adolescents.

On the whole, the Urban Forest had both flaws and advantages over the other green spaces within the city and even though it had proven to be a popular local family recreational area, it had its bearing capacity or its limits. Similarly, for the Botanical Gardens and the smaller parks which were some of the places visited by the respondents from time to time. These places provided open spaces for certain activities. Apart from the green spaces, the adolescents would still have their own neighbourhood to search for spaces for their physical and social activities.

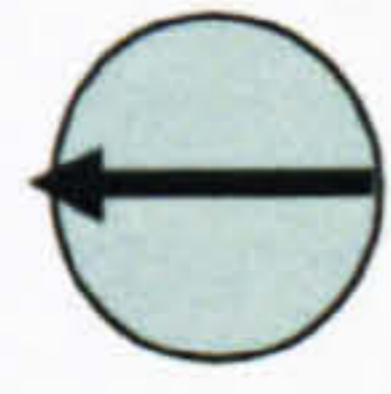
### **7.3 Summation**

Chapter 7 presented findings based on the data from the interviews and managed to collect important information on adolescents' places in the city. The city of Johor Bahru was found to be a place for some of the adolescents' activities such as consuming activities and social activities with friends. The activities were mostly passive. Opportunities for other activities were also found to be capable of expressing their views on certain issues of the city. The next chapter will present what the respondents have to say about their outdoor environment in their respective housing area and neighbourhood.



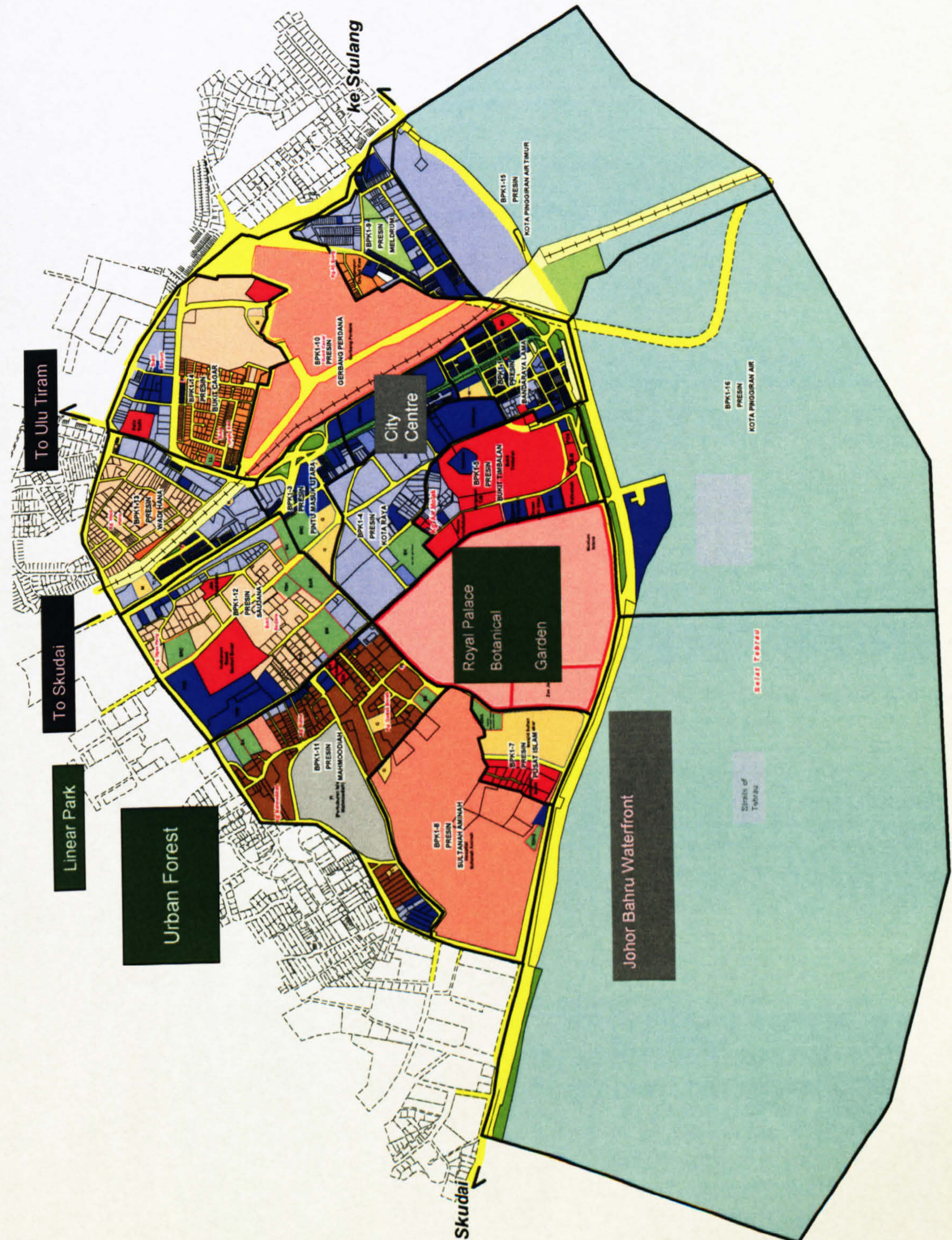


**LEGEND**



1 : 16,500

**Figure 7.1.1: Johor Bahru -City Centre and green spaces**



*Nota : Maklumat Guna Tanah Sedia Ada dan Guna Tanah Yang Ditetapkan adalah sehingga Disember 2004*

## **CHAPTER 8:**

### **What the adolescents want from their housing areas (Taman Pelangi and Bandar Baru UDA) and neighbourhoods**

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#### **8.0 Introduction**

Chapter 8 will present in detail the findings relating to the resources available to adolescents in two neighbourhoods of Taman Pelangi and Bandar Baru UDA in Johor Bahru which they go to apart from their schools. The chapter will also describe in detail the adolescents' views or what they expressed about their housing and neighbourhood environments in accordance to what they wanted. Some of the excerpts from the interviews which support the respondents' opinions on their outdoor environment will be included in this chapter.

This research acknowledged the problems faced by the adolescents in this study, in the provision of urban housing spaces and facilities and neighbourhoods. Adolescents' needs are often overlooked or not given priority (Weinstein and David, 1987). This chapter will also provide findings on the percentage of respondents who want changes in their housing area and neighbourhood and state what particular facilities and spaces they want in their housing area and neighbourhood. The information gathered from the respondents answered the following research questions:

- 1. What are the changes wanted by the adolescents in Johor Bahru relating to their housing area and neighbourhood?**
- 2. What are the adolescents' preference for spaces and facilities within their housing area and its neighbourhood in relation to their social and physical needs?**

Apart from the survey questionnaire and interviews used to gather the respondents' views concerning their housing area and of what they would like to see improved in relation to their outdoor neighbourhood environment, site visits were also carried out to understand the conditions of the site. (See Figure 8.0.1 and 8.0.2) Visits were

made to the places mentioned by the respondents during the interviews to enable the researcher to have a closer look at the places mentioned by the respondents. The in-depth interviews were used to probe further into the places they went to, both the places they liked and disliked, within their housing area and neighbourhood. In the context of Johor Bahru, the research sought to develop an understanding at what was available within the two housing areas and neighbourhoods for the respondents who lived in those areas. Some of the important and relevant excerpts from the in-depth interviews relating to their housing area and neighbourhood are included in this chapter while the names of the respondents are incorporated using pseudonyms.

## **8.1 Results**

### **8.1.1 Wanting Changes to support their activities**

The first question of part C of the survey questionnaire required the respondents to answer whether they wanted changes in their housing area to support their activities in their housing and neighbourhood area. They were asked to give the answer 'yes' or 'no'. The responses from the questionnaire were tabulated according to ethnic background, gender and age group. See Tables 8.1a, 8.1b and 8.1c.

The question was:

***Question C1. Do you want changes within your housing area and neighbourhood?***

Respondents from all three ethnic backgrounds wanted changes with the highest percentage of 84% of the Chinese respondents gave the answer 'Yes' and only 16%, 'No'. Eighty-one percent of the Malay respondents answered 'Yes' and 19% gave the answer 'No', while 80% of the Indians wanted changes and the other 20% answered 'No'. (See Table 8.1a).





**Table 8.1a: Wanting Changes and the ethnic background factor**

Wanting Changes Within Neighbourhood	Ethnic background (%)		
	Malay	Chinese	Indian
Yes	81	84	80
No	19	16	20
% within ethnic background	100	100	100
Total count (N=423)	282	77	64

From the responses received, 84% of the male respondents and 78% of the females answered 'yes' indicating they had needs for certain changes within the housing area to support their physical and social needs. Another 16% of the male respondents and 22% of the females returned a "No" answer, implying satisfaction with the current or existing condition of the housing area. (See Table 8.1b).

**Table 8.1b: Wanting Changes and the gender factor**

Wanting Changes Within Neighbourhood	Gender (%)	
	Male	Female
Yes	84	78
No	16	22
% within gender	100	100
Total count	217	206

**Table 8.1c: Wanting Changes and the age factor**

Wanting Changes Within Neighbourhood	Age Groups (%)			
	10 to 11	12 to 13	14 to 15	16 to 17
Yes	83	82	77	83
No	17	18	23	17
% within age groups	100	100	100	100
Total count (N=423)	76	113	114	120

By age, the percentage of respondents who gave the answer 'Yes', implying they wanted changes, ranged from the lowest of 77% among the 14 to 15 year-olds to the highest of 83% among the 10 to 11 and 16 to 17 year-olds. (See Table 8.1c).

### **8.1.2 What they want or desire (Their Needs) from their housing and neighbourhood environment**

Pertaining to Question C1, the respondents were asked to respond to question C2 which asked them what they would like to have within their housing area and neighbourhood. They were asked to express their opinions on how to improve the neighbourhood so that the adolescents in the area can benefit from the changes.

#### **Question C2 :**

***What would you do to your neighbourhood if you were given the opportunity by the local authorities to make decisions to improve the housing area and to fulfil the needs of adolescents?***

All the respondents gave their answers or responses to the second question in various ways. There was a range of responses from the respondents whereby their answers were in the form of what they wanted or desire, indicating specific open spaces and facilities. Some of the respondents even expressed wanting maintenance or good upkeep of the spaces and facilities. In order to facilitate analysis, the answers were coded or grouped according to eight main themes which comprised both neighbourhood spaces and resources. As a general overview, the responses extracted from the interviews were grouped according to the following spaces and facilities and related issues. They were listed according to the hierarchy of what they wanted and were based on the percentage of the respondents' mentions. What they want in their housing area and neighbourhood are listed below.

1. Sports facilities for games and sports
2. Spaces for resting and to be on their own for privacy (Quiet places)
3. Spaces for meeting people, community gatherings and activities
4. Play spaces for unstructured play and open spaces
5. Multimedia , cyber café and commercial facilities (Shopping complex)

6. Natural areas, parks and beautifully landscaped housing areas
7. Better Streets
8. Clean and well-maintained neighbourhood

The findings on what they want within their outdoor environment are listed according to the hierarchy of importance, based on the percentage of respondents' mentions. (See Table 8.1d)

**Table 8.1d: What they would like by hierarchy of their needs responses from the questionnaire**

	<b>What they want within their environment (Their needs)</b>	<b>Percentage</b>
1	Sports and recreational facilities and spaces	26
2	Spaces for resting and privacy(Peaceful and quiet places)	14
3	Places to meet people, friends and the community	13
4	Play Spaces and open spaces	12
5	Natural areas, parks and landscaped areas	11
6	Better streets	11
7	Multimedia, Cyber Cafe and commercial facilities	9
8	Clean and well-maintained areas	4
	Total %	100
	Total count	423

According to ethnic background, the need for sports facilities was highest among the Chinese (38%). (Refer to Table 8.1e). Their needs for social spaces such as spaces for resting (4%) and spaces to meet people (3%) among the Chinese respondents were very low. The Malay (26%) respondents' top needs were also sports facilities. The top needs of the Indian respondents were also sports facilities (33%). The need for places for private resting spaces were higher among the Malays because they were placed second in their hierarchy of needs while the Chinese placed them sixth and the Indians, seventh.



**Table 8.1e: Hierarchy of needs by ethnic background**

What they want within their Environment (their needs)	Malay	Hierarchy	Chinese	Hierarchy	Indian	Hierarchy
	(%)		(%)		(%)	
Sports facilities	26	1	38	1	33	1
Spaces for resting and privacy (Peaceful and quiet places)	20	2	4	6	2	7
Places to meet people, friends and the community	17	3	3	7	11	5
Play Spaces	9	6	17	3	17	2
Natural areas, parks and landscaped areas	12	4	6	4	9	6
Better streets	5	7	27	2	16	3
Multimedia, Cyber Cafe and commercial facilities	11	5	5	5	13	4
Clean and well-maintained areas	2	8	2	8	0	8
% within ethnic background	100		100		100	
Total count	282		77		64	

According to gender, the top needs of male respondents were sports facilities (36%). (Refer to table 8.1f). The second highest needs were places to meet people (14%) and it was higher than the females (12%). The female respondents' top needs were also sports facilities (21%) and they wanted more spaces for resting (17%) compared to the males (12%). The needs for play spaces were also higher among the females as their ranking was third. There were equal needs (11%) for natural areas, parks and landscaped areas for both male and female respondents. Clean and well-maintained spaces were the lowest in the hierarchy for both male and female respondents.

**Table 8.1f: Hierarchy of needs by gender**

What they want within their environment (Their needs)	Gender		hierarchy	hierarchy
	Male (%)	Female (%)		
Sports facilities	36	21	1	1
Spaces for resting and privacy (Peaceful and quiet places)	12	17	3	2
Places to meet people, friends and the community	14	12	2	5
Play Spaces	10	13	5	3
Natural areas, parks and landscaped areas	11	11	4	7
Better streets	8	13	6	3
Multimedia, Cyber Cafe and commercial facilities	8	12	6	6
Clean and well-maintained areas	2	2	8	8
Percentage within gender	100	100		
Total count (n=423)	217	206		

According to age group, the need for sports facilities was eminent across all ages and the percentage ranged from a minimum of 25% among the 10 to 11 year-olds to a maximum of 37% among the 16 to 17 year-olds. (See Table 8.1g). The 10 to 11 year-old respondents' top needs were sports facilities (25%). It was similar for the 12 to 13 year-olds, their first needs were also sports facilities (27%). Twenty-six percent of the 14 to 15 year-olds stated sports facilities to be their top need. The oldest age group, 16 to 17 year-olds' first needs were sports facilities (37%).

**Table 8.1g : Hierarchy of needs by age groups**

What they want within their environment (their needs)	10 to 11	Hierarchy	12 to 13	Hierarchy	14 to 15	Hierarchy	16 to 17	Hierarchy
	%		%		%		%	
Sports facilities	25	1	27	1	26	1	37	1
Spaces for resting and privacy (Peaceful and quiet places)	8	6	14	4	18	2	14	3
Places to meet people, friends and the community	13	4	9	6	16	3	15	2
Play spaces (for unstructured play)	24	2	15	3	8	6	4	7
Natural areas, parks and landscaped areas	14	3	4	7	13	4	12	4
Better streets	7	7	12	5	11	5	12	4
Multimedia, Cyber Cafe and commercial facilities	9	5	19	2	7	7	7	6
Clean and well-maintained areas	0	1	0	1	2	8	2	8
% within age groups	100		100		100		100	
Total count	76		113		114		120	

## 8.2 Results from Interviews on what the respondents want

The in-depth interviews were able to further elucidate what the adolescents wanted or needed in their own words and their views and opinions relating to places they went to which they liked and disliked, within their housing area and neighbourhood.

### 8.2.1 The opinions of the respondents on their needs in their housing area and neighbourhood

Part of the findings from the in-depth interviews were the respondents' expressions of what they wanted in their housing area and neighbourhood. Some of the key points and justifications for their needs are supported by the excerpts of the interviews of respondents in the housing areas, Taman Pelangi and Bandar Baru UDA. Figure 8.2.1 is the layout of Taman Pelangi housing area and the places frequented by the

respondents. Figure 8.2.2 is the layout plan of Bandar Baru UDA housing area which also indicated the places frequented by the respondents.

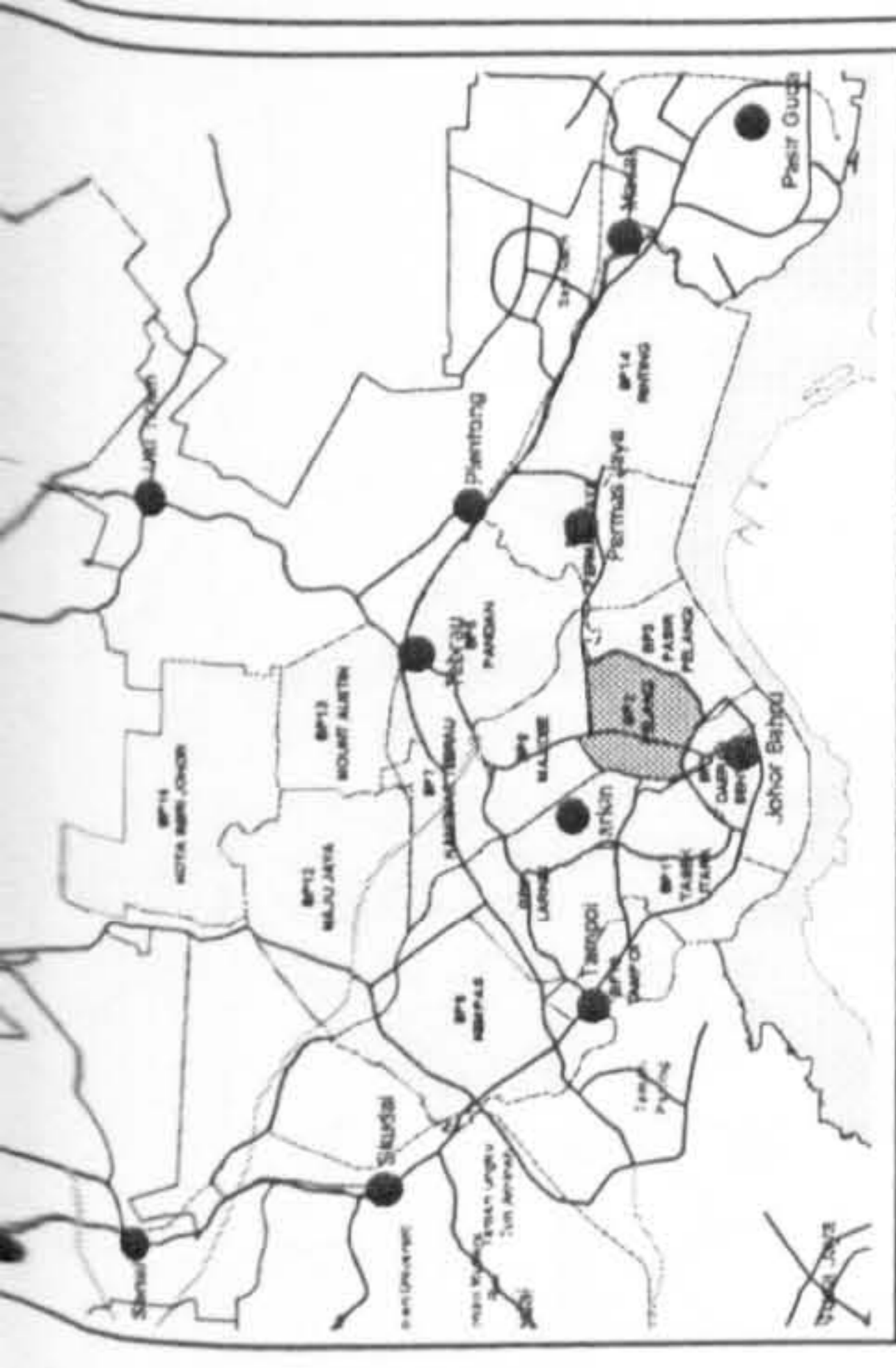
The following were some of the respondents' comments made during the interviews and presented through the eight main themes identified earlier in the chapter.

### **1. The need for sports and recreational facilities**

The request for sports and recreational facilities were in line with the findings from the Chapter 5 on their activities. From the findings on favourite activities, sports and recreational activities were top of the list according to ethnic background, gender and age group. The respondents were not happy with the existing facilities within their neighbourhood as they said that currently there was a lack of certain facilities or there were none at all. The respondents admitted they normally had some opportunities to perform sports activities in school, being part of the physical education curriculum and extra curricular activities. However, physical education in school was only carried out twice a week and each session lasted for forty-five minutes. The total physical education was only one and a half hours a week. The tight everyday schedule had already restrained them from performing some sports activities and the limited or lack of sports and recreational facilities further reduced the opportunities for more physical activity through sports. Some of the frustrations of the respondents about sports and recreation facilities were amplified from the following interview excerpts which revolved around major concerns of the respondents.

#### **1. The adolescents' need for certain types of sports facilities as indicated by the respondents from the two neighbourhoods**

Many of the respondents interviewed conveyed their frustrations with their housing environment when the issue of a lack of sports facilities limited their physical activities within the housing area and neighbourhood. Among the main facilities lacking as mentioned by the respondents were playing fields and games courts.



**LEGEND**

- HOUSING AREA**
- Existing Houses
  - Commercial areas
  - Community Facilities
  - Educational Facilities
  - Health Facilities
- RELIGIOUS INSTITUTIONS**
- Religious Institutions
  - Cemeteries
  - Existing Green Spaces
  - Proposed New Green Spaces

- INFRASTRUCTURES AND UTILITIES RESERVES**
- Electricity lines
  - Water Supply
  - Communication network
  - Roads
  - Road Reserves
  - Railway Tracks
  - System Perpartian dan Saliran
  - Others

Scale: 1 : 16,000

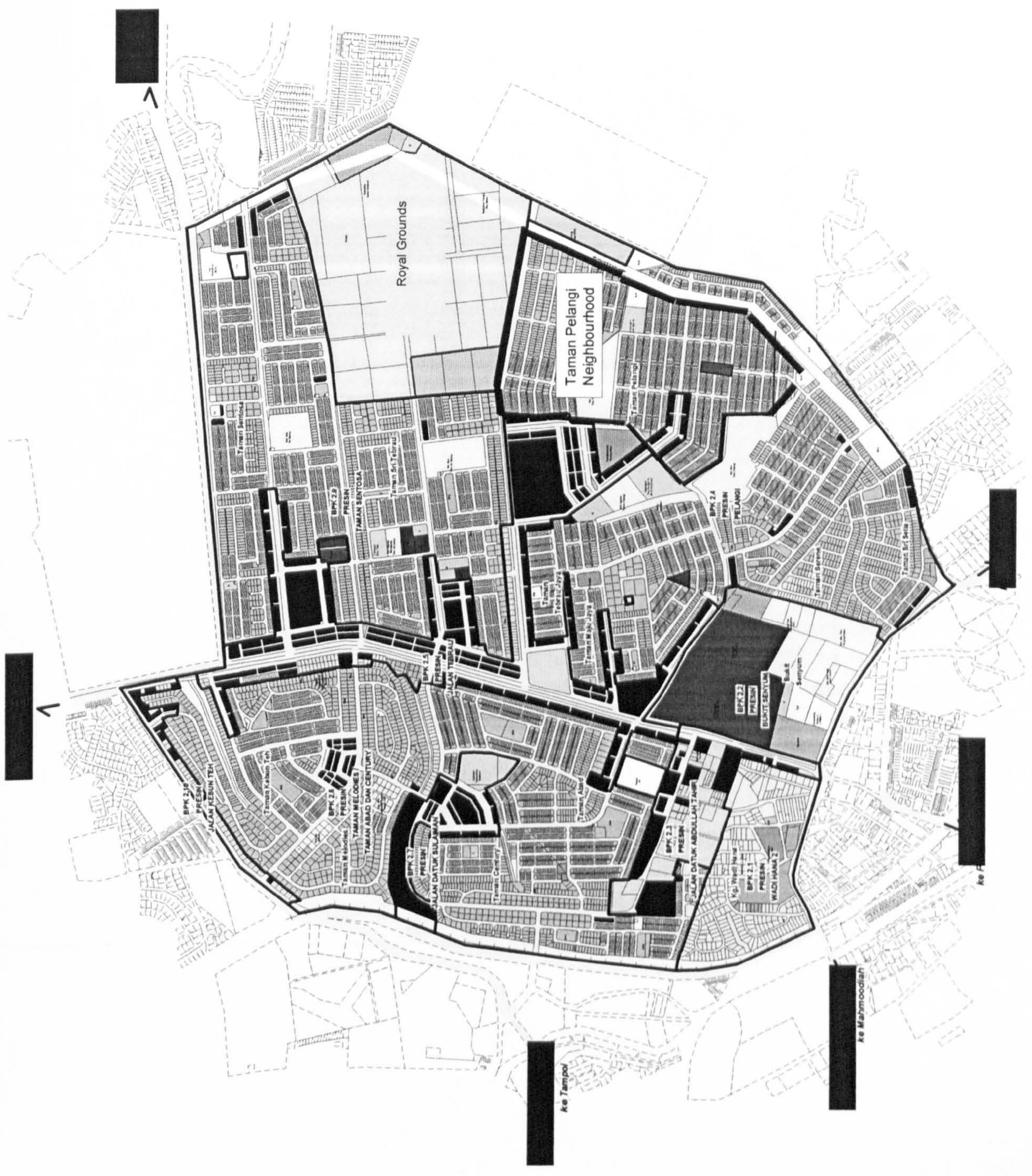
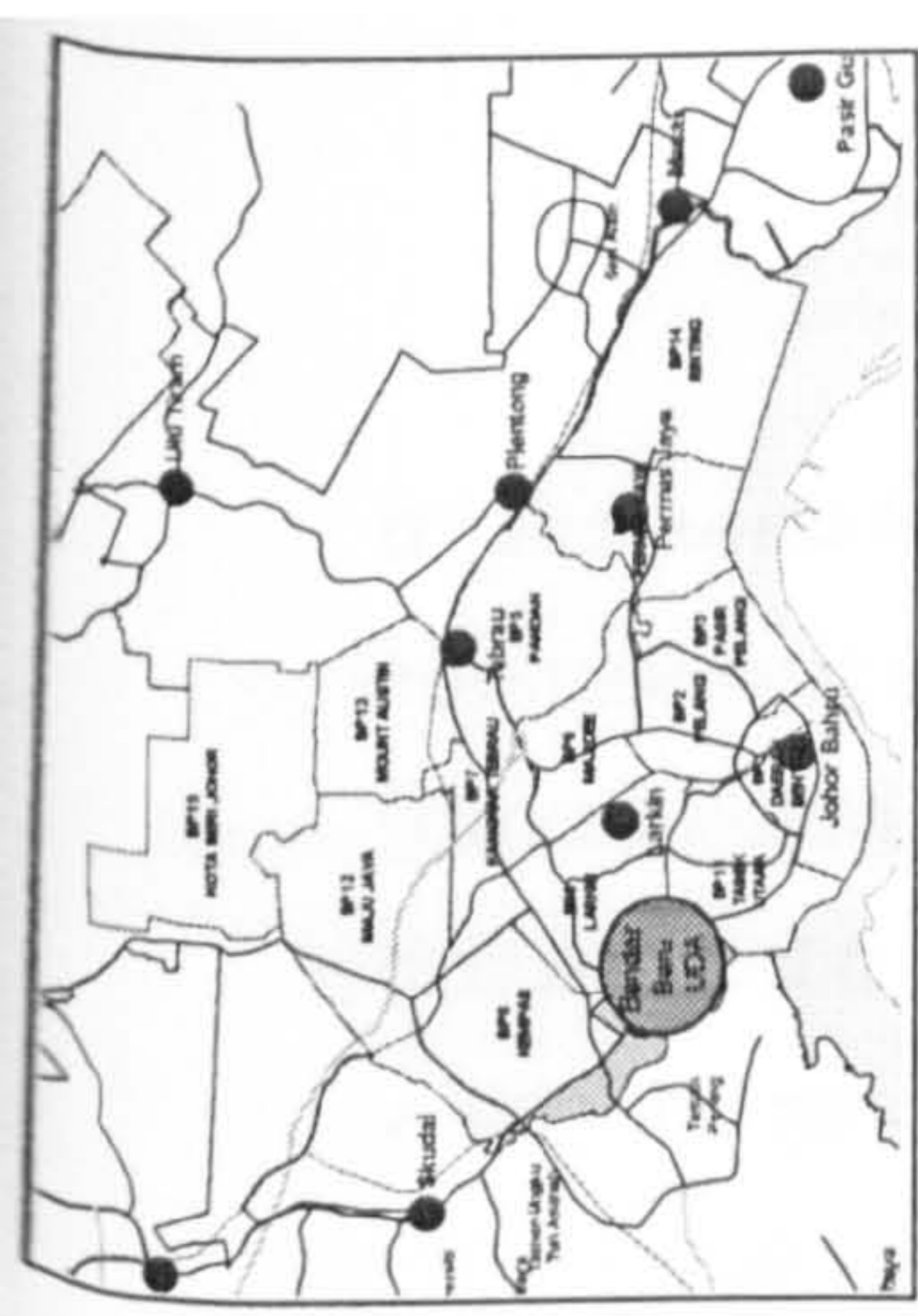


Figure 8.0.1 Taman Pelangi  
Source : Johor Bahru Local Plan 2002 - 2020



LEGEND

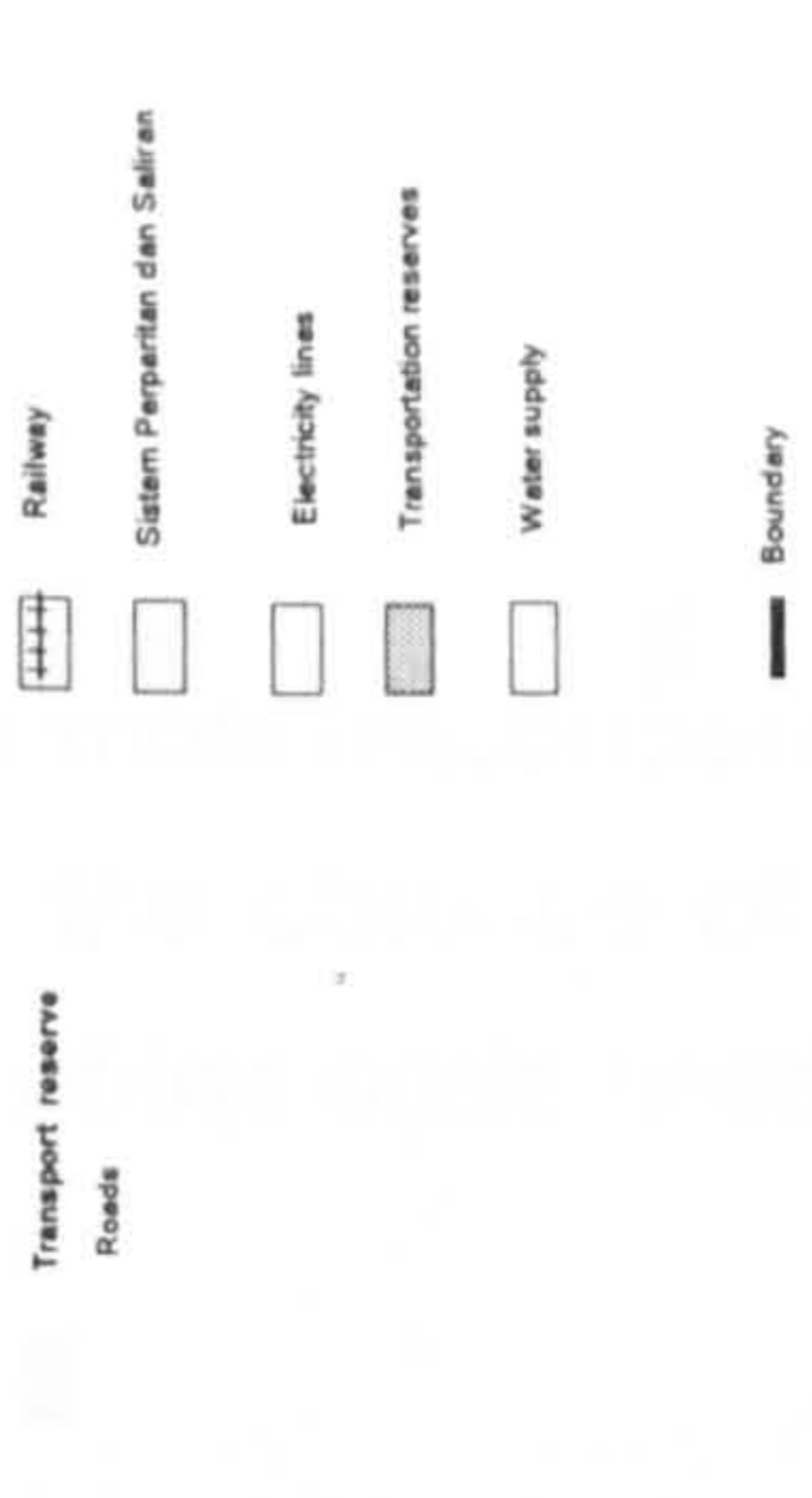
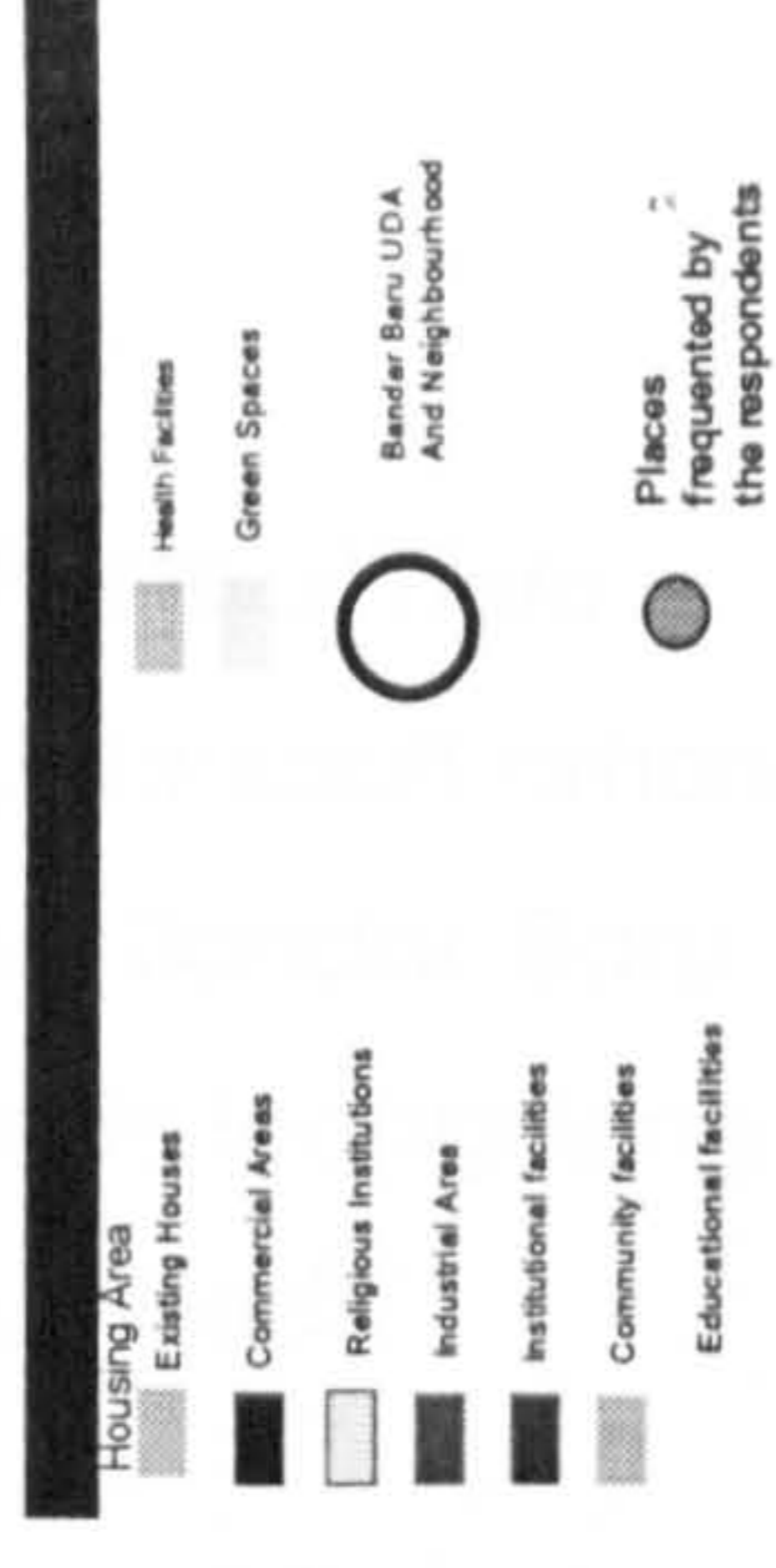


Figure 8.02: Bandar Baru UDA Housing Area and Neighbourhood

Source: Johor Bahru Local Plan, 2002 - 2020

1 : 25,000



### **a. The need for a Football Field**

Football was a popular sport among the male respondents. In both neighbourhoods, Taman Pelangi and Bandar Baru UDA, the absence of a public football field was considered a failure in recognizing one of the basic needs of the young adolescents within the neighbourhoods.

For a young adolescent like Aziz, he ingenuously admitted that he loved football and would be happy to be able to play the game in all available free time with his friends or neighbours. However, he felt quite frustrated with the surroundings within his neighbourhood;

*"I am a bit frustrated and fed up with the environment that lacks facilities for playing such as not even having a basic field to play football."*

*(Aziz, a male Malay respondent, a 10 year-old, Taman Pelangi)*

Talib, a 16 year-old respondent further emphasized the predicament of the adolescents of his age concerning football in his neighbourhood.

*"Football is one game that most of the teenagers around this housing area like but sadly there is no public football field. Yes, there is a football field in the schools but we can only use the field during school hours and those are only accessible to students of that school. Outsiders are not allowed to play in school grounds. During out of school hours, we cannot play football at a proper football field. We can just play within a limited open space in the housing area which is not a proper football field. Can you imagine how frustrating it is to see a football field but you cannot go in to play? At times, we cannot help it but to sneak into the school grounds to play football. It is fun though."*

*(Talib, a Malay male respondent, 16 years old, Bandar Baru UDA)*

### **b. The need for a public Swimming Pool**

For Kumar, swimming was another sport that was enjoyable and he would like to be able to swim more often but it was not possible. The nearest swimming pool was seven kilometres away from the housing area. Due to the distance, he had to take public transport to go to the swimming complex. Thus, it was not possible to go on weekdays as too much time would be taken up travelling. Hence, the activity could

only be taken up at weekends. He thought that a swimming pool within the neighbourhood would be a good resource for young people and the rest of the community.

*"Swimming pool within the neighbourhood would be good. We have to travel far to go swimming."*

**(Kumar, A male Indian respondent, 13 years old, Bandar Baru UDA)**

### **c. The need for games courts**

Games courts were also important for the respondents. The other two sports facilities cited as being lacking by the respondents were netball and badminton.

#### **i. Badminton court**

Badminton was the favourite sport among the respondents as discovered in the findings for favourite activities. These games were normally played on a court. Due to the absence of court facilities within the two neighbourhoods, the adolescents turned to the streets and whatever small spaces they could find near their homes to play badminton which was played in the streets. However, for Cheng Peng, 14, from Taman Pelangi, the presence of a badminton court would bring in more young people together to play the game.

*"Many teens like badminton but currently there is no badminton court and we normally play on the streets or small open spaces within the housing area."*

**(Cheng Pheng, , a male Chinese respondent, 14 years old, Taman Pelangi)**

#### **ii. Netball court**

The girls would also like to have a game court for girls such as a netball court. According to Azizah, a netball court would be a good sports facility to have around her neighbourhood as the game was synonymous with local female adolescents. They said that males would not occupy the space because they thought that netball court was meant for females. For other sports facilities which can be played by both genders, the conflict of use arises when both male and female adolescents want to play on the same court. In the end, it would always be the female adolescents who would shy away. Azizah stated that the public were often not particularly keen on seeing female respondents hanging out in public spaces. She suggested that by providing a 'gendered' space within the neighbourhood, there



would be an alternative space for the female respondents to go to and have their own activities such as netball.

*"Girls need a netball court to prevent them from too much hanging around. Netball is a girls' game and if there is a place to play netball, then the girls would have a place to go to which they could call their 'own'."*

**(Azizah, a female respondent, 15 years old, Taman Pelangi)**

Apart from voicing their concern about the absence of sports facilities, the respondents could also relate the benefits of spaces and facilities for sports.

**d. The adolescents' understanding of the benefits of sports facilities**

Many of the respondents understood the importance of having the resources or spaces and the benefits they could get out of the facilities. Some of the Interview excerpts on the respondents' opinions on the benefit of sports facilities are as follows:

***Benefit 1: Sports are essential for adolescents and sports facilities support sports activities***

***For example: Playing fields can support a diversity of sports activities***

Eighty-nine percent of the respondents interviewed admitted the importance of sports and they thought that sports facilities could support activities that can make young people physically active. One respondent, Ardi, anticipated that playing fields were essential as an avenue for the young to play sports. He suggested that an amenity which was near and accessible would provide a place to do different activities not only for adolescents but also the other residents as well. In his opinion:

*"The housing area and the neighbourhood without playing field for certain games such as football is actually depriving us of physical activities. Having a proper playing field within a housing area would be convenient, easily accessible and comfortable for all residents to use. It would provide us teenagers with a place to do different activities."*

**(Ardi, a Malay male respondent, 13 years old, Bandar Baru UDA)**

**Benefit 2: Sports facilities can act as an 'outdoor room'**

**For example: A playing field can be an 'outdoor room' that is a safe, vast, open space to play and spend time in**

Noraini, a 15 year-old female respondent, deemed a playing field as a big and safe open space to spend time with many people within the community. She added that doing activities on a playing field would provide interaction with the other people within the community.

*"A playing field can provide safe open spaces to play and spend time with friends. A big playing field can accommodate many activities and people."*

*(Noraini, a Malay female respondent, 15 years old, Bandar Baru UDA)*

**Benefit 3: Sports activities can become a place or avenue for a variety of sports activities and reduce boredom**

**Example 1: Activities on a playing field could reduce boredom**

The respondents anticipated the provision of sports facilities as enabling the creation of opportunities for physical activities to take place and help to reduce boredom among the adolescents. For Chong Meng, his anticipation of having a sports facility could be as basic as a grassed playing field and he thought that boredom could be reduced substantially through sports activities.

*"A grassed field should be a minimum provision of a playing field and would be essential. A playing field can support a variety of activities, so we do not feel bored."*

*(Chong Meng, A Chinese male respondent, 13 years old, Taman Pelangi)*

**Example 2: The girls can also have a place to play a variety of games so that they do not hang around**

Hui Hui sensed that one of the reasons some girls spent time hanging around at shopping complexes was because of the unsympathetic residential surroundings and the competition for the few available facilities. She admitted that normally girls enjoyed being in their bedroom at home but admitted the need for outdoor activities for alternative activities.

*"Girls are often deprived of facilities including sports facilities in the housing area and neighbourhood do lack facilities for girls. If there are facilities, they are normally for boys or monopolized by the boys. The girls would only come in to*

*play when the facilities are not used by the other users which is rarely the case. A playing field can at least provide us with a basic facility to play our own sports activities whenever we want or feel like it so that we do not need to hang around unnecessarily or spend time going to the shopping complex."*

***(Hui Hui, a Chinese female respondent, 13 years old, Taman Pelangi)***

***Example 3: Openness of green playing fields can provide a relaxed feeling to escape from the enclosed small room of the home***

Vasantha, a 16 year -old Indian adolescent, lives with her family in a small low cost house with her big family of 6 siblings and found the congested state uncomfortable and excruciating at times. She contemplated the affect of open space such as the playing field as providing relaxation from the enclosure of the room within the home.

*I like the openness of the green playing field which provides a feeling of relaxation. My family live in a small 2- bedroom low cost home and with a big family like mine, it can be congested. So, having an open space to go to during my free time would be a great relief.*

***(Vasantha, an Indian female respondent, 16 years old, Taman Pelangi)***

**2. Peaceful and quiet places for resting and privacy**

Their second need was for peaceful and quiet spaces as well as places to rest and have some privacy. According to the respondents, they needed this type of space to be on their own at certain times when the need arises, for example, when they have a problem or want to be on their own to contemplate. The need for such spaces was heightened for those who came from big families but lived in a small house. In the Malaysian context, there are no restrictions on the number of people living in a house. Among the respondents, there were those who are quoted as having to share a room with four other brothers. They see the outdoor spaces as their extra outdoor room which could provide them with a space to contemplate and to be on their own.

*"Sometimes we need time to just unwind or relax and be on our own. There are times when we have problems or are in a mood to be alone. It is so nice to be just sitting in an area and have a little bit of privacy especially when our homes are not spacious. I have 2 sisters and 4 brothers. We live in a 3- bedroom*

*terraced house. To share a room with my 4 brothers means that I do not have my own space. So, being outside can make a difference."*

*(Luffi, a Malay male respondent, 16 years old, Bandar Baru UDA)*

### **3. Places to meet people, friends and the community**

Places to meet people, friends and the community or meeting spaces were the third type of spaces on the list of their needs. Not only did the respondents mention the need for spaces in which to meet friends or their peers, they also voiced their willingness to meet with the other people within the community. There was no doubt that they think highly of their peers and friends especially those in the middle and late adolescence. However, they also had it in their minds that generally adults had negative misconceptions of young people. For example, the adults thought that young adolescents were normally up to mischief or no good and they were linked to social problems such as drug abuse, vandalism and bullying.

#### **One of the respondents' opinions on friends and meeting spaces**

For Syahirah, friends were important to her because there were things which she would only share with her friends. She found that she enjoyed talking with friends. The same applied to things which she did. She had friends around her neighbourhood and they were also her school friends. Sometimes she would meet them in their homes, in school or in a shopping complex. She thought a public space created for the community to gather which allowed her to be with her friends would be most welcomed.

*"Friends are important people in our everyday life. There are some things which we simply do only with our friends. We can talk about anything with friends which we do not with our family. Meeting friends can be anywhere in the neighbourhood but if there are open spaces where we can meet, then it would give us an opportunity to do more activities with friends."*

*(Syahirah, a Malay female respondent, 16 years old, Taman Pelangi)*

#### **Respondents' opinion on adults and their perception of adolescents**

Ali thought that adolescents often got the cold shoulder from adults who viewed them negatively. He blamed the media for giving negative images of them. He

thought it was wrong for adults to generalize about young people's involvement in negative activities. Those who were involved might have personal problems.

*"Adults normally look differently at us. Even though the media often gives a negative image of us, in reality not all of us are like that. Those who are involved in social problems are probably those who have personal problems and they do not represent all young people. It is unjustified when the adults think we cannot get along with them. We do not mind getting along with the community in the housing area. At least it gives us something else to do apart from playing and doing our own private activities. Therefore, spaces where the community could gather would be important. Not just the community hall but an outdoor open space where all sorts of activities can be worked out for the residents. We do not mind participating, it is just the opportunity is not given. Adults often take young adolescents for granted when we can also work together with them if they get us involved in whatever community activities there are in the neighbourhood. "*

**(Ali, a Malay male respondent, 17 years old, Bandar Baru UDA)**

He also thought that adolescents could get along with the rest of the community if the adults would get them involved in community work. So, spaces for communal activities were necessary to organise various forms of activities for the residents and to include the young people as well. He added that though a community hall was needed, outdoor spaces would be more inviting and easier to maintain.

#### **4. The need for play spaces**

The comments also pointed out the need for more play spaces, the affordances of the play spaces or what the play spaces can provide and what they would like to do in play spaces. Play spaces were especially needed by the younger adolescents of age 10 to 14. There were not enough play spaces for the adolescents within the housing areas in both neighbourhoods. Some of the respondents comments on the lack of play spaces for adolescents especially a good playground. They also pointed out the benefits of play spaces demonstrating their ability to understand the importance of having play spaces in their housing area. They linked play spaces in relation to various activities and the overwhelming feelings of fun, excitement and challenge which playing could provide.

### ***A good playground is needed***

Twelve- year old Eidayu, from Taman Pelangi wanted a playground and she said it should be a good one to enable them to play, sit around and watch people. For her, a good playground in a pleasant setting would be a place that can offer hours of recreation. She wanted the existing old playground to be upgraded with new, contemporary play equipment.

#### **4.1 The Benefits of play spaces from the respondents point of views:**

The respondents had commented on the benefits of play spaces during the interview. They linked play spaces in relation to various activities and the overwhelming feelings of fun, excitement and challenge which they could provide.

##### ***Benefit 1: Wanting a place where a variety of play can take place***

Nathan, a 16-year old Indian male respondent from Taman Pelangi, said that adolescents needed play spaces too and because of their age, they would like play spaces which provided more challenge and excitement. He observed that the play equipment in Taman Pelangi's playground were very old, conventional and would not serve the needs of today's children and adolescents.

##### ***Benefit 2: The play spaces can make the environment of the housing area much more pleasant and friendlier for children, adolescents and the other residents as well***

The respondents added that play spaces were needed not only by them but also the whole community as play spaces would make the environment of the housing area much more pleasant and friendlier for all. The hustle bustle of the activities would add life to spaces as well as allowing the young and old to be together. The residents could also gain benefit from improved play spaces and the addition of sitting areas which were close to the homes. Soi Chan, a 15 year old female respondent thought that young people in the Malaysian community were happy to be in contact with the adults. They would never shun adults as they had been taught since they were small by their parents to respects elders.

##### ***Benefit 3: It provides a space where the adolescents can spend time to play and release stress***

The respondents in the interview asserted the benefits of public open spaces as places for them to reduce stress as they admitted being stressed with their busy

routine life. Kamil mentioned the word 'happening' in association to play spaces and expressed words such as fun, movement, exercise and spirit lifting to describe the effects of playing within the spaces, as Kamil commented;

*"I think stress is not only present in adults, we feel it as well. Everyday life is so hectic and tiring. Not only are play spaces important for us to enable us to spend some of our time in but they provide an avenue for releasing stress. Even though playing can be tiring, it provides fun, movement, exercise and we get to interact with friends. Playing lifts our spirit. It creates 'happenings' "*

**(Kamil, a Malay male respondent, 17 years old, Bandar Baru UDA)**

#### **Benefit 4: Play spaces provide more things to do**

The respondents had expressed wanting to do more outdoor activities apart from the routine activities at home and in school but was quite disappointed with the environment and they thought that having more play spaces would provide them with more options for outdoor activities.

*"More play spaces mean more things to do apart from our routine activities at home and in school. Our playground is so small and there is only one for the whole area."*

**(Ng Pak Hup, a Chinese male respondent, 11 years old, Taman Pelangi)**

#### **5. Better Streets**

Many of the respondents mentioned the need for better streets for their neighbourhood. They understood the role and benefits of streets and how their presence or availability could improve the quality of life for the residents of a housing area.

**Benefit of better streets: Improved streets can help to make the housing area more user friendly.**

**For example: A place to walk and cycle safely**

For Mei Lan, she wanted a housing area which is user friendly which could make the walking and cycling experience safe. She thought that proper pedestrianisation through the provision of wide pavements and a specific cycling track as well as diversion of traffic away from the housing area would help to make the neighbourhood better.

*"Improved housing area which is user friendly, pedestrianised, wide paving for walking and space to cycle. Currently, it is not safe to cycle within the housing area as there is no cycling track or lane. Divert some of the traffic away from the housing area to make the streets less congested. Otherwise it is difficult for us to play outside."*

*(Mei Lan, Female respondent, 16 years old, Taman Pelangi)*

#### **6. Natural areas, parks and landscaped areas**

The presence of plants, those that grew naturally and those planted did attract the attention of the adolescents especially the female respondents as many expressed their positive views on the presence of greenery within spaces in their neighbourhood. They not only commented on the aesthetic value of plants but were able to explain the significance of plants in improving the ecology of a place, in particular to this study and their effects on the urban housing landscape. They associated oxygen and the effects of trees in reducing pollutants in the air. Words such as 'welcoming', 'nice', 'pleasant', 'peaceful' and 'natural ambience' as well as 'harmony' were used to describe the effect and presence of greenery in the neighbourhood landscape. They were concerned about the current lack of maintenance of housing areas and the lack of greenery making the place dull and less attractive. Comments by three of the respondents on plants in their housing area demonstrated their understanding of the need for more natural areas, parks and landscaped areas and their benefits.

##### **Benefit 1: Plants can make a place pleasant evoking a peaceful ambience**

*"A housing area with natural areas and beautifully landscaped areas are great to live in. It will make a nice place and provide a pleasant and peaceful ambience."*

*(Swee Keng, a Chinese female respondent, 15 years old, Taman Pelangi)*

Another respondent, Surayah, observed that the housing area where she lived in did not have enough trees and the existing ones were not maintained either.



**Benefit 2: Plants can make a place fresh and cool, provide shade and improve the air**

*"There are few trees within the housing area and they are not well maintained. Malaysia is a hot humid country. The presence of a lot of green natural areas will be very welcoming especially with temperatures as high as 34°C around the year. Trees create a natural ambience and it makes a place feel cooler, provides more shade and gives more oxygen. My housing area is next to an industrial area where there are pollutants emitted from the industrial activities. So, I think the plants are important in lessening the effects of the pollutants in the air."*  
**(Surayah, a Malay female respondent, 14 years old, Bandar Baru UDA)**

*"Natural areas improve a place by making it a fresher and cleaner environment and it makes the surroundings look nicer and in harmony"*  
**(Mohamad, a Malay male respondent, 16 years old, Taman Pelangi)**

**7. Multimedia, cyber café and commercial facilities**

Multimedia, cyber café and commercial facilities were voiced out as spaces and facilities needed by the young respondents. They looked upon them as avenues for getting information as well as socializing as explained by Min Kyuk, 15 and Sidek, 14;

**Benefit 1: Increase in knowledge especially concerning Information Technology**

*"It is beneficial to have more multimedia and cyber café facilities within the housing area or at least in the neighbourhood. I have to go to the city centre or the Sultan Ismail Main library to get access to the internet. It helps us to be more knowledgeable as the Internet provides a lot of information which we can use for school assignments or projects apart from it providing a space to unwind as there are sitting areas in the cyber cafe."*

**(Min Kyuk, a Chinese male respondent, 15 years old, Taman Pelangi)**

**Benefit 2: The facilities can become meeting places or meeting points for adolescents**

*"I get to meet my friends at the cyber café as apart from surfing we get to chat with friends."*

**(Sidek, a Malay male respondent, 14 years old, Bandar Baru UDA)**

However, there was also an issue behind the presence of adolescents in cyber cafes as admitted by some of the respondents. They were aware that they were being watched by adults and their frequenting places such as cyber cafés had received disapproving looks and comments from adults and the authorities. Anuar, 16, revealed:

*"Some adults have negative perceptions of adolescents' presence in cyber cafés. There were cases in the past when the authorities raided cyber cafés and removed teenagers from the premises when they suspected adolescents of being responsible for making trouble. There might be a few such cases but young people should not be generally perceived as being capable of misbehaving.*

**(Anuar, a Malay Male respondent, 16 years old, Bandar Baru UDA)**

#### **8. Clean and well-maintained areas**

The respondents were also concerned about having a clean and well-maintained neighbourhood. They admitted being uncomfortable in a dirty neighbourhood. They understood that maintenance of the neighbourhood was important to keep the environment nice and conducive for the public. Comments from two respondents conveyed their opinions on this need.

*"I do not feel comfortable when I see rubbish around the housing area and the neighborhood. It is unsightly. We want a clean and comfortable environment. It would make the place a nicer place to live in."*

**(Phua Chin Eng, a Chinese male respondent, 14 years old, Taman Pelangi)**

*"Maintenance should be carried out from time to time. For example, the small open space where we play football is uneven and has small holes. If proper care is taken to improve the condition, it will enable the play activities to take place in a more conducive place."*

**(Azman, a Malay male respondent, 17 years old, Bandar Baru UDA)**

What they would like to have within their outdoor environment was again compared according to neighbourhood (See Table 8.3a). The overall results showed that the needs for more sports facilities was the highest among all their needs and was also

higher among Taman Pelangi's respondents (39%) unlike the respondents in Bandar Baru UDA (18%).

The top needs of the Bandar Baru UDA respondents were places to meet people, friends and community (23%) which was only 4% among Taman Pelangi respondents. There were more respondents in Bandar Baru UDA who wanted more spaces for resting and having privacy (21%) compared to 7% among the Taman Pelangi respondents. Play spaces were needed more by Taman Pelangi respondents (16%) than those of Bandar Baru UDA (7%). Natural areas, parks and landscaped areas were appreciated more by Bandar Baru UDA respondents (17%) than Taman Pelangi respondents (5%). Infrastructure was needed more by Taman Pelangi respondents (14%). It was only 7% among Bandar Baru UDA respondents. The least percentage for needs were for clean and well-maintained areas for both neighbourhoods. Only 2% among the Taman Pelangi respondents expressed this need and there was no need at all expressed (0%) from Bandar Baru UDA.

**Table 8.2a: The needs of the respondents according to neighbourhood**

The needs of the respondents according to neighbourhood	%	
	Neighbourhood	
	BBU	Taman Pelangi
Sports and recreational facilities and spaces	18	39
Spaces for resting and privacy (Peaceful and quiet places)	21	7
Places to meet people, friends and the community	23	4
Play Spaces and open spaces	7	16
Multimedia, Cyber Cafe and commercial facilities	7	13
Natural areas, parks and landscaped areas	17	5
Better infrastructure	7	14
Clean and well- maintained areas	0	2
% within neighbourhood	100	100
Total Count	206	217

### 8.3 Emerging interests:

Two interests emerged from the findings of this research in relation to the Malaysian adolescents in Johor Bahru. One was related to extreme sports and the other, a Programme named "Rakan Muda" (A programme for Malaysian Young People) which was designed for young people's leisure activities.

#### 8.3.1 Spaces for extreme games and activities

One of the sports that was relatively new but currently gaining immense popularity among the Malaysian adolescents was extreme games-especially skateboarding which needed to be highlighted. The game had already received a 'nod' by the Malaysian government as one of the current new Malaysian young people's sports. Extreme games and activities were becoming a new interest, venture and trend among local Malaysian adolescents. Some of the respondents had shown an interest in this game but they thought there were not enough public places and facilities to support the activity. The respondents of this particular study had also given their views and comments on skateboarding and extreme games. The game was also gaining some interest among the female respondents but the number was few.



Plate 8.3 : A Malaysian adolescent Skateboarder

The following are excerpts from the interviews with three of the respondents, two males and a female, who expressed their views on their interest in x-treme (extreme) games, particularly, skateboarding. Ah Meng reported that in Johor Bahru there was not a single housing area that had a skatepark. He added that the reason was the adults said this sport was dangerous especially to passersby. He found the game challenging and fun. The game became irresistible because of all the tricks there were to learn.

He would try to find whatever spaces with suitable surfaces for the skateboard to land on such as the pavement or corridor of shophouses or game courts.

*"We like extreme games too but spaces for example a proper skatepark for extreme games are not provided within the housing areas. I would skate along the 5 footway of shop houses which are not busy or any flat hard paved areas, for example, a game courts. Some adults say this type of game is dangerous, not only to us but also to the passersby. Well, it is hard to resist a game that provide challenges and thrills, not forgetting a lot of fun."*

**(Ah Meng, a Chinese male respondent, 15 years old, Taman Pelangi)**

Fizul, a skateboarder from Taman Pelangi related his views on skateboarding in Johor Bahru. He discussed his observation of the 'skateboarding' scene among the young people, how it was today and in previous months, the constraints on skateboarding and his aspirations for improvement of the urban spaces that could be made 'skateboarder friendly'.

*"Lately some kids in Johor Bahru begin to get hooked up in skateboarding. I always walk alone looking at them holding their skate in their arms. A few months ago, I was amazed to hear that there was a girl who got into this game too. Today, our 'scene' is different from yesterday. In previous years, we normally skate on every Saturday and Sunday. All of the places were crowded and it was really 'happening'. Moreover, some of my friends brought some music stuff and make us feel happy. We started skating at 12, 1 or 2 o'clock while the sun was up above our heads. With all the madness and obsession of skateboarding, we did not even bother about the heat. It was an old story. Today the scene is different. The skateboarding club lost many skateboarding enthusiasts within the city and the housing areas as there were not many places for skateboarding and when I thought of it, I became really disappointed. Without friends and a proper place to skate, one cannot achieve the satisfaction of playing the game. So right now I only go to places where there are still some other kids skating in our city. Hoping that this 'scene' could be alive once again. Johor Bahru is a small city and we skated at small clinic spaces. It's not a carpark but a takraw or badminton court. At times I see fellow skaters skate along quiet shophouse corridors. For the future, I pray and hope I could still get around with my skateboarders and dream that this city could be the best skateable city in Malaysia."*

**(Fizul, a Malay male respondent, 15 years old, Taman Pelangi)**

### **What a female respondent has to say about skateboarding?**

Five female respondents had admitted being amateur skateboarders and one of them, Fatimah, was happy that the sport was becoming more popular among adolescents. She talked about how she went about the sport, how she learnt and attempted to improve herself so that she was capable of playing the sport. She had the impression that people looked down on females who skated and mentioned that some female skateboarders stopped mainly due to the criticisms they received from the public. She did not feel disheartened by the negative comments but still hoped that the sport could be supported by having a neighbourhood which could provide spaces and facilities for the sports to thrive.

*"Don't skate for the wrong reason. I don't know why and when it suddenly becomes a trend, all kids seem to get hooked up with skating. Is it because they wanted to look cool or to attract a lot of chicks (girl) or something? Although it seems to be a good sign that skateboarding is getting popular and is known by many people, but the number of dedicated skateboarders is small. I know in Malaysia skating is still new compared to those big countries like USA. I do not know how long I will keep skating but at least I try to skate to the fullest. Make the circle and 'happening'. So, to support this sport, we do need spaces appropriate for the sport. Then only will young skaters know they have a place to go, different places to choose from and where we can get access to any time."*

*(Fatimah, a Malay female respondent, 15 years old, Bandar Baru UDA)*

### **8.3.2 Rakan Muda Programme (Young People's Programme) and the neighbourhood**

The Rakan Muda Programme was designed for young Malaysian young people and the main objective of the programme was to provide Malaysian adolescents and youth with opportunities to translate young people's dreams into tangible goals; by motivating them to adopt positive attitudes, encouraging them to acquire knowledge and new skills to broaden their perspectives, and to pursue excellence through structured and organised activities. The Young People Programme was introduced partly to inculcate beneficial activities for young people at several levels

and one of them was the neighbourhood level. However, from the interviews, the respondents mentioned that the Programme did not work well at the neighbourhood level.

There was one comment from an outspoken Malay male respondent, Sulaiman, an adolescent, aged 16, from Bandar Baru UDA whose comment touched on the National 'Rakan Muda' programme (Young Friends' Programme) and his opinion on improving the programme at the neighbourhood level. According to him, the Young Friends Programme was not working well in his neighbourhood. However, the programme was not being implemented effectively because there were hardly any activities organised by the Ministry of Youth and Sports at the level of his neighbourhood.

He commented that the available programmes were formulated based on the organisers' plan and so far, there were no cases in which the young people were involved at the planning stage. As a result, the programme failed to reach out to a large number of young people. He added that for activities to be carried out, there should be suitable venues or places especially those that the young people were at ease in. He thought that it would be more effective to get the Ministry of Youth and Sports to invest in upgrading the spaces within the neighbourhood for young people's activities. The young people should be invited to discuss the projects and in this way, activities which were needed and in line with the adolescents' interests could be programmed or organised in the spaces. Sulaiman revealed that the activities organised for the young people within the neighbourhood should serve the current needs rather than anticipating in general what young people would normally like. As a result, the programme failed to reach out to a large number of young people.

#### **8.4 Discussion**

Chapter 8 discussed the needs of the adolescents in their housing area and neighbourhood based on their views and preferences. The presence of the physical resources coupled with the community life contributed to the way they spend their time within their outdoor environment, their well being and development.

The findings were based on the responses given in the last part of the questionnaire when they were asked whether they wanted to have some changes to their neighbourhood and the findings provided an indication of the adolescents' dissatisfaction with their neighbourhood environment. The majority of them, regardless of their ethnic background, gender and age had answered 'YES' indicating they wanted specific changes within their neighbourhood environment to cater for their needs.

The findings gave a clear indication of the respondents' dissatisfaction with their housing area and neighbourhood pertaining to the resources available to support their needs. Most of the respondents wanted changes in their housing area and neighbourhood across different ethnic background, gender and age group. When the responses were analysed by ethnic background, the findings showed the highest percentage were from the Chinese respondents. By gender, there were more males wanted changes and by age group, the results showed that two specific age groups, the 10 to 11 and 16 to 17 year-olds, wanted changes more than the remaining two age groups.

The research moved on to probe further into what exactly were the changes needed by the respondents in order to cater for their needs which they might find beneficial. The final part of the questionnaire offered the opportunity for the respondents to provide short sentences to explain what their needs were and some of the reasons linking to the resources they needed. The findings were answers in the form of specifically mentioning the types of facilities and spaces they thought should be made available within their neighbourhood. The responses were then grouped according to eight main types of resources with the highest percentage placed on top of the list.

All eight needs indicated that the needs of the respondents were found to be biased towards the physical resources which could support both physical and social activities.

### **1. Sports facilities for games and sports**

The physical resources such as sports facilities, were needed by the respondents to create and support physical activities which would indirectly nurture



adolescents' social relationships which were believed to have a strong impact on their emotional health (Rutter, 1995). The need for sports facilities was associated with the range of games and sports activities the respondents wanted to play. Some of the sports activities mentioned by the respondents in the survey questionnaire ranged from badminton, cycling, netball, football, snooker, basketball, softball, cycling, x-treme games and lawn ball.

The findings were further analysed according to ethnic background, gender and age group and sports facilities was top on the list. By ethnic background, the highest percentage wanting sports and recreational facilities were the Chinese and by gender, it was the more males and by age group, the findings also pointed out the need for sports facilities and spaces was highest among the oldest age group, the 16 to 17 year-olds and the least were among the 10 to 11 year olds. The respondents' interest in wanting sports facilities was not only due to the lack of opportunities to participate in sports within their housing area and neighbourhood but because during adolescence, the need for more sports, especially game sports was more evident. This interest is in agreement with Piaget's theory that stated when children enters early adolescence, their play become more organised and structured. It is at this stage when the adolescents develop a passion for orderly thinking, manifesting itself through games with rules and in organised sports. Team sports are important among adolescents when game winning becomes central to the adolescents being able to deduce winning denoting following rules (Hughes, 1999; Santrock, 2000). The respondents mentioned physical resources such as game courts, a swimming pool, a football field, recreational open spaces which can offer both structured and unstructured games and events. The respondents recognized the importance of having these facilities within their neighbourhood as resources which could create opportunities for dynamic activities such as structured games and team sports. The fields and courts in the housing area and around the neighbourhood could host activities such as leagues and competitions for adolescents at different skill levels so that, basically, everyone can play.

Facilities for extreme games such as skateboarding and cycling had also been highlighted as they were the latest trend in contemporary sports among both

male and female young people in Johor Bahru. The male respondents from both neighbourhoods highlighted the absence of basic sport amenities such as a football field. Football is a popular game among the respondents, as confirmed by the findings of this study on favourite activities in Chapter 6. Thus, access to a football field was important. For the respondents, the playing field was not just a place to play but it also provided them with a place to unwind and relax apart from supporting other types of activities. It was even more crucial for those with big families but stayed in small homes. Even though the percentage among the females was lower at 21%, the results showed the demand for sport facilities was present among the females. According to the female respondents, even though current existing sports facilities in the neighbourhood could be used by both genders, the males would normally have better access to sports facilities because they would normally dominate them and the female would end up shying away from playing. Thus, the females' request for some sports facilities specifically for female use such as the netball court.

The findings also demonstrated that those adolescents in the higher age groups, from the age of 12 onwards were more inclined towards sports facilities. The respondents from the oldest age group, the 16 to 17 year-olds, were found to be the ones who wanted to have more sports facilities compared to the respondents from the younger age groups. The findings demonstrated a demand for organised and structured activities was higher among the respondents of older age groups.

## **2. Spaces for resting and to be on their own for privacy (Quiet places)**

Spaces for resting and privacy as well as places to meet people, friends and the community were two of the needs which were biased towards supporting social activities such as meeting friends, and contemplating while the rest of the needs were clearly physical in nature. They expressed their need for more easily accessible spaces for them to spend time to relax and to be on their own apart from being at home. Even though the home was one of their favourite places for some of the respondents, they still needed a place away from home to allocate a little time to be by themselves, to either rest or to just simply think. However, they would like the place or space to be close to their home or in the

neighbourhood. The respondents thought the presence of more of these facilities would be part of the available resources within their neighbourhood which could help them to diversify their activities and promote a healthy way of living.

By ethnic background, this need was highest among the Malays. By gender, more female respondents needed these kind of spaces. By age, the older adolescents were more inclined towards wanting this type of spaces and the percentage was highest among the 14 to 15 year-olds and lowest among the 10 to 11 year-olds. Quiet and peaceful spaces were needed by the respondents to contemplate whenever they faced challenges and stress in their everyday life. The adolescence maturation process normally causes additional stresses and challenges for teens who are struggling to establish new identities as they pass into adulthood (Brown, 1980). The need for resting spaces would cater for passive activities which could enable them to have moments of rest such as sitting and having time to themselves. In other words, the adolescents wanted a space of their own outside from home for a moment or two which was in line with the findings of Korpela's study (1996).

### **3. Spaces for meeting people, community gatherings and activities**

The respondents indicated that they would also need spaces to enable them to carry out their non-play social activities such as meeting and being involved in community gatherings and activities. They need spaces, big or small, which can serve or function as meeting places for non-play socialising with friends and the other residents within the community.

The findings stated the need for spaces to meet people was again highest among the Malays and lowest among the Chinese. In the context of Malaysian societies, all three ethnic groups, the Malays, Chinese and Indians foster their everyday cultural norms. It is particularly apparent for the Malay community to inculcate a strong sense of belonging, whereby the community is expected to be considerate, courteous, helpful and polite (Sojourn, 1999, *New Straits Times*, 2006). In the past, it became part of the local norms for all three ethnic groups, especially the Malays, to expose the young to the community in terms of participation in community functions, be they cultural or religious. This particular

need of the respondents could be considered as a positive stand of the young Malaysians towards wanting to have places for social and community activities which were important in helping to curb or prevent positive communal practices, for example, formal and informal inter-racial community gatherings from disappearing among the multi-ethnic societies in Malaysian cities such as Johor Bahru. By gender, spaces to meet people were higher among the females denoting that the females' needs for social activities were higher. Friends were important and they needed public spaces not only for meeting people but also to participate in some activities with friends. It was also an opportunity to indicate their willingness to meet and be involved with adults relating to participation in community activities. By age group, the percentage wanting meeting spaces was highest among the age group of 14 to 15 and lowest among the 12 to 13 year-olds. The research findings demonstrate that wanting to be involved more with friends and the community was more evident among the older adolescents. Being in a place where time is spent on a certain activity between two or more people would in time create familiarity and initiate some forms of contacts or observations especially for adolescents and their community (Hester, 2006). The older adolescents seemed to be able to demonstrate their willingness to have some form of social connectedness through activities in public community spaces. It is good for the adolescents because many studies have documented improvements in social connectedness among young people through community social activities (Mcguire, 2006).

In summary, the findings indicating the interest and their needs of the respondents in social community spaces supports Brofenbrenner's theory and other studies (Hughes, 1999; Plancherel, 1995). In Brofenbrenner's theory on relationships, adolescents interact with other people such as friends and peers, in a range of environments and through various forms of interactions and the lack of them can influence development. Adolescents have more social awareness especially the females (Plancherel, 1995) and their focus moves from the family and school to the peer group. Adolescence is also a stage when young people become involved in social activities and have more interest to channel their energies into specialised clubs, youth groups, and volunteer activities. When the adolescents experience role taking and play in groups or organisations, they

would be able to better understand how they could fit into the significance and structure of their social systems (Hughes, 1999).

#### **4. Play spaces for unstructured play and open spaces**

Play spaces were also mentioned as one of their main needs especially by the younger adolescents aged 10 to 12. Some of the respondents expressed they wanted open spaces not only to play with friends or peers but also to provide places for them to go to for simply playing on their own or with their siblings. The kind of play activities were not specified in the responses of the survey and they were coded as unstructured play.

By ethnic background, play spaces were needed most by the Chinese and Indians and the least were the Malays. According to gender, it was the females who wanted more play spaces. By age groups, the spaces were needed most by the youngest age group, the 10 to 11 year-olds and the least by the oldest age group, the 16 to 17 year-olds. In general, there was a need for play spaces among all age groups but there was a declining percentage as the respondents' age increased. The adolescents' expressions of wanting a playground with the affordance to provide a variety of activities and making the housing area pleasant portrayed some of the benefits they could see in play spaces. Previous research provided indications of the importance of play in adolescents. Hence, the availability of play spaces in housing areas and neighbourhood could accommodate a range of play opportunities advantageous in supporting adolescents' physical and social developmental needs. Play spaces could be in the form of small spaces within the neighbourhood and playgrounds. The Johor Bahru Local Authority and developer have provided play spaces but they were only meant for the younger children comprising of small, minimal and conventional play equipment. It has been the current practice of the Johor Bahru Local Authority to provide playgrounds only for children under 12. While those in the early adolescent stage could still 'rightfully' play within the playground, adolescents above that age were evidently excluded. Even though the findings demonstrated the need for play spaces among older adolescents were present but with a declining trend, older adolescents in this research stated

that they would still like to have access to a public playground and some play equipment suitable for their age.

##### **5. Multimedia , cyber café and commercial facilities (Shopping complex)**

Multimedia and cyber café facilities were becoming increasingly popular among adolescents in Johor Bahru and they were fast forming another niche for their activities. Cyber cafés, multi media and commercial areas were places that appealed to some of the respondents. The activities in the cyber café were not only centred around browsing the internet or using the computer for academic purposes but the cyber cafe was used as another 'meeting point' or place for adolescents to hang out with their peers. Despite the association of the negative perception of adolescents' presence in the shopping complexes and their precincts([www.ypkdt.org.my/kajian-remaja-Bab3.htm](http://www.ypkdt.org.my/kajian-remaja-Bab3.htm)), they remained extremely popular among Malaysian adolescents regardless of their ethnic background, gender or age. Apart from cyber cafes, the shopping complex was seen as another alternative place to go to by many of the respondents of this study. The inclination to visit the shopping complex was linked to being part of their wanting a place or space to hang out, to relax, to sit, watch and meet people.

The need for multimedia and cyber café facilities was highest among the Indian respondents and by gender, the need was higher among the female respondents. By age group, it was highest among the 12 to 13 year-olds (19%). It attracted a high interest for this age group compared to the younger age group for both 14 to 15 and 16 to 17 year-olds. Access to a current existing cyber café, multimedia and commercial areas was probably easier for the older adolescents. The presence of adolescents in such premises was reported in many negative reports by the local media due to their spending too much time browsing the internet (New Straits Times, 2005). There were cases of the authorities raiding and removing adolescents from the cyber cafes around the city which implies that their presence in cyber cafés was detested (Berita Harian, 2004) which was one form of exclusion for young adolescents. Nevertheless, some of the respondents looked upon the cyber café not only as an alternative place for the adolescents to hang out with friends but also as an opportunity to

explore the internet for information for some assignments especially for those who do not have access to the internet at home.

#### **6. Natural areas, parks and beautifully landscaped housing areas**

The respondents expressed wanting more natural areas and other green spaces. They indicated that green areas were preferred by the respondents as elements that could make their housing area and neighbourhood much greener, livelier and aesthetically pleasing and conducive. They liked greenery such as natural growing plants and thought that they improved the surroundings by not only enhancing a place but also to creating a tranquil and peaceful ambience. The respondents saw the potentials of natural areas as being suitable spaces for certain outdoor activities such as camping and walking.

By ethnic background, the need for greenery was the highest (12%) among the Malay respondents. However, the inclination towards greenery was equal according to gender. By age group, the youngest adolescents, aged 10 to 11 years old (14%) were found to want more greenery. The findings showed the respondents not only appreciated greenery for its aesthetic quality but understood how it fit into being part of the ecology of the urban landscape. Furthermore, the respondents mentioned that the presence of greenery could enhance the quality of a place by providing a peaceful and natural ambience and its cooling effect. Landscaped areas were part of the greenery mentioned by the respondents and, in the Malaysian context, landscaped areas meant specific zones or areas purposely landscaped using both soft landscape and hardscape elements to make the area conducive and aesthetically pleasing (ILAM,2006). The appreciation of greenery and nature among the Malaysian adolescents in Johor Bahru was similar to the many previous studies conducted in the West. The needs for greenery could benefit them in terms of providing privacy, mental stimulation, and sensory stimulation, supporting important developmental activities such as play, creative forms of play, and exploratory play as found in many theoretical and empirical works in landscape architecture and environmental psychology for children and adolescents which managed to address the numerous possible benefits of nature (Moore, 1978, 1986).

## **7. Better Streets**

Better and safer streets were another physical resource identified by the respondents as a need which they thought could help to improve their neighbourhoods. The request for better streets for most of the respondents meant they want to see the housing area have good roads, proper pathways for full pedestrianisation to support safe walking and proper cycling tracks to promote cycling within the neighbourhood. They want less traffic so that pedestrians can move safely around the housing area and neighbourhood.

By ethnic background, the highest percentage wanting better and safer streets were the Chinese respondents. By gender, more females wanted better streets. By age group, more respondents from 12 to 17 year-old expressed wanting better streets. Lower percentage from the youngest age group, the 10 to 11 year-olds, expressed wanting better street. Apart from mentioning streets, the respondents also mentioned wanting pedestrian walkways for walking and cycling. They suggested wide walkways to enable safer walking. As there were not enough open spaces or the green spaces available were far from their homes, the streets became alternative 'open spaces' for their activities. To enable them to play safely, they wanted less traffic around the streets near their homes. The current conditions of the neighbourhood were not 'friendly' as they entailed risks and dangers of being outdoors. For this reason, parents would want to keep their children and adolescents indoors.

## **8. Clean and well-maintained neighbourhood**

The need for a clean and well-maintained neighbourhood was voiced too by the respondents as a result of being uncomfortable with the presence of unmaintained spaces. They thought unmaintained public spaces made a place unattractive as well as being a factor which could contribute to the creation of an 'unhealthy' environment. The respondents' understanding of unmaintained spaces was the improper upkeep of the neighbourhood such as the presence of potholes on the roads or uneven pavements and the poor upkeep of the play equipment in the playgrounds. The respondents were also uncomfortable with a dirty neighbourhood especially the unsightly litter, bad smell and places needing maintenance such as repair of roads. They thought that the lack of maintenance could cause places to



be unsafe. One example was the condition of the roads and lighting within the neighbourhood area. Activities such as cycling, jogging and strolling became unsafe with the current condition of roads having no pavements, being poorly or unmaintained and having poor lighting. They wanted the neighbourhood to be well maintained for safe use of spaces and facilities and making the environment more conducive. In the "Growing Up Project" in 8 countries in the 1990's (Chawla, 2001), the findings listed the respondents' concern for wanting clean and well maintained areas. The respondents of this study had a similar concern for a conducive, clean and well-maintained neighbourhood as well.

This need was lowest among the respondents regardless of their ethnic background, gender or age group. By ethnic background, only the Malays (2%) and Chinese (2%) respondents wanted their neighbourhood to be clean and well-maintained. By gender, there was an equal inclination between the two genders even though the percentage was only 2% and by age, it was only the older age groups, the 14 to 15 and 16 to 17 year-olds who had mentioned wanting a clean and well maintained neighbourhood area.

The research analysed what the respondents from the two housing area and neighbourhoods want or desire according to the hierarchy within the variables, ethnic background, gender and age. By ethnic background what the Chinese respondents wanted were found to be biased mainly towards physical resources. Their three top needs were sports and recreational facilities (39%), streets (27%) and play spaces (17%). The percentages for these needs were highest among the Chinese compared to the respondents from the other two ethnic backgrounds, the Malays and the Indians. Their needs for spaces relevant to social activities were given minimum priority compared to physical needs. In the case of the Malay respondents, their first need was also sports facilities but the percentage was lowest (27%) compared to the Chinese and the Indians. The needs for spaces supporting social activities such as spaces for resting (20%) and places to meet people (17%) were highest among the Malays. Parks, natural and landscaped areas (11%) were also needed most by the Malay respondents. Their needs were lowest for clean and well-maintained areas (2%), better streets (5%) and play spaces (9%). Similarly, the overall Indians' needs were found to be biased towards physical resources too with

sports facilities being high(33%), play spaces (17%) and better streets (16%). The Indians, like the Chinese respondents had placed the needs for social spaces lowest in the ranking. Their needs were lowest for spaces for resting (2%), green areas (9%) and places to meet people (11%). The Indian respondents had the highest need for multimedia, cyber cafés and commercial spaces(13%) compared to the other respondents from the other two ethnic backgrounds.

Analysis of the findings by gender revealed that both male and female respondents' needs for physical resources were high. The male respondents' top three needs were sports facilities (36%), places to meet people (14%), and places for resting (12%) and the three lowest needs were clean and well-maintained areas (2%), better streets (8%) and cyber cafés and commercial areas (8%). For female respondents, their three top needs were sports (21%), spaces for resting (17%), play spaces (13%) and better streets (13%). The three lowest needs for the females were clean and well-maintained areas (2%), green areas (11%) and cyber cafés (12%). Both male and female respondents placed sports facilities as their top needs and wanted places to rest among their top three needs. However, the females placed wanting play spaces and better streets among their three top needs. These needs suggested that the females needed more places and opportunities to play. Analysis of the findings by age group revealed that sports facilities were on the top of the list for all age groups. However, there were variations in the second and third needs. For the 10 to 11 year-olds, their top three needs were sports facilities (25%), play spaces (24%) and green areas (14%). Their lowest needs were better streets (7%) and places for resting (8%). None of them mentioned clean and well-maintained areas. For the 12 to 13 year-olds, their top needs were sports facilities (27%), cyber cafes and commercial areas (19%) and play spaces (15%). The lowest were green areas (4%) and places to meet people (9%). None of this age group mentioned wanting clean and well-maintained areas. The three top needs of these two young age groups were for resources for physical and active activities. For the older age groups, the 14 to 15 year-olds and 16 to 17 year-olds, even though sports facilities were their top needs, their second highest and third needs were spaces that support social activities. The second needs of the 14 to 15 year-olds were for spaces for resting and privacy and third were for places to meet people. On the other hand,

the 16 to 17 year-olds' second needs were places for meeting people and the third were for spaces for resting and privacy.

### **Comparison of what the respondents from the two housing areas want from their neighbourhoods**

The research managed to look at the respondents' needs according to each housing area and neighbourhood. Taman Pelangi was found to lack more physical resources than Bandar Baru UDA. On the whole, what Taman Pelangi respondents wanted were biased towards the physical resources because sports facilities (39%) and play spaces (16%) were the most needed. Taman Pelangi being one of the oldest neighbourhoods within Johor Bahru had not benefited from the open space planning regulations and thus was one of the reasons for the respondents' complaints about not having enough facilities within the housing area. For example, Taman Pelangi was provided with only one playground to serve the whole community. That one particular playground again was designed to be used by children and adolescents of all ages but designated for children under the age of 12. It indicated adolescents of age 12 and above were excluded from using the play spaces. Prohibition on activities like cycling further imposed restricted use of the open space. The only alternative for the adolescents was to go to the other adjacent housing areas. Hence, the neighbouring housing areas' playgrounds became alternative playing spaces for the adolescents of Taman Pelangi. The limited open spaces in Taman Pelangi could not cater to the needs of the adolescents within this neighbourhood. The availability of appropriate sports facilities such as playing fields was important for them to provide opportunities to play freely at any time of the day. The lack of sports facilities and open spaces in Taman Pelangi was the reason for the respondents wanting better streets (14%) to provide them with alternative play places within their neighbourhood. The respondents considered good streets as being part of a good road system with a proper pedestrian network and proper cycling tracks. For the respondents, the streets could be an alternative place to generate social and physical activities especially the immediate streets outside of their homes.

Even though there were needs for open spaces which could support social activities, the percentages were low. For example, the percentage of spaces for meeting was only 4%. The findings were concurrent to the low percentage for non-play social activities as shown in Chapter 5 on their daily activities. The lower percentage for social needs could be explained partly by the presence of Chinese respondents within the neighbourhood who had given less priority to social activities.

A difference was apparent when the analysis of Bandar Baru UDA adolescents' needs was carried out. Their needs were found to be biased towards wanting spaces for social activities. Such spaces were given higher priority as 23% of them wanted spaces for meeting people or communal spaces and 21% for resting places. Even though sports facilities were also needed, they were only the third (18%) on the list of their needs. Bandar Baru UDA respondents had more appreciation of greenery (17%) compared to only 5% among the Taman Pelangi respondents. However, none of Bandar Baru UDA respondents expressed their need for clean and well-maintained areas in the questionnaire. It was only mentioned in the interviews.

There were also two interests that emerged from this research of Malaysian adolescents in Johor Bahru; one was their involvement in extreme sports and the "Rakan Muda" programme relating to young people's leisure activities. The respondents had expressed their interest in sports, the excitement they got from the game and the current challenges they had to face in terms of the support for the sports which they thought were minimal. The respondents expressed their need for more opportunities to play extreme games, especially skateboarding, in terms of places to support the activity not only in the city but particularly in housing areas. The current scenario in Malaysia is that extreme games have already gained some form of recognition from the government but the respondents think that more can be done by the government to support the sport.

The second issue was the Rakan Muda Programme (Young People's Programme) in the neighbourhood. The respondents had given feedback on the programme by providing views on the status of the programme in housing areas. The programme was supposed to provide opportunities to turn young people's dreams into tangible goals, to motivate them to have positive attitudes, to acquire knowledge and new

skills and to pursue excellence through structured and organised activities. The Young People's Programme was introduced partly to inculcate beneficial activities in young people at several levels and one of them was the neighbourhood level. However, the respondents mentioned that the Programme did not work well at the neighbourhood level because there were hardly any activities organised by the Ministry of Youth and Sports. Due to not bringing the adolescents at the early stage of planning resulted in the available programme being formulated based on the organisers' plan. There were suggestions that for activities to be carried out, there should be suitable venues or places, especially those that the young people were found to be at ease in. One of the respondent thought that it would be more effective to get the Ministry of Youth and Sports to invest in upgrading the spaces within the neighbourhood for young people's activities. Activities proposed by the adolescents which were needed and in line with the adolescents' interests could be programmed or organised in the spaces. The activities organised for the young people within the neighbourhood should be able to serve the current needs rather than having adults anticipating in general what young people normally like which can result in the failure of the programme as well as facing the failure of reaching out to a greater number of young people.

### **8.5 Summation**

The findings showed that adolescents can express specifically what they wanted and in their housing area and neighbourhood if given the opportunities. The findings found that the limited physical resources in the two neighbourhoods affected the percentage of the needs. The highest needs were for sports facilities regardless of ethnic background, gender and age group. Respondents from Taman Pelangi top needs were physical resources while they placed social spaces last in the list. On the other hand, respondents from Bandar Baru UDA had placed sports facilities at the topmost ranking but social spaces were placed second and third.

The respondents' needs were biased towards wanting physical resources but varied according to the gender, ethnic background and age group of the respondents. Regardless of these variables, all respondents had placed wanting sports facilities as the top need. Within ethnic background, the Chinese needs were more for physical resources that support physical activities but the Malays' needs were for spaces

which could support social spaces. In examining the findings by gender, the males' needs were more towards physical resources. However, they also placed places for meeting people in third position. On the other hand, the females placed sports facilities top but the next few needs were for social spaces.

Findings within every age group showed again that sports facilities were placed highest on the list. Their needs for social spaces were found to increase as age increased. However, needs for play spaces were highest among the younger age groups of 10 to 11 and 12 to 13 year-olds.

Apart from expressing their needs, there were also attributes assigned by the respondents according to each need which will be presented in the following Chapter.

## **CHAPTER 9:**

### **Attributes of facilities and spaces which the adolescents want or desire**

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#### **9.0 Introduction**

Chapter 9 present findings on the attributes ascribed to facilities and open spaces in the environment which could fulfil the adolescents' desires drawn from respondents' responses in the interviews. An attribute is a quality ascribed to or characteristic of a person or thing (Oxford, 1998). The attributes were identified through the responses given in the in-depth interviews which were conducted among 96 respondents, represented equally by gender, ethnic background and age group. The information gathered from the respondents answered the following research question:

- 1. What are the attributes assigned to the facilities and open spaces wanted by the adolescents within their outdoor environment?**

#### **9.1 Facilities and open spaces needed within the outdoor environment**

To recap from the previous chapter, the respondents had mentioned wanting the following facilities and open spaces within their outdoor environment ( housing area, the neighbourhood and city). They are:

1. Sports facilities
2. Spaces for resting and privacy (Peaceful and quiet places)
3. Places to meet people, friends and the community
4. Play spaces for unstructured play
5. Greenery-natural areas, parks and landscaped areas
6. Better streets
7. Multimedia, Cyber Cafe and commercial facilities
8. Clean and well- maintained areas

The attributes were assigned for specific facilities and spaces which the adolescents thought were important for make the spaces or facilities to be utilized or better.

## 9.2 Results

### 9.2.1 Attributes for the facilities the adolescents want or desire

The success or failure of a resource in the form of a space or facility depends on the users because there may be reasons when they become either unused or under utilised facilities. Therefore, the research took one step further through the in-depth interviews to probe into the attributes of the facilities they wanted or desire in their housing and neighbourhood environment. The results drawn from the interview transcripts identified and listed a total of thirteen attributes mentioned throughout the interviews. According to the respondents, these attributes were important to attract or influence them to patronise and use the space. According to the respondents, spaces designed according to the desires of the adolescents or to what they wanted, could attract and encourage positive activities among them and their peers or the community. In their opinion too, the facilities should have some or all of the main attributes. The 13 attributes of the facilities mentioned by the respondents were;

- possessing element of play
- variety ( in terms of activities)
- ambience ( tranquil and peaceful)
- size (of space)
- safety
- fun and exciting
- challenging
- walkable
- aesthetically pleasing
- green
- sociability
- accessibility
- intelligent
- affordances of facilities in terms of supporting sports activities.



### **9.3 Hierarchy of the attributes according to specific facility they want or desire**

The analysis of the data of the interview was carried out to not only identify specific attributes assigned by the respondents to certain types of spaces and facilities but also to list them by hierarchy. This was based on the number of mentions of each attribute for each type of facility they wanted. The attributes were rearranged from the most frequently to the least mentioned attributes.

The overall hierarchy of the attributes according to the overall percentage of respondents' mentions is as follows;

1. Variety	17%
2. Safety	13%
3. Aesthetic quality and greenery	9%
4. Accessibility and location	8%
5. Ambience-tranquil	8%
6. Multiple functional space for sports activities	7%
7. Intelligent	7%
8. Size of space	7%
9. Sociability	7%
10. Fun and excitement	4%
11. Walkable	4%
12. Element of Play	3%
13. Challenge	3%

Of the 13 attributes, variety (17%) was the most mentioned and second was safety (13%). The attributes with the least percentage were elements of play (3%) and challenge (3%).

#### **9.3.1 Attributes for sports facilities**

Sports facilities were one of the physical resources wanted by the respondents from both housing areas and neighbourhoods as most of the respondents had very high interests in sports activities as shown in the findings of Chapter 5. The respondents had specified wanting playing fields and other sports facilities. Playing fields and other sports facilities were examined separately as the respondents had assigned or

mentioned specific attributes for them. However, this chapter would like to highlight the attributes assigned to playing field which was one of the most wanted facilities.

**a. Playing fields**

Playing field was a top need mentioned by the respondents within the two housing areas. Unfortunately, there were no public playing fields in both neighbourhoods within the study area. Currently, those present within the two neighbourhoods belonged to the schools and public access was not available.

Playing fields were very important for the respondents in both neighbourhoods, Taman Pelangi and Bandar Baru UDA, because a playing field could also be a multi functional space. The adolescents agreed that a playing field could support numerous activities, providing elements of fun as well as provide the opportunity for meeting people. Furthermore, the respondents from Bandar Baru UDA raised a point, adding that a green playing field was preferable to a hard paved one. The respondents assigned a total of 8 attributes for the playing field. (See Table 9.3a).

**Table 9.3a: Attributes for playing fields**

	<b>Attributes for playing fields</b>	<b>%</b>
1	Multiple functionality space for sports activities	41
2	Variety	35
3	Safety	7
4	Sociability	4
5	Accessibility	4
6	Fun and excitement	4
7	Aesthetic quality and greenery	3
8	Challenging	2
	Total %	100
	Total Count	96

The attributes assigned by the respondents for playing fields were analysed according to their importance. The attributes with the highest percentages were

multiple functionality of space for sports (41%) and variety of activities (35%). The least mentioned attribute was the element of challenge (2%).

Sports facilities were high on the list of what the respondents would like to have within their housing area and neighbourhood. Nine attributes were mentioned for sports facilities. (See Table 9.3b).

**Table 9.3b : Attributes for sports facilities**

	<b>Attributes for sports facilities</b>	<b>%</b>
1	Variety	33
2	Accessibility	18
3	Multiple functionality space for sports activities	17
4	Safety	13
5	Fun and excitement	7
6	Sociability	5
7	Element of play	3
8	Ambience-Tranquility	2
9	Walkability	2
	Total %	100
	Total Count	96

The most important attribute indicated in the provision of sports facilities or resources were variety (33%), accessibility (18%) and multiple functionality of space for sports activities (17%). The least important attributes mentioned by the respondents were ambience (2%) and walkability (2%).

### **9.3.2 Attributes for resting spaces**

Five attributes were assigned for resting spaces. (See Table 9.3c). Of the five attributes, ambience (38%) was the most important. The least mentioned attributes for resting spaces were walkability and intelligent space, both with percentages of 12%.

**Table 9.3c: Attributes for resting places**

	<b>Attributes for resting spaces</b>	<b>%</b>
1	Ambience-Tranquility	38
2	Aesthetic quality and greenery	21
3	Safety	17
4	Walkability	12
5	Intelligent	12
	Total Percent	100
	Total Count	96

**9.3.3 Attributes for meeting spaces**

Meeting spaces were desired too by the young adolescents for activities with friends and the community at large. Adolescence is a stage in life when friends or peers become increasingly important apart from the family (Santrock, 2001). The respondents mentioned 8 attributes for meeting spaces. (See Table 9.3d). The size of the spaces was the attribute with the highest percentage of 29%. The least important was accessibility (6%).

**Table 9.3d: Attributes for meeting spaces**

	<b>Attributes associated with meeting spaces</b>	<b>%</b>
1	Size of space	29
2	Sociability	18
3	Ambience-Tranquility	15
4	Variety	9
5	Safety	9
6	Fun	7
7	Intelligent	7
8	Accessibility	6
	Total %	100
	Total Count	96

### 9.3.4 Attributes for play spaces

A total of 9 attributes were mentioned for play spaces. (See Table 9.3e). By far, play spaces had the most number of attributes. There were five main attributes with percentages ranging from a minimum of 11% and a maximum of 20%. The respondents mentioned 9 attributes for play spaces. The two most important attributes which were equally important, were possessing element of play (20%) and the size of the spaces (20%). The least important attributes for play spaces were multiple functionality space for sports activities (3%), ambience -tranquility (3%) and challenging (3%).

**Table 9.3e: Attributes for play spaces**

	<b>Attributes for play spaces</b>	<b>%</b>
1	Element of play	20
2	Size	20
3	Variety	16
4	Safety	15
5	Sociability	11
6	Fun and excitement	9
7	Multiple functionality space for sports activities	4
8	Ambience-Tranquility	3
9	Challenging	3
	Total %	100
	Total Count	96

### 9.3.5 Attributes for cyber café and commercial spaces

Multimedia, cyber café and commercial spaces were current facilities or resources which were becoming popular among the Malaysian adolescents. The Internet is now a popular pastime among Malaysian adolescents leading to their interest in patronising cyber cafés. According to research conducted by a leading Malaysian network provider, of the overall Internet users, 24% were those in the age group of 15-19 year-olds (Jaring, 2005).

**Table 9.3f : Attributes relating to cyber café and commercial spaces**

	<b>Attributes relating to cyber café and commercial spaces</b>	<b>%</b>
1	Intelligent	44
2	Accessibility	19
3	Variety	16
4	Fun and exciting	12
5	Ambience-Tranquility	6
6	Size of space	3
	Total %	100
	Total count	96

The commercial areas formed important 'places' for many of the respondents. The respondents of this research assigned 6 attributes relating to the cyber café and commercial spaces. (See Table 9.3f). The attributes with the highest percentage of mentions for multimedia, cyber cafe and commercial spaces were intelligent spaces (45%). The least mentioned attribute was the size of space (3%).

### **9.3.6 Attributes of natural and landscaped areas**

Natural and landscaped areas became some of the types of public spaces that the adolescents wanted within their housing area and its neighbourhood. (See Table 9.3g). The respondents maintained a notion that these spaces should not only possess aesthetic quality that pleased the five senses but should also be kept safe, fun to be in, capable of attracting users to the area and able to support some outdoor activities such as camping. There were 9 attributes mentioned by the respondents for natural and landscaped areas. The most mentioned attributes was greenery (37%) and the least mentioned was tranquility (5%).

**Table 9.3g : Attributes of natural and landscaped areas**

	<b>Attributes of natural and landscaped areas</b>	<b>%</b>
1	Aesthetic quality and greenery	37
2	Safety	14
3	Variety	8
4	Accessibility	8
5	Fun	7
6	Sociability	7
7	Challenging	7
8	Size of space	7
9	Ambience-Tranquility	5
	Total %	100
	Total count	96

#### **9.4 Discussion**

Chapter 9 discussed the adolescents' views and preferences regarding the attributes they assigned to the physical resources they wanted within the outdoor environment particularly in housing area and neighbourhood. The findings were based on the responses given in the interviews. The presence of resources within their housing area and neighbourhood can contribute to the adolescents' overall quality of life which may affect their movement within their outdoor environment, their well being and development (Brofenbrenner, 1998; Santrock, 2001). After identifying what the adolescents wanted in their housing area and neighbourhood, as discussed in Chapter 8, the research further investigated the attributes relating to the facilities they wanted through the interviews with the respondents.

Across the samples interviewed, thirteen intangible attributes were mentioned by the respondents when they mentioned the attributes relating to the types of physical facilities or spaces they wanted within their housing area and neighbourhood. What they wanted were sports facilities, especially a playing field, resting spaces, play spaces, meeting spaces as well as commercial spaces.

Thirteen attributes were mentioned by the respondents throughout the interviews assigned to specific facilities and spaces. The number of attributes varied between each facility or spaces whereby some of the had a maximum of nine or at least two. The attributes mentioned were ; possessing element of play, variety of activities and settings, tranquil and peaceful ambience, size of space, safety, fun and exciting, possessing challenge, walkable, aesthetically pleasing setting with greenery, sociability, accessibility, intelligent and multi functionality of spaces for sports activities.

#### **9.4.1 The overall hierarchy of attributes and needs**

The findings on the attributes were presented at two levels. Firstly, on the general hierarchy of the attributes mentioned for all the facilities according to their overall percentage. Secondly, the findings were presented according to the attributes assigned for each of the facilities or resources. (See Table 9.4a.). The table displays all the attributes and facilities wanted by the respondents.

In analyzing the overall hierarchy of attributes, the top attribute was found to be variety (17%) and second was safety (13%). The least was the element of play (3%) and challenge (3%). There were three common attributes mentioned in almost all the spaces and facilities. They were variety, safety and ambience.

The attribute, variety, was assigned to all of the facilities wanted by the respondents except resting spaces. The highest percentage assigned to variety was for playing fields (35%). For playing field, the respondents wanted a variety of activities and functions, referring to the playing field as a resource to be used not only for playing different types of games but also for holding social activities such as gatherings or "hanging out". Apart from needing a variety of activities in the playing fields, the respondents had also mentioned wanting variety for other sports facilities within their housing area and neighbourhood.



**Table 9.4a: Attributes and facilities matrix**

		%							
	Attributes  Facilities (%)	Playing field	Other Sports Facilities	Resting spaces	Playing spaces	Meeting spaces	Commercial spaces	Natural areas	Overall %
2	Safety	8	13	17	15	9		14	13
3	Aesthetic quality and greenery	3		21				37	9
4	Accessibility	4	18			6	19	8	8
5	Ambience-Tranquility		2	38	3	15	6	5	8
6	Multiple functionality of space for sports activities	41	17		3				7
7	Intelligent			12		7	44		7
8	Size of space				20	29	3	7	7
9	Sociability	4	5		11	18		7	7
10	Fun and exciting	3	7		4		12	7	4
11	Walkability		2	12					4
12	Element of Play		3		20				3
13	Challenging	2			8	7		7	3
	Total %	100	100	100	100	100	100	100	100

For the adolescents a space should offer a variety of activities that could help enliven a space or place. The respondents wanted facilities and open spaces which could afford or have the potential of accommodating a variety of activities to make them more appealing not only to the adolescents but also to other users such as the younger children and adults.

Safety (13%) was the second attribute mentioned for all the facilities and spaces wanted by the respondents except commercial spaces. The adolescents insisted that if the facility or space was deemed safe, indirectly, it would be able to encourage more users to use the space. They thought that there would also be an increase in the chances of adolescents being allowed by their parents to go out more often to play or participate in certain activities. The percentage for safety as attribute was particularly high for resting spaces (17%), play spaces (15%) and natural places (14%). The safety of spaces was considered important because the respondents thought that users and their parents would be more confident of using or being in the spaces which were safe. Thus it would probably increase the frequency in the use of the spaces. The aspect of safety in spaces was also an issue among the respondents of previous studies of young people and urban places whereby safety was mentioned to be important in influencing the use of the space particularly affecting the frequency of space usage ( Chawla, 2002; Lynch, 1977).

Aesthetic quality and greenery was an attribute assigned to 3 types of facilities and spaces. They were natural areas, resting spaces and the playing field but no mention was made for the other facilities needed. This attribute was highest in natural areas (37%) and lowest in playing fields (3%). The respondents wanted certain neighbourhood spaces to possess some aesthetic quality through the use of both soft and hard landscape elements to enhance the quality of the spaces. They also thought the presence of greenery in spaces could improve a place, making it cooler and pleasant to be in.

The respondents expressed wanting certain public open spaces to be strategically located, accessible and near to their homes. Location and accessibility are related to the time spent outdoors. Proper accessibility to resources within their housing area and neighbourhood would help them increase the time spent in certain spaces and facilities. In addition, they do not have to travel which can incur transport costs. Parents will be at ease in letting them go out more often when they are able to watch over them, especially the younger adolescents. For most of the facilities, except resting spaces and playing spaces accessibility and location were indicated as important. The adolescents pointed out that accessibility was needed particularly

for commercial spaces (19%) and sports facilities (18%). It was lowest in playing fields (4%).

A tranquil and peaceful ambience was an attribute they linked to some of the spaces or facilities especially resting spaces. The respondents expressed the desire for spaces that possessed a form of needed ambience, tranquility and peacefulness, which could indirectly offer therapeutic qualities to reduce stress and make them feel more relaxed. The adolescents in this research mentioned places such as public spaces which with a tranquil and peaceful ambience would be suitable places for them to sit down and relax. They could also carry out passive activities such as walking or just sitting and "hanging out". Places with such ambiances would be appropriate for the adolescents when they need to socialise with their peers and adults and at certain times they have the tendency to choose to be on their own. Most adolescents at their age will want at certain time to be on their own because it is an important part of their development when they are learning to become independent adults (Santrock, 1998). It is at this age too that they are learning to focus on what is important, to pay attention and follow directions, and how to take small steps to work towards larger goals.

Multi functionality was an attribute in the facility needed to support a range of sports activities. The respondents thought that with limited open spaces in a housing area and neighbourhood, then having a multi functional space in which a range of sports activities could be played could maximize the potentials of limited spaces. The multi functionality of spaces for sports was important for the respondents particularly for playing fields (41%). This was in line with their opinion that if open space was limited in a housing area and neighbourhood, any available open space should be able to afford or accommodate more than one sports activity. To the researcher, the attribute of multi functionality of spaces for sports activities also relates to structured sports activities. Structured sports activities such as games were part of leisure which could also provide opportunities for identity exploration and skill building (Kleiber, 1999) as well as both social differentiation and integration for the adolescents. Through games, adolescents can learn patience, persistence, and a desire to learn-all from playing with other people such as friends and parents too (Bandura, 1977). When playing games, the adolescents as players will learn rules,

working towards goals, and working with others. Research implied the benefit of playing games when findings showed that children and adolescents tend to get better grades in school and get into less trouble, get along with others, and develop high self-esteem (Gould, 2005).

The respondents also highlighted the need for resources to be intelligent in design and performance, one that can also provide knowledge, one that is interactive. They link 'intelligent' to technology such as computerization and interactivity, for example, the use of interactive landscape elements such as computerized synchronized water features and proper informative signages. They wanted the spaces to be interactive with the presence of elements within the space or as part of the facility allowing some form of interactions. They demanded spaces to be not just common spaces but the design should go beyond the conventional design.

Size was another attribute deemed important for some of the facilities and spaces. The size could vary from small to big. They wanted bigger spaces for some spaces, for example, play spaces. However, they had also mentioned wanting some spaces to be smaller, more intimate and enclosed to cater to the more passive and peaceful social group activities or simply to enable them to have some privacy or to be alone. The respondents linked the attribute to 4 types of spaces, playing spaces, meeting spaces, commercial and natural areas. The percentage was highest in meeting (29%) and playing (20%) spaces. The size of the space particularly for play spaces, depended on the types of activities. For example, big spaces would be more appropriate for physical public activities such as playing and for congregation in a big group. On the other hand, for gathering or meeting in small groups, smaller and more intimate spaces would be more appropriate.

Sociability was an attribute assigned to 5 of the facilities needed; playing field, other sports facilities, playing spaces, meeting spaces and natural spaces. The percentage for sociability of the space or facility was highest for meeting spaces (18%), followed by playing spaces(11%) but there was no mention of the attribute for resting and commercial spaces.

Fun and excitement was another attribute mentioned by the respondents. The respondents wanted some place to be fun and exciting to be in and this attribute was given to all needs except resting spaces and meeting spaces.. They thought that the element of fun and excitement in spaces and also in the activities to be carried out within the spaces would help to reduce boredom and stress among adolescents. The attribute of fun and excitement was needed by the respondents to reduce boredom and stress among the adolescents.

The respondents thought that the housing area and neighbourhood should have the attribute of walkability. The spaces within the neighbourhood were needed to be within walking distance and the housing area should have proper wide walkways for safe walking, separate tracks for cycling and less traffic through the diversion of traffic and ease of road crossing. They wanted separate tracks for cycling and lower traffic volume through diversion of traffic and ease of road crossing.

As adolescents, the respondents wanted to participate in some form of activities on their own and playing was one of them. The adolescents had identified play, both types, non-structured and structured play as being an important attribute for certain facility such as those in the form of open spaces or game courts. Certain facilities should offer or support play opportunities providing either one or both forms of play. The respondents think that some spaces or facilities should have or be able to generate some form of unstructured play. They were aware that play could support positive interaction in the relationship between two or more people, friends or even their parents. For these respondents, playing was still an important endeavour for them. This attribute was present in the need for sports facilities and play spaces. It was highest in play spaces (20%). The need for non structured play opportunities would be able to support not only play but also social activities.

The adolescents added challenge as an attribute which could transform or make a facility or space attractive. The element of challenge was the last attribute which the respondents wanted for resources such as playing spaces, meeting spaces, natural areas and playing fields. Being in a facility or space that offers challenge can reduce boredom which is often the main complaint among the respondents

regarding the use of their free time. The respondents' presence of challenges in facilities would also help to sustain their interest in an activity within a space.

#### **9.4.2 Hierarchy of attributes within each need**

An overview of the attributes and facilities matrix also indicated that not all of the attributes were present in each resource needed. Some attributes had a higher percentage compared to the others within each facility desired by the respondents. The top needed resources were sports facilities. Some of the attributes assigned to specific facilities such as playing field and other sports facilities were examined.

For the playing field, the respondents assigned 9 attributes. The attributes assigned by the respondents according to their importance in relation to playing fields were multifunctionality of space for sports (41%), variety (35%). Safety (8%) was another attribute associated with sports and recreational resources. The respondents looked upon the playing field as an open space capable of supporting more than one activity. The playing field was perceived as an important resource but a public playing field was absent in both housing areas and neighbourhoods. The respondents felt the absence of a public playing field which could be accessed at all times was a deprivation of their basic and essential need and they could only depend on the school playing field. A school playing field imposed limited access and was only for the use of the students enrolled in the school. They agreed that the presence of a playing field could support other activities, providing elements of fun as well as the opportunity for meeting people. Respondents of Bandar Baru UDA added that having a green playing field would be better than a hard paved playing field.

For the other sports facilities, 9 main attributes were indicated by the respondents as being important in the provision of sports facilities. The top two attributes were variety (33%) and accessibility (18%). Variety in sports resources referred to the types or range of sports facilities available within the housing area and neighbourhood and accessibility meant the need for the facilities to be accessible and close. The least important attributes mentioned by the respondents were tranquility (2%) and

walkable (2%). The tranquil ambience was quoted as one of the attributes but it was the least important for sports resources.

The respondents mentioned 5 attributes for resting spaces. A tranquil ambience (38%) was the most important attribute in such spaces followed by aesthetic quality and greenery (21%). The respondents thought safety (17%) was a substantial attribute too for resting spaces. The findings were in line with previous studies according to which the 3 attributes were normally linked to resting spaces.

Ten attributes were mentioned for play spaces. The top two attributes were having elements of play (20%) and the size of play spaces (20%) was important. The other three main criteria were variety (16%), safety (15%) and sociability (11%). There were 3 least important attributes for play spaces which were facilities for sports (3%), tranquility (3%) and challenging (3%).

Meeting spaces were important spaces for the young respondents because such spaces provided opportunities for the respondents to socialize with people, their peers and the community. Eight attributes were present in meeting spaces and the most mentioned attribute for meeting spaces was the size of space (29%) followed by sociability (18%). They also wanted the spaces to have an element of tranquility (15%), variety (9%), fun (9%) and to be intelligent (7%) as well as being accessible (6%).

Commercial spaces including cyber cafes were some of the current public spaces which were popular among adolescents. Six attributes were mentioned for such spaces and intelligence (44%) was the highest, followed by accessibility (19%). They associated other attributes such as fun, variety and tranquility to commercial spaces. Even though size was an attribute mentioned, it was the least mentioned at 3%.

Green natural and landscaped areas were the last type of resources they needed within their housing area and neighbourhood. There were 9 attributes assigned to natural and landscaped areas. According to the respondents, the most important attribute that the spaces should have are aesthetic quality and greenery (38%). Second was safety (14%) and the least important was a tranquil ambience (5%).

Even though tranquility was often associated with green areas, the respondents placed other attributes such as variety, accessibility, fun, sociability, challenge and the size of space above tranquility.

### **9.5 Summation**

This chapter presented findings on the 13 attributes ascribed to the facilities and spaces which the respondents want linked to the resources needed in the housing area and neighbourhood. The three attributes present in most of the resources, were found to be variety, safety and tranquility. They were mentioned in six of the seven types of facilities wanted by the adolescents. The mentions of attributes for a specific resource reflected on the type and character of the resources they needed. For example, in playing field they wanted it to be able to have variety, referring not only to activities but also to the function of the space. They wanted the playing field to be a place that could be a facility which can support other sports. It was indicated in the high percentage given to the attribute and multifunctionality of space (41%). They wanted playing field to be a place that should be accessible, green, one that can support socialising through activities and be fun to be in. The findings of this chapter summarised that the presence of the resources for the respondents was not only important but they should also have certain attributes deemed necessary to make the facilities or resources more appropriate for adolescents' use.



# **CHAPTER 10:**

## **Conclusion-**

### **Summary, recommendations and future research**

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#### **10.0 Introduction**

The final chapter focuses on three main areas, the summary drawn from the research, its main findings and emerging issues, recommendations, possibilities of integrating the findings with future planning and design of urban landscape for adolescents' use and future research.

To enable easy understanding of the study, the whole research work will be outlined in a succinct manner. Secondly, it will accentuate on the main achievements of the study, draw conclusions and describe the ways and situations of how these findings can be used. Last but not least, some important areas for future research which have emerged in line with the findings and those not investigated during this study due to certain constraints such as limited time and resources.

#### **10.1 Summary**

Bronfenbrenner (1989) stated that outdoor spaces formed part of the environmental resources for young people to use relevant to their overall physiological, psychological and healthy well being within their environments. Adolescents in urban areas are part of a major and important social group of young people according to the adoption of the Convention on the Rights of the Child by the U.N. General Assembly in 1989, which specifies their rights for better living environment. These rights include better provision of human settlements, human interrelationships, living conditions and are associated with their overall well being and improvement of their quality of life from both physical and social aspects, linked to the environments. However, rapid urbanization in cities led to emerging issues of adolescents or young people being marginalized and facing exclusion in terms of their socio-spatial movement and accessing a supportive 'young people friendly' environment.

To recap from Chapter 1, previous research identified adolescents as being one of the frustrated population groups in relation to the use of public spaces especially when the spaces were not designed according to what they liked or preferred (Gans 1967, Popenoe, 1977; Chawla, 2002; Malone, 2003). Based on young people's issues in other countries particularly in the United States of America, United Kingdom, Australia and some other parts of the world, research relating to young people's environment, evolved in a time span of almost three decades and succeeded to provide findings on adolescents' environmental experiences across the globe (Chawla, 2001; Driskell, 2002; Malone, 2002; Breitbart; 1998). Kevin Lynch's important research in 1977, 'The Growing Up in Cities Project' attempted to look at the environment beyond its physical entities in order to establish the ways children and adolescents perceived and used their environment. Studies such as those of Florence Ladd's observations (1972), contended that the adolescents' interests through their interaction and resources they experienced in many public places were often denied due to limited open spaces in the city, housing area and neighbourhood. The use of outdoor environment among adolescents is now a recent concern among the public and the exclusion of adolescents from the few available spaces becomes an issue when the adolescents has fewer places to go to. Adolescents faced marginalization and exclusion within the urban environment when they were deprived of 'young people friendly' safe places in which to live, work, learn, and play. The need to play is not only important for young children but also the adolescents.

According to Piaget, play is to adolescents being something that they do as part of their lives and it is an opportunity of experiencing and exploring their environment. Through play, adolescents learn and explore their environment, to learn how it works and how they relate to it (Eccles, 2002; Elkind, 1998; Driver, 1976; Garling, 1989; Gormon-Smith, 2000; Hart, 1979; Hendry, 1983; Hillsdon, 2001; Kleiber, 1986; Lee, 2002). An adolescent can express feelings and emotions through various types of play activities and play may be the outlet through which an adolescent can convey emotions that they are either unwilling to share verbally or do not have the sufficient vocabulary to express (Driskell, 2002; Lynch, 1977; Malinowski, 1996; Seifert and Hoffnung, 1997; Shaw, 1995). More adolescents in urban areas lived within limited

living spaces and needed the outdoor landscape as an extension of spaces for their activities. Thus, the design of spaces in the outdoor environment should fulfil the requirements of the adolescents so as to create a conducive setting for various types of community activities (Baranowski, 1997; Hart, 1976).

Researchers had also done studies based on emerging health issues such as the problem of obesity and the rise in the numbers of adolescent facing mental health such as depressive symptoms and other health problems (Australian Institute of Health and Welfare, 2004; British Heart Foundation, 2005; British Health Authority, 2005; Canadian Task Force, 1992; Centers for disease Control and prevention, 2004; National Health & Mental Health Corporation, 1997). According to the World Health and Organisation (2005) the rise in percentage of obesity among adolescents was evident among urban children and adolescents. Most health problems according to research's findings were partly because of the current sedentary lifestyle and lack of physical activities among the adolescents.

The findings of the research particularly those relating to the children and adolescents' use of the outdoor spaces and involving young people's participation were used in the government agencies in countries like the USA, United Kingdom and Australia to upgrade or improve the facilities and public spaces for their young people.

In the context of adolescents in Malaysia, much of Malaysia's current research of Malaysian adolescents were still focused on educational, health, psychological and sociological research. The absence of studies on how the adolescents use their outdoor environment in particular their housing area and neighbourhood had provided a gap for research of Malaysian adolescents and their outdoor environment. Therefore, this study was undertaken in an attempt to gain an understanding of how some Malaysian local adolescents in a city, lived and used their outdoor environment within their housing area, neighbourhood as well as the city.

The research focused on understanding current growing up trends of adolescents in Johor Bahru, the environment they lived in, the types or categories of activities they

participated in, ones which they would like to do and the ones which constituted their favourite activities and their use of spaces within the housing and neighbourhood environment and some parts of the city. The research line of inquiry included identifying places they went to, ones which they actually went to and those which they liked and their favourite places. The information of the adolescents' places were linked to the sort of activities that were carried out in such places, whether the activities were passive or active.

Another main area of inquiry was to capture the adolescents opinion on their outdoor environment. The adolescents in this research were able to express orally their opinion about their environment, what they liked, how they felt and they gave reasons for liking or disliking certain elements or settings, in all their preferences of the outdoor environment. The findings on the three main areas provide an understanding of what the Malaysian adolescents in Johor Bahru wants or desires from their outdoor environment, particularly in the housing area and neighbourhood.

## **10.2 The use of the research tools**

This research aims were to investigate and identify the adolescents current life in a Malaysian city in relation to their use of housing area and neighbourhood spaces through information of their everyday activities, places they go and their attitudes towards their outdoor environment. Researchers in the study of young people and the environment used a range of research tools such as surveys, and for this particular study a triangulation of methods comprising of questionnaire survey, time diary and interview were adopted. Triangulation of methods was applied for this research in order to complement as well as accommodate the other two methods as each method had limitations and strengths as mentioned in Chapter 3. The full findings of the research are reported in Chapter 5, 6, 7, 8 and 9. The findings are from three main research areas, adolescents' activities, places they go to and people they meet and lastly, their environmental preference of spaces within the urban residential neighbourhood landscape.

### **10.3 Findings of the research in identifying the needs of the adolescents in public spaces in the housing area, neighbourhood and the city**

#### **10.3.1 Findings relating to Policies involving Malaysian adolescents and urban spaces**

The findings on Malaysian Policies involving adolescents and urban spaces contended that young people in Malaysia faced the similar predicaments like adolescents in many countries around the world such as the USA, UK, Australia and other developing countries such as India and Buenos Aires (Chawla, 2002; Driskell, 2002). Malaysian general policies do acknowledge the importance of adolescents as the country's young generation and efforts are made to introduce programmes which organize activities for the young people. However, the programmes could not be reached and benefited by many of the targeted groups, such as the adolescents. Various youth development programmes and strategies were implemented in the past few years by many concerned groups within the governmental and non governmental groups, spearheaded by the Ministry of Youth and Sports (Kementerian Belia dan Sukan, 2005). As mentioned by the respondents in Chapter 8, 'Rakan Muda' is one such programme aimed at placing more emphasis on youth potentials and activities. However, the programmes formulated to meet the objective of the government to cater to the current needs for activities among the adolescents were not enough because of the large population of young people (Syed Ali, 2003). Open space planning policies did not outline enough provisions of facilities and spaces for adolescents in housing areas and neighbourhood (Jabatan Perumahan Malaysia, 2005;). With current limited access to open spaces and facilities for adolescents' needs in current Malaysian open space planning, they faced 'exclusion' in indirect ways. It is more evident in older housing areas and neighbourhood such as Taman Pelangi.

More facilities and spaces were important to create places for both structured and non-structured activities to take place among users including adolescents (Larson, 1999; Tankel, 1963; Valentine, 1996; Willits, 1986). Facilities and spaces can create opportunities for everyday leisure time activities which they can do whenever they have the time in their housing area and its neighbourhood. The adolescents can find

easy access to facilities and spaces which are provided within housing areas and neighbourhood.

This research found that the design of existing open spaces were not based on users needs but were often dictated by briefs given by developers who tried to provide minimum open spaces and facilities to minimise developmental costs and to maximize their profits. The design of open spaces were normally biased towards improving the space aesthetically rather than considering the functional aspects of the spaces. The weakness in urban planning practices result in a poor quality environment and inadequate facilities and for adolescents use, not only in the housing area, neighbourhood and city. What the adolescents want or desire should be incorporated as part of an holistic users development approach in open space planning to achieve a liveable and conducive environment. Information on current Malaysian adolescents preferences of the environment is important in addressing their needs in terms of their physical and social needs.

### **10.3.2 Findings on Activities of Malaysian adolescents in Johor Bahru**

The findings revealed that Malaysian adolescents in Johor Bahru did not spent a lot of time on outdoor activities within their neighbourhood but rather on home activities. ( See also Appendice 4 on respondents' activities). In comparison to adolescents in the West, who on average spent about 40% of their time indoors, the respondents of this study spent as high as 58% of their time at home (Shaw, 1995; Zill and Nord, 1995). The findings showed that the adolescent led a sedentary lifestyle and spending very little time in the outdoors. Whatever free time that they have were spent on indoor home activities. Limited time was spent in the spaces within the housing area and neighbourhood landscape as reflected in the findings on the respondents' activities. The other factor that contributed to the sedentary lifestyle was the lack of physical activities among the adolescents.

The interest in physical activities was high among the respondents regardless of gender, ethnicity and age. As high as 80% of them quoted sports and recreational activities as their favourite activities. The high interest in sports was in line by a statement made by AFS (2003) that Malaysian adolescents love sports. In reality, the percentage of respondents who managed to engage in sports was only between 10

to 40% of which significant differences existed between ethnic background, gender and age factors.

Apart from the commitment towards education, an examination of weekend activities reinforced the fact that even though the respondents had more free time, the percentage of respondents who stayed at home was higher than expected. With the busy schedule, the presence of spaces within the neighbourhood would render easy access to the spaces, enabling them to go out within a short distance which require little travelling time. The findings on activities point out that the use of the outdoor environment, the housing and neighbourhood landscape was rather limited among the respondents.

The activities within the necessary, and contracted time, took up most of a weekday, leaving very little free time for the respondents to indulge in activities of their preference. In general, the findings, confirmed that on a weekday, the time were spent on school and educational activities and leaving little time available for outdoor activities. There were less outdoor activities in a weekday than the weekend due to the time spent in school. The remaining free time of the adolescents were mainly spent on indoor home activities. The main home activities at home were watching television, playing video game, listening to music, computer, helping the family with the house chores and doing their schoolwork.

A total of 56 activities were recorded in the responses from the survey. The summary of findings on selected activities are listed in Table 10.3a. While school life and busy schedule on a weekday were reasons for the little time that they had for outdoor activities, the weekend upward trend in indoor activities indicated that there were other factors that might affect their ability or chances to go out. The Malaysian adolescents are spending much time indoors.

The respondents had to spend part of their free time on home activities but it need not necessarily be what they actually wanted to do. The high interest in sports and recreational activities is in line with their developmental needs when the adolescents at this age range is very energetic ( Andersen, 1998; Aziah, 1999; Brofenbrenner, 1998; Gaver, 1996; Harian Metro; 2005; Lateh, 1994)

According to ethnic background, sports and recreational activities were highly favoured with the highest among the Malays. The percentage who listed home activities as their favourite activities were low. The highest percentage who listed home activities as their favourite activities were the Chinese and the lowest were the Malays. Home activities were highest among the Malays as high as 58% in the morning of a weekend.

There were gender differences in the type of activities preferred by the respondents whereby the male respondents inclination were towards the physically active leisure sports and recreational activities while the female to be more on social based leisure.

The female respondents inclination for social leisure was more compared to the male respondents due to different cultural settings. Malaysian female adolescent's social networks were limited and normally restricted to domestic sphere. They gained new friends and alliances through school life which formed their social networks. Thus, the needs to be with friends arised.

**Table 10.3 a: The highest percentage of selected activities: Sports and recreational activities; Home activities**

	Sports activities (%) and time when activities took place		Home activities (%) and time when activities took place		Favourite Activities (%)
	Weekday	Weekend	Weekday	Weekend	
Ethnic Background	Chinese (18%-afternoon)	Malay (26%-Afternoon)	Chinese (62%-Evening)	Malay (58%-Morning)	Sports and recreational activities (Malays-78%)
Gender	Male (15%-Afternoon)	Male (33%-Afternoon)	Female (36%-Evening)	Female (56%-Morning)	Sports and recreational activities ( Male-80%)
Age group	16-17 year- olds (16%-afternoon)	10-11 and 11-12 year- olds (28%-Afternoon)	10-11 year -olds (46%-evening)	16-17 year- olds (70%-morning)	Sports and recreational activities (86%; 10-11 year-old and 12-13 year- olds)

According to age groups, sports and recreational activities were the favourite activities among all age groups with the highest being in the 10 to 11 year old. The



younger adolescents inclination for sports and recreational activities were higher compared to the older adolescents. A trend occurs whereby the percentage for non-play social activities were more popular among the older adolescents and the sports and recreational activities, among the younger adolescents.

In general, physical activities were more favoured than non-play social activities by the respondents. Preference for certain types of activities differs between respondents of different gender, ethnic background and age group. The findings showed that even though the respondents preference for sports and recreational activities were high, the opportunities that existed within the outdoor environment were rather limited.

### **10.3.3 Findings on Adolescents' Places and People**

The second main area of findings of this study were on the places frequented by the adolescents. The places mentioned by the respondents were those located in three areas, their housing or residential area, neighbourhood and those areas extending beyond their housing area but within the city, offering the city centre, the waterfront and the green spaces within its urban fabric.

The findings on adolescents' places demonstrated that regardless of ethnic background, gender and age group, a majority of the study's respondents' group of favourite places were sports and recreational spaces. The findings were summarized in Table 10.3b. By ethnic background, the percentage for sports and recreational spaces was highest among the Indians. By gender, it was higher among the females. It showed that even though the female respondents' access to sports and recreational spaces was restricted compared to the male respondents, they still favoured and wanted more opportunities for sports and recreation. Very high percentages for sports and recreational spaces were also recorded among respondents in all age groups and the highest was 52%, among the 14 to 15 year-olds.

Of the four most mentioned favourite places analysed, the playground was placed first, followed by, shopping complex or mall, playing field and fourth was friend's

house. Table 10.3c summarises the study's findings indicating the highest percentages for four of the most mentioned favourite places by ethnic background, gender and age group.

Of the three categories of people they go out with, friends were the most important followed by neighbours and the family, in last place. (See Table 10.3d). It was similar by gender. By age group, the percentage for friends was high in all age groups but it was highest among the 12 to 13 year-olds. However, the importance of family members and relatives decreased as age increased. It was highest among the 10-11 year-olds but lowest among the 16 to 17 year-olds. While family was still closer to the younger respondents, it was the reverse for the older adolescents. The younger adolescents' attachments to family were stronger compared to the older adolescents.

**Table 10.3b: Summary of Favourite Places and Highest Percentages by ethnic background, gender and age group**

		Highest %		
Ranking	Group of Favourite Places	Ethnic background	Gender	Age Group
1	Sports and Recreation	Indians (52%)	Female (49%)	14-15 year-olds (52%)
2	Commercial areas	Chinese (26%)	Female (21%)	10-11 year-olds (26%)
3	Friends' and Relatives' Places	Malays (13%)	Male (12%)	10-11 year-olds 11-12 year-olds (14%)
4	Other Places	Chinese (23%)	Male (19%)	12-13 year-olds (18%)
5	Institutions	Malays (9%)	Male (7%)	12-15 year-olds (11%)

**Table 10.3c: Summary of Most Mentioned Favourite Places and Highest Percentages by ethnic background, gender and age group**

Highest %				
Ranking	Most Mentioned Favourite Places	Ethnic background	Gender	Age Group
1	Playground	Indians (28%)	Female (28%)	14-15 year-olds (35%)
2	Shopping complex or Mall	Chinese (16%)	Female (14%)	14-15 year-olds (14%)
3	Playing Field	Chinese (13%)	Male (13%)	16-17 year-olds (15%)
4	Friends' and Relatives' Places	Malays (11%)	Male (9%)	10-11 year-olds (14%)

**Table 10.3d: Summary of people they like to go out with and highest percentages by ethnic background, gender and age group**

Highest %				
Ranking	Categories of People	Ethnic background	Gender	Age Group
1	Friends	Malays (77%)	Male (73%)	12-13 year-olds (73%)
2	Neighbours	Chinese (32%)	Female (22%)	16-17 year-olds (29%)
3	Family	Malays (11%)	Male (12%)	10-11 year-olds (20%)

An inquiry into the frequency of meeting found that in general, they meet up more within their housing area and neighbourhood, at least once a week. (See Table 10.3e). The findings on the frequency of meeting reflected the existence of intentional social meetings among the adolescents with other people on a substantially regular basis of at least once a week within the neighbourhood.

**Table 10.3e: Summary of highest percentages in frequency of meeting by ethnic background, gender and age group**

		Highest	%
Ranking	Frequency of meeting people	Ethnic background	Age Group
1	Once a week	Malays (52%)	14-15 year-olds (59%)
2	More than once a week	Chinese (35%)	10-11 year-olds (33%)
3	Once a month	Chinese (20%)	10-11 year-olds (30%)

The study found that the respondents, for reasons of having limited places to go within their housing and neighbourhood area, would go further to the city. The city became an important place in their range of action but it was stated by the adolescents that the city too offer limited choice of activities. For the adolescents, the three different popular places mentioned by the respondents were the city centre, the waterfront and the Urban Forest. The city centre was found to be a hub of entertainment and socializing for the respondents. The city lacks physically oriented activities. While in the West, skateboarding took place substantially in the city centre and faced problems of public conflicts (Woolley,1999; Owens, 2002), the scenario in Malaysia differed. Even though the authorities and the public did not impose direct legal or indirect restrictions on this sports, the spaces within the city and neighbourhood themselves were not 'skateboarders friendly'. Repeated laments among the interviewees amplifies their interest for more facilities for x-treme games which this study considers as an issue which should be explored further in future research.

The adolescents indulgence in social activities such as meeting people, sitting, relaxing and watching people were found in the city's urban spaces. The popularity of one place over another within the city means the affordances of such places in accommodating young people's activities had an effect on use of the spaces.

The findings reveal that certain activities were more popular among specific gender, ethnic background and age group. Three of the activities are meeting up with friends, sitting and watching people and consuming activities. The summary of

findings is in Table 10.3f: Highest percentages for Activities in the city according to ethnic background, gender and age group.

The city's waterfront was another important place mentioned by the adolescents in this study. The waterfront was a recreation hub for them. They would go to the waterfront for passive social activities such as strolling and sitting and their favourite spots along the waterfront were the sitting areas, grassed areas, playground and skate park.

The green spaces of Johor Bahru were places visited by the respondents .

Table 10.3g summarises the findings relating to the high frequencies according to ethnic background, gender and age group.

**Table 10.3f: Highest percentages for Activities in the city according to ethnic background, gender and age group.**

<b>Activities in the city</b>	<b>Ethnic Background</b>	<b>Gender</b>	<b>Age Group</b>
Meeting up with friends	Malay and Indian (25%)	Female (36%)	14-15 year-olds and 16-17 year-olds (29%)
Sitting and watching people	Malay (29%)	Male (31%)	16-17 year-olds (29%)
Consuming activities: shopping, watching movies and eating out	Chinese (43%)	Female (39%)	10-11 year olds (54%)

**Table 10.3g: Highest percentages according to ethnic background, gender and age group.**

<b>Green Spaces</b>	<b>Ethnic Background</b>	<b>Gender</b>	<b>Age group</b>
Urban Forest	Malay (35%)	Female (35%)	10-11 year-olds (37%)
Royal Palace Botanical Garden	Malay (35%)	Male (15%)	16-17 year-olds (22%)
Other Parks and recreational areas in Johor Bahru	(Indian (61%))	Male (55%)	14-15 year-olds (49%)

#### **10.3.4 What the adolescents want or desire from their outdoor environment**

The majority of the adolescents wanted changes within their outdoor environment according to gender, ethnic background and age group. The findings stated that;

- Gender: More male than female respondents
- Ethnic background: highest percentage who wanted changes were the Chinese respondents;
- Age factor: the highest percentage of adolescents wanting changes were the 10 to 11 years old and the 16 to 17 years old.

The study's findings included exploring what were available in two neighbourhoods, Taman Pelangi and Bandar Baru UDA. The findings indicated that the adolescents can express specifically what they wanted from their housing area and neighbourhood if given the opportunities. Both neighbourhoods did not have enough spaces for the adolescents to use for their activities. Conflicts of use occurred when more than one group of users wanted to use the same space. As for Taman Pelangi, being one of the earlier mixed developments in Johor Bahru, has only one small green space to serve the whole population of Taman Pelangi. There were no other neighbourhood spaces for the young people to go to for their activities. For respondents in Bandar Baru UDA, being a newer housing area, had more facilities and public spaces but still there were no spaces which were

specifically allocated for the adolescents. The absence of important play spaces such as a football field was also an indication of the lack of consideration for the needs of the adolescents. Respondents of both neighbourhoods, had voiced out their needs for spaces for extreme games such as skateboarding. In both neighbourhoods, the adolescents use of the streets were limited due to the motor traffic. Due to the lack of public neighbourhood spaces, the spatial range of the adolescents extended to include other parts of the city's urban environment.

In summary, what the respondents wanted by hierarchy were sports and recreational facilities and spaces, spaces for resting and privacy, places to meet people, play spaces, green spaces, better infrastructure, commercial facilities and clean and well maintained areas. Respondents from Taman Pelangi top needs were physical resources and had placed social spaces last in the list. On the other hand, respondents from Bandar Baru UDA had also placed the physical resources such as sports facilities on the top of the list but social spaces were placed second and third. Figure 10.3.1 and 10.3.2 summarise what the respondents want according to their housing area and neighbourhood.

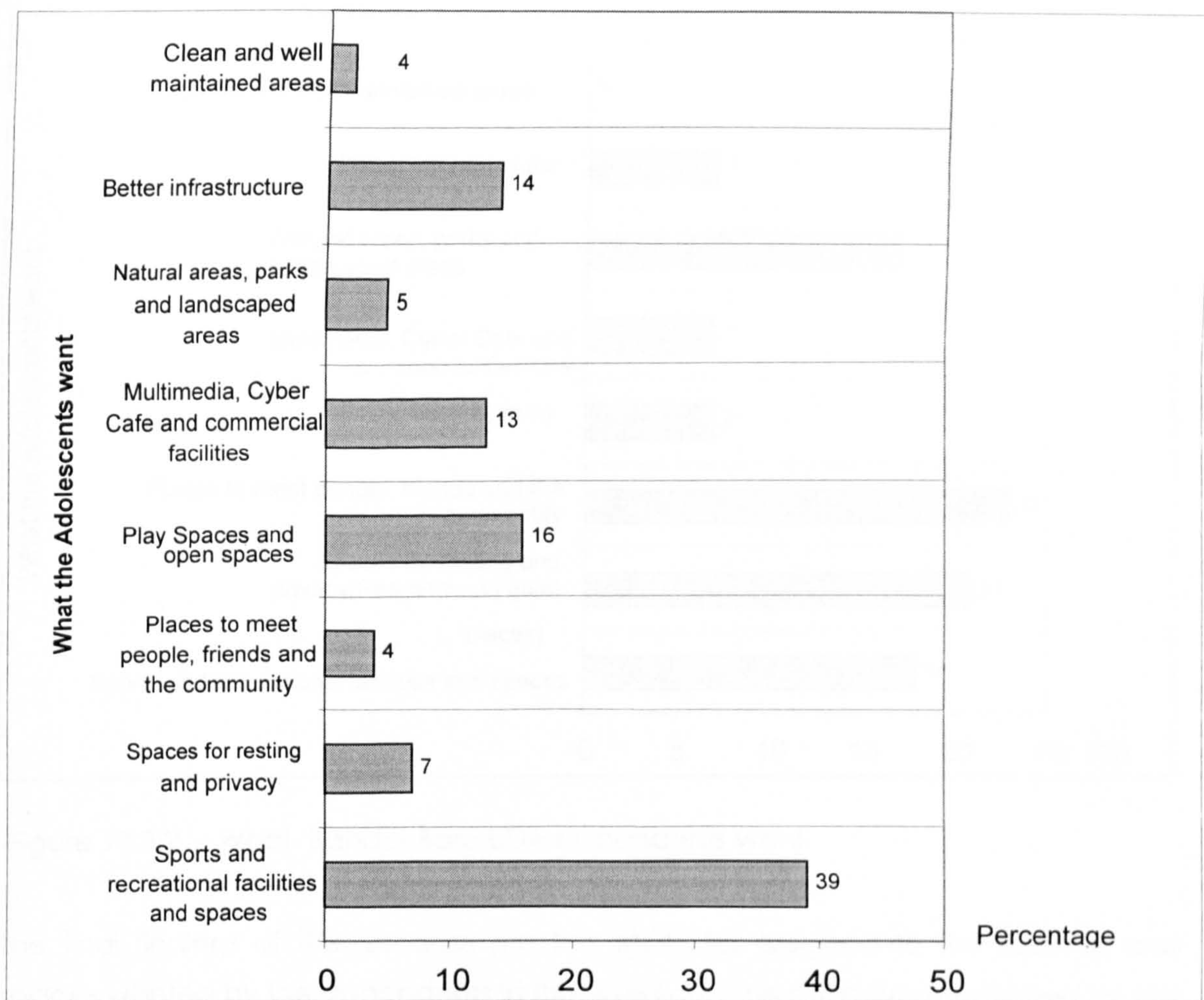


Figure 10.3.1 : What Taman Pelangi respondents want

Conclusively, what the adolescents wanted from their housing area and neighbourhood depended on the resources available and what they wanted in total were physical resources to support both physical activities and social activities.



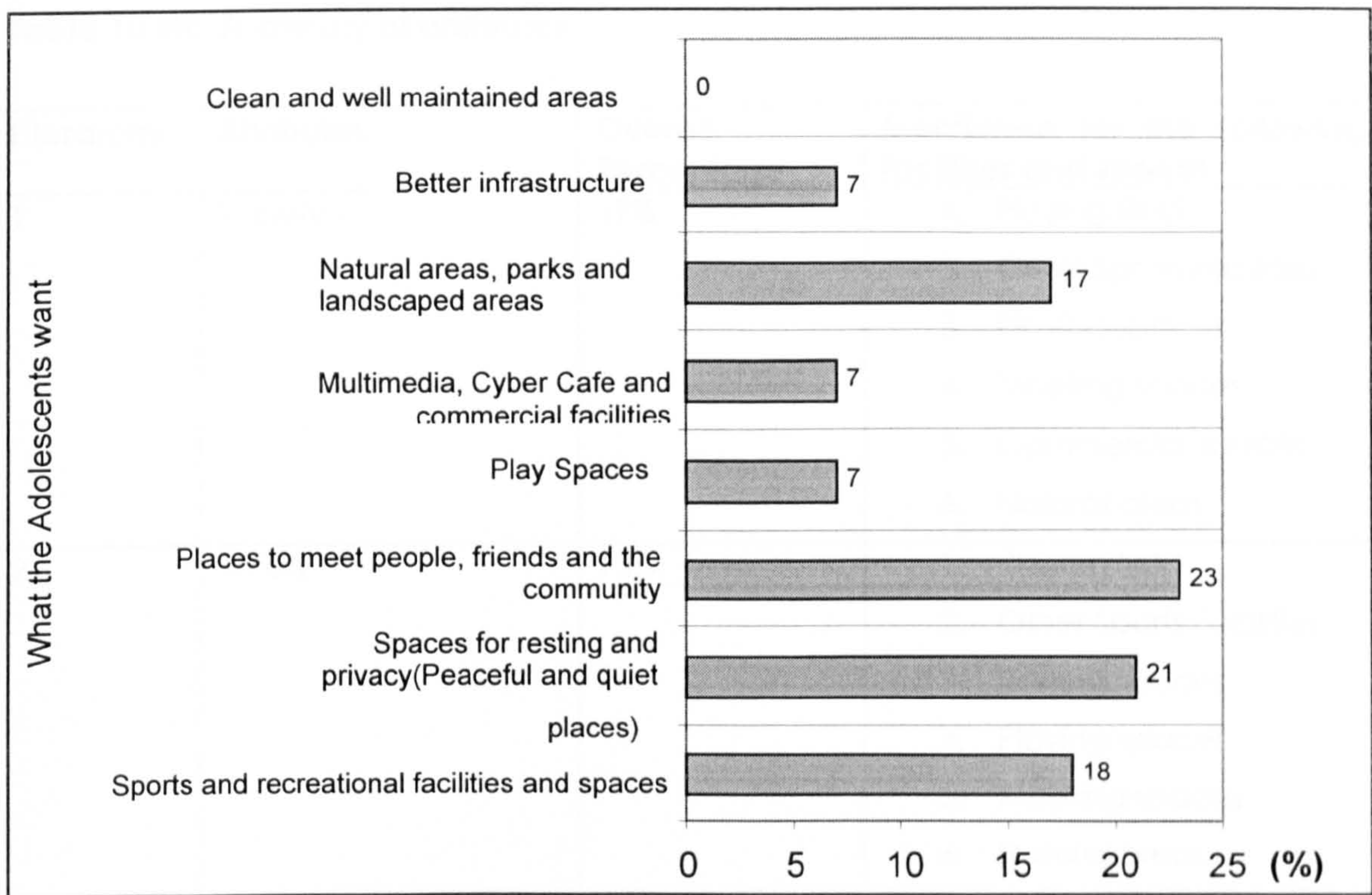


Figure 10.3.2 : What Bandar Baru UDA respondents want

The final findings of this research are the attributes assigned to the facilities and spaces wanted by the respondents in this research. The attributes mentioned by the respondents are variety, safety, aesthetic quality and greenery, accessibility, ambience, multiple functionality, intelligent, size of space, sociability, fun and excitement, walkability, element of play and challenging. The table summarized the overall hierarchy of the attributes assigned by the respondents for specific facilities and spaces which they wanted.

**Table 10.3h: Summary of attributes**

Hierarchy	Attributes	Overall Percentage	Mentioned for the following facilities and spaces
1	Variety	17%	<ol style="list-style-type: none"> <li>1. Playing field</li> <li>2. Other Sports Facilities</li> <li>3. Playing spaces</li> <li>4. Meeting spaces</li> <li>5. Commercial spaces</li> <li>6. Natural areas</li> </ol>
2	Safety	13%	<ol style="list-style-type: none"> <li>1. Playing field</li> <li>2. Other Sports Facilities</li> <li>3. Resting spaces</li> <li>4. Playing spaces</li> <li>5. Meeting spaces</li> <li>6. Natural areas</li> </ol>
3	Aesthetic quality and greenery	9%	<ol style="list-style-type: none"> <li>1. Playing field</li> <li>2. Resting spaces</li> <li>3. Natural areas</li> </ol>
4	Ambience	8%	<ol style="list-style-type: none"> <li>1. Other Sports Facilities</li> <li>2. Resting spaces</li> <li>3. Playing spaces</li> <li>4. Meeting spaces</li> <li>5. Commercial areas</li> <li>6. Natural areas</li> </ol>
	Accessibility	8%	<ol style="list-style-type: none"> <li>1. Playing field</li> <li>2. Other Sports Facilities</li> <li>3. Meeting spaces</li> <li>4. Commercial spaces</li> <li>5. Natural areas</li> </ol>
5	Multiple functionality of space for sports;	7%	<ol style="list-style-type: none"> <li>1. Playing field</li> <li>2. Other Sports Facilities</li> <li>3. Meeting spaces</li> <li>4. Commercial spaces</li> <li>5. Natural areas</li> </ol>

	Size of space;	7%	<ol style="list-style-type: none"> <li>1. Playing spaces</li> <li>2. Meeting spaces</li> <li>3. Commercial areas</li> <li>4. Natural areas</li> </ol>
	Intelligent;	7%	<ol style="list-style-type: none"> <li>1. Resting spaces</li> <li>2. Meeting spaces</li> <li>3. Commercial areas</li> </ol>
	Sociability	7%	<ol style="list-style-type: none"> <li>1. Playing field</li> <li>2. Other Sports Facilities</li> <li>3. Playing spaces</li> <li>4. Meeting spaces</li> <li>5. Natural areas</li> </ol>
6	Fun and excitement	4%	<ol style="list-style-type: none"> <li>1. Playing field</li> <li>2. Other Sports Facilities</li> <li>3. Playing spaces</li> <li>4. Commercial areas</li> <li>5. Natural areas</li> </ol>
	Walkability	4%	<ol style="list-style-type: none"> <li>1. Other sports facilities</li> <li>2. Resting spaces</li> </ol>
7	Element of Play	3%	<ol style="list-style-type: none"> <li>1. Other sports facilities</li> <li>2. Playing spaces</li> </ol>
	Challenging	3%	<ol style="list-style-type: none"> <li>1. Playing field</li> <li>2. Playing spaces</li> <li>3. Meeting spaces</li> <li>4. Natural areas</li> </ol>
	<b>Total Percentage</b>	<b>100%</b>	

## **10.4 Recommendations**

Based on the issues and the findings of this research, the researcher would like to suggest the following recommendations. The recommendations were mostly directed to the Johor Bahru City Council and the relevant government agencies.

### **10.4.1 Recommendations on Policies and Strategic Plan**

#### **i. Johor Bahru Local Vision and Strategic Plan**

As mentioned in Chapter 4, Johor Bahru upholds the vision to create a city in a garden and concurrently set a target of achieving excellent and equal opportunities for social life, recreation and enjoyment for all ages and interest groups in the city. However, the existing policies and guidelines lacked provision and development of facilities and opportunities for activities appropriate for young people like the adolescents. The researcher recommends that a Strategic Plan be drafted as a statement of intent indicating future directions for the planning and development of the existing urban spaces and places including those within the housing areas and neighbourhoods in Johor Bahru. The Strategic Plan should form a powerful vehicle for a number of recommendations, including policies to develop urban spaces as the focal points for adolescents and community activity to cater for their social needs.

Three focus areas of Johor Bahru Strategic Plan are directly relevant to the research's findings:

- Accessibility of the City Centre, waterfront and green spaces;
- Well-Designed and Culturally Dynamic City; and
- Children and adolescents friendly places

#### **ii. Adolescents and community development policies**

The findings of this study proceeded that it was apparent the issues raised by the adolescents in this research needed to be satisfactorily addressed through management, planning and design. Principles for Policy Development Relating to Public and Community Space should be drafted to form the basis for the development of an adolescents' policy framework within Johor Bahru Local

Authority. It can act as a tool to evaluate how various other policies within the other government agencies are written and the impact they can have on the adolescents. It is recommended that Johor Bahru Local Council should take a more coordinated and integrated approach to adolescents' policy and programs. Its current interests and activities can be consolidated in a way which will better address the issues raised through this research's investigations.

### **iii. Develop a Community Youth Communication Project**

The researcher recommends that a Community Adolescents Communication Project be developed jointly with the public and commercial sector to highlight young people's contributions and achievements in local Johor Bahru communities. The project should celebrate diversity amongst adolescents as young people, especially those from low socio-economic circumstances and from groups with negative stereotyped images such as skateboarders.

#### **10.4.2 Recommendation on Involving young people in Johor Bahru City Council and major development**

The researcher recommends that Johor Bahru City Council involve a range of adolescents in its various committees, including those related to young people policy and locality planning.

##### **i. Establish a basis and models for adolescents policy**

The Principles for Adolescents Policy Development Relating to Public and Community Space are recommended as a basis of a general adolescents policy statement by Johor Bahru Local Authority. This research supports the view that there is a need for a clear and endorsed statement regarding the legitimate place of adolescents in public spaces and the need for their participation in public life to be acknowledged and facilitated. A range of principles can be designed to promote the inclusion of adolescents as young people in community life.

##### **ii. Foster increased understanding between adolescents and the rest of the community**

It is recommended that existing and potential adolescents' networks should be identified. These networks can be further developed for a whole range of public

matters involving the adolescents as young people in consultation. The Johor Bahru City Council, through a Young People Participation Policy, should ensure that all its community consultation processes make specific efforts to involve adolescents in providing their perspectives in the provision of public spaces and facilities.

#### **10.4.3 Recommendation on developing policies in relation to health, public safety, recreation, and cultural development**

It is also recommended that Johor Bahru City Council further develop policies and provisions which relate to specific areas, namely , health, recreation and cultural life.

##### **i. Development of a City Safety Strategy**

It is recommended that Johor Bahru City Council, through the Community Life Program, use working parties to deal with particular issues in the city centre, housing area and neighbourhood, particularly those with incidences of crime, as part of a City Safety Strategy.

##### **ii. Develop a Adolescents Health Program**

It is recommended that the development and implementation of a 'Adolescents' Health Program as an element of the Johor Bahru City Council Adolescents' Policy. This should consolidate and further develop adolescents' health activities relevant to Johor Bahru City Council's role. The Johor Bahru City Council and also local universities should support and promote fundamental research into issues relating to the displacement of young people from public and community space.

#### **10.4.4 Recommendation to consolidate a Youth Cultural Policy**

It is recommended that Johor Bahru City Council activities be consolidated into a Youth Cultural Policy and develop a cultural development program for young people for selected open spaces with their active participation. There should be active input of young people's current and desired activities, and how these could be expressed and enhanced in the cultural symbolism and social and physical provisions of the city, housing area and neighbourhood.

#### **10.4.5 Recommendation on Liaison and advocacy with other levels of government**

It is recommended that Johor Bahru City Council liaise with other levels of government agencies, and other institutions in Malaysia, regarding adolescents' needs and policies. In particular, a clear and explicit liaison mechanism should be established, with the Malaysian Ministry of Youth and Sports and Ministry of Education.

#### **10.4.6 Recommendation on Integrating policy and planning processes**

- i. It is recommended that developers can contribute towards facilities for adolescents especially in new commercial areas using contemporary principles of integrated environmental design which can be applied to make sure that the new buildings and circulation systems relate sympathetically with the surrounding townscape.
- ii. A variety of recreational opportunities should be available for adolescents including Youth Activity Centres in central links with bus stations and bicycle routes, particularly important to young people, should also be introduced, and generous bicycle parking provisions should be made.
- iii. It is recommended that the Local Authority upgrade the facilities in areas frequently used by the adolescents such as vacant sites in housing area, the city's waterfront, the city centre and government public land. Attractive features such as water bodies, natural slopes and interesting views should be used to enhance the outdoor settings.
- iv. It is recommended that these provisions be widened to include temporary recreational and leisure uses. These could include: skate ramps, open air performance, play construction spaces, and sites for adolescents' temporary art projects.

#### **10.4.7 Recommendation on preventing crime through environmental design**

Principles of good access and safe design should be incorporated into the fabric of both new and existing developments within housing area, neighbourhood and the city. Some of the aspects of environmental design which could be used are safe

and continuous pedestrian access, good integrated lighting, convenient through-movement and natural surveillance (Harris, 1998; Dines, 2002).

#### **10.4.8. Recommendation to encourage access**

Housing, neighbourhood and city commercial developments should provide natural arenas for young people's social and recreational contact, and acquisition of social skills. It is recommended that a proposal be drafted as a means to eliminate or reduce constraints of access and to allow better access for adolescents of all groups.

##### **i. Encourage young people to use public transport**

Existing popular locations for young people's activities should be provided with bus stops and bicycle ways to link them to central areas of the city and housing areas.

##### **ii. Improve perceived access through design quality**

Physical and psychological access can be improved by linking indoor and outdoor spaces. Construction of sidewalk cafes breaching the external walls of various centres can also help integrate developments visually with their surroundings.

##### **iii. Promote small local meeting places in housing areas and neighbourhood shopping centres**

Housing areas and local commercial areas should have an important role to play in ensuring that residents including the adolescents without time, transport or money to visit major commercial areas and also local commercial centre to meet their commercial and social needs.

#### **10.4.9. Recommendation to encourage adolescents' participation**

The researcher recommends the development of a specific *Consultation Policy*, consolidating and expanding these provisions and identifying required and recommended approaches for involving various community groups and interests, including adolescents at all stages of the planning process. The adolescents should be included in the Community Needs Analysis, which can become a basic part of the preparation of Local Area Plans. A link should be established with the Youth Participation Strategy, enabling young people to involve themselves directly in the design process through Adolescents' Forums and Centre Advisory Committees.



A youth action and community leadership program for young people, especially those nominated for the Centre Young People Forum should help to evaluate a range of active and passive recreation options for young people in housing areas through conducting regular surveys with young people in the housing catchment area in order to ascertain their views and insights.

#### **10.4.10 Recommendations on further development of facilities and activities for young people**

The term 'youth friendly' and 'youth specific' spaces are used to describe two different sorts of spaces, which are;

##### **i. Provide youth-specific space related to adolescents**

There should be allocation of more Youth-specific spaces, which are oriented specifically to the needs of the 12 to 18 years old age group.

##### **ii. Make spaces more children and youth friendly**

Community spaces in housing area, neighbourhood and the city should become more 'children and youth friendly' by recognising the children and adolescents as one legitimate user age group, particularly in terms of community activities which are encouraged to utilise such spaces. One of the key issues that emerges in the research is the need for both active and passive options for recreation and social interaction in housing area and neighbourhood. This is important given the emphasis that is sometimes directed to the development of sports and other active options, the result of which can be that significant numbers of adolescents who feel they are not catered for.

#### **10.5 Scope for future development of research**

This study suggests many related areas which can be further explored and researched. The findings of the study were biased towards identifying what the adolescents in Johor Bahru wanted which constituted a small proportion of the whole young people of Malaysia. Within Malaysia itself, there is a diversity in terms of local culture depending on the geography of a place. For example, the rural adolescents may have different needs and issues. So researching into the needs of

the rural adolescents in different locations can become another potential extension of this research. Other potential research areas are looking into the marginalized groups of adolescents such as the disabled and delinquents as well as special group of adolescents, such as the skateboarders. Potential research areas may also include looking into specific design areas of the adolescents' environments based on the attributes of the facilities and spaces they wanted drawn from this study. For example, in creating spaces with a desired ambience, research can be made on the elements or other attributes which produce the effects, or behaviour settings required in a space. Other potential research areas are the emotions or effects resulting from being in certain types of spaces; exploration of the concepts of adolescents' friendly neighbourhood spaces; educational and recreational effects of neighbourhood spaces and Malaysian adolescents' participation in planning and design of public spaces. Each and every one of the research area should be in the context of local social, culture, gender and community themes.

## **10.6 Conclusion**

The researcher has gained important learning experiences in the course of this study. Researching adolescents' use of their environments is an important and broad area. In Malaysia the adolescents' problems become the subjects of discourse but researching into what they want in relation to the environment are often identified by adult through assumptions rather than listening to the adolescents. The current study has aimed to identify the adolescents' needs and understanding their use of the urban environment based on their everyday life in two specific neighbourhood areas in Johor Bahru through identifying their activities, their preferred places, people associated with them and 'listening' to what they actually want and the attributes they relate to their needs. One important point conceived from this study is that Malaysian adolescents are also facing exclusion in open space planning. Even though there are potentials of extending this research, whatever findings in this study can still be used or incorporated in the existing planning and design of housing and neighbourhood landscape and urban spaces in Malaysia. This research has shown that there are a lot to be learnt from the perspectives of the adolescents and they can become one of the 'key planners and designer' in designing an environment that they can call their own and to share with the others within a community.

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([www.unfpa.org/adolescent/aout.htm](http://www.unfpa.org/adolescent/aout.htm).)

## FORMULA USED TO CALCULATE SAMPLE SIZE

The sample size was calculated using the following formula;

$$\text{Sample Size} = \frac{Z^2 * (p) * (1-p)}{C^2}$$

where:

Z = Z value (e.g. 1.96 for 95% confidence level)

p = percentage in selection of a choice, expressed as a decimal  
(.5 used for sample size needed)

c = confidence interval, expressed as a decimal  
(e.g., .04 = ±4)

(Reference: Creative Research Systems, 2003)

**INSTRUCTION:**

Please tick (/) to indicate your appropriate answer/s or write in the spaces provided. Thank you.

**SECTION A: BACKGROUND INFORMATION**  
 This section is aimed at getting some basic background information about you and your family.

**A1. Gender:**

Male: ( )<sup>1</sup>                      Female: ( )<sup>2</sup>

**A2. Age:**

10: ( )<sup>1</sup>    11: ( )<sup>2</sup>    12: ( )<sup>3</sup>    13: ( )<sup>4</sup>    14: ( )<sup>5</sup>    15: ( )<sup>6</sup>  
 16: ( )<sup>7</sup>    17: ( )<sup>8</sup>    18: ( )<sup>9</sup>

**A3. Ethnic/Race:**

Malay: ( )<sup>1</sup>              Chinese: ( )<sup>2</sup>              Indian: ( )<sup>3</sup>  
 Other, please indicate \_\_\_\_\_ ( )<sup>4</sup>

**A4. Your religion:**

Islam <sup>1</sup>    Christianity     Buddhism     Hinduism     Others   
 Please specify \_\_\_\_\_

**A5. My parent's/guardian's occupation**

My father's occupation: \_\_\_\_\_<sup>1</sup>  
 My mother's occupation: \_\_\_\_\_<sup>2</sup>              Or  
 My guardian's occupation: \_\_\_\_\_<sup>3</sup>

**A6. My parent's/guardian's educational background**

	Primary	Secondary Education	Diploma/ College/Polytechnic	University	Others
Father	<input type="checkbox"/> <sup>1</sup>	<input type="checkbox"/> <sup>2</sup>	<input type="checkbox"/> <sup>3</sup>	<input type="checkbox"/> <sup>4</sup>	<input type="checkbox"/> <sup>5</sup>
Mother	<input type="checkbox"/> <sup>6</sup>	<input type="checkbox"/> <sup>7</sup>	<input type="checkbox"/> <sup>8</sup>	<input type="checkbox"/> <sup>9</sup>	<input type="checkbox"/> <sup>10</sup>
Guardian	<input type="checkbox"/> <sup>11</sup>	<input type="checkbox"/> <sup>12</sup>	<input type="checkbox"/> <sup>13</sup>	<input type="checkbox"/> <sup>14</sup>	<input type="checkbox"/> <sup>15</sup>

**A7. The place where I live:**

The name of my housing area or estate or part of the city where I live \_\_\_\_\_

APPENDIX

A8. Type of House

Tick  
(X) in  
the box

1	Bungalow	
2	Semi Detached House	
3	Terrace House	
4	Flats	
5	Low cost homes	

**B. MY EVERYDAY LIFE AND ACTIVITIES**

This section is aimed at gathering information on the Malaysian adolescents everyday activities.

B1. How I spend my time every day?

Day		Time	Activities
Weekdays(Monday to Friday)	1	Morning(Between 7.00-12.00 a.m)	
	2	Afternoon(Between 12.00-6.00 p.m.)	
	3	Evening(Between 6.00 -12.00 p.m.)	
Weekends (Saturday and Sunday) and Public holidays	4	Morning(Between 7.00-12.00 a.m)	
	5	Afternoon(Between 12.00-6.00p.m.)	
	6	Evening(Between 6.00 -12.00 p.m.)	
School Holidays	7	Morning(Between 7.00-12.00 a.m)	
	8	Afternoon(Between 12.00-6.00p.m.)	
	9	Evening(Between 6.00 -12.00 p.m.)	

B2. Name 3 most favourite outdoor activities you do outside within your neighbourhood area?

	Favourite outdoor activities
1	
2	
3	

B3. How often do you do these favourite outdoor activities?

- 1- Once a week
- 2- More than once a week
- 3- Once a month
- 4- A few times a year

APPENDIX

Put in the appropriate number in the box

	Name of <b>favourite</b> outdoor activities	Frequency
1		
2		
3		

**B4. When do you do your favourite outdoor activities?**

	Things you do outside of your house	Time
1		
2		
3		

**B5. Name three favourite or valued outdoor places that you like to go in your neighbourhood area.**

	Favourite Places in your neighbourhood
1	
2	
3	

**B6. Name three people that you like to go out with in your neighbourhood area.**

	People you go out with in your neighbourhood
1	
2	
3	

**B7. How often do you see your friends in your neighbourhood?**

		Tick (X) for your answer
1	Everyday	
2	More than once a week	
3	Once a week	
4	None at all	

### C. WHAT I WOULD LIKE TO HAVE IN MY HOUSING AREA AND NEIGHBOURHOOD

This section is aimed at gathering information on what the Malaysian adolescent / teenagers would like to have in their housing area and neighbourhood

The government are planning to improve the neighbourhood environment to cater to the needs of the adolescents or teenagers. They want to provide spaces and facilities that can help in adolescents' / teenagers' social and physical development.

Please imagine that you are selected as a **representative of the teenagers your age** and requested to give ideas on making the neighbourhood more friendly for teenagers. Please give your response to the following questions in light of this.

C1. Do you want Changes in your housing area and neighbourhood?

Yes  No

C2. What would you do to your neighbourhood if you were given the opportunity by the local authorities to make decisions to improve the housing area and to fulfil the needs of adolescents?

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*Thank you for your time and effort in filling up this questionnaire.*

Hamidah Ahmad  
University of Sheffield, United Kingdom

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Botanical Gardens and the other green spaces which included the local playgrounds in the neighbourhoods. Johor Bahru does not have many green spaces within the city. The following are the public green spaces existing within the city:

1. The Johor Bahru Urban Forest ( City Park / Neighbourhood Park)
2. The Royal Palace Botanical Garden (City Park)
3. Other small parks and recreational areas within the city (percentage of 5% and less)

The Urban forest was found to be popular among the respondents from the three ethnic groups and the percentage was highest among the Malays (35%). The percentage of respondents who frequented the Botanical Gardens was also highest among the Malays (26%). Most of the Chinese (55%) and Indians (61%) preferred to go to the smaller parks and recreational areas within the city centre. (See Table 7.1d and Figure 7.1.1)

**Table 7.1d: Green spaces frequented by respondents according to ethnic background**

Green spaces within the city frequented by the respondents	Ethnicity (%)		
	Malay	Chinese	Indian
Urban Forest	35	25	24
Royal Palace Botanical Garden (City Park)	24	18	15
Other parks and recreational areas within the city	41	57	61
Percentage within ethnic background	100	100	100
Total count (N=96)	32	32	32