

**Towards Establishing Planning and Design  
Guidelines for Children's Play Environments  
in Jeddah, Saudi Arabia.**

**A Thesis Presented for The Degree of Doctor of Philosophy (PhD)**

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# **Chapter I : Introduction**



## **I.A. Introduction**

The city, the ultimate creation and expression of man and his creativity is suffering from many ailments. The ideal that city life was supposed to be a better and brighter way of living has been tarnished. City life, in many cases, is not, at the moment, very glamorous. The existence of crime, social tension, poverty, drugs, and a considerable number of other plagues testify to that fact. Although these problems are complex issues and require examination and scrutiny from many perspectives, the physical environment and the way it came into being has a significant part in the emergence of some of these problems and as such, needs to be inspected very carefully. The search for the ideals that urban living was founded upon, and where it went wrong is a good starting point in coming to recognise and perhaps resolve some of the problems of the modern city. There is a need to search for the basics, the foundations, and the component parts that through time have evolved into the metropolis of the twentieth century. Perhaps by looking back, we can envision a future for the city based on those essential yet often forgotten needs that brought families together to share a common space. Maybe by glancing behind us we can see what was always in front of us but was obscured by the smoke and dust of rapid growth and the stress of getting things done.

The activities that people engage in in their daily lives in cities are abundant and varied. The planning and design for these activities by officials, architects and designers have failed. City layouts and designs have, in the most part, followed the economic forces with little regard for the activities and the people that participate in them. From the times of the industrial revolution and the industrial city, planning and design in Western cities have followed ideals that are based on production and economic growth. The Garden City movement had the ideal of distributing, rather than concentrating the economic activities and population. The Functional movement put forth the ideal of establishing cities off the ground in concentrated business areas which are served by speedy vehicular movement. The failure of these ideals and their implementation have been outlined by many who have studied their effects on people and their activities (Coleman 1985, Jacobs 1961, Broadbent 1990).

The truly unfortunate thing is that developing countries, such as Saudi Arabia, tend to look for advice and technical know how, concerning urban planning, towards the West. While it is true that the West is more developed and may offer expertise on matters of construction as well as dealing with urban problems, the differences that exist in the nature of the physical and social environments between the more developed nations and developing countries is substantial. Perhaps the most substantial difference that exists is one of ideology (Gehl 1987). Developing countries have different ideologies and the city planning approaches that they have innocently adopted from the more developed countries have



failed them greatly. The clash between an environment following a certain ideology and people living in that environment following a completely different one is perhaps the reason for the emergence of many problems that did not exist in those societies before.

It would seem that the greater the concentration of people in an area the more stress is put on resources and nature's rule; "survival of the fittest" is more applicable. The weakest members of the group are neglected and have very little influence in terms of attaining equal rights and a fair share of the resources available. The complex machine of planning, regrettably, tends to only plan, listen and provide for the outspoken members of society. Children and their play (which is a vital activity for the child and indeed society) have received the short end of the stick for many decades. It seems that the lack of concern with children and their play is a function of development! While economies and cities grow, children and their activities are neglected more. No longer are children allowed to roam the streets of their communities and city. Their activities are being isolated in specialised areas dispersed throughout the urban fabric in the form of playgrounds and schools. Children are being isolated from the places where education and learning really occurs; the street, the neighbourhood square, the museums, the theatres: the city. The best planning has to offer is chunks of fenced land here and there for the children of today who are the future of societies and humanity. How can a child that has been isolated from society for all his childhood suddenly be expected to deal with that society on the street, at work or even at play. It is not very surprising to find that there is a tendency amongst the younger generation to not be very interested in culture, society and life. The increasing rates of violence, anti-social behaviour, suicide and murder among the younger generation is frightening. The horror to us, as environmental designers, is that we may have helped in bringing this sad situation about by not recognising (or forgetting) what it means to be young; and by not providing the young of a society environments that truly cater for that stage of life.

### **I.B. The Nature of The Problem**

Where/when has planning failed in children's play provision?

To fully understand the provision for children's play environments or "playgrounds" and the problems they face today, a look back in the history of provision would be very beneficial. The problems that children's play areas face are in many ways the same problems that open spaces in the city face. Hence, a brief examination of the history of open space provision in urban areas is the starting point of realising the nature of the problems faced today in terms of children's play environment provision.

The modern concept of open spaces is indeed, a very modern concept in relation to the history of human settlements. The turbulent times of the nineteenth century and the



industrial revolution is the first point that needs to be examined. The machine and its capacity to produce goods more efficiently than human beings was the basis on which the industrial revolution grew and became a fact of human history. This mass production capability meant people were changing their older ways of manual labour to conform with the tide that was sweeping the world. Production centres, such as London, Manchester and New York became magnets for people seeking a better and more prosperous life. The influx of people from rural and outskirt areas to these cities of production was on a scale never witnessed before. With this large concentration of people in these cities problems began to arise. Living conditions for the working class (which made a large proportion of the population) were beginning to show signs of being inhumane and appalling (Chadwick 1966). These conditions did not get better with time and literature from the era (i.e. Dickens and Dostoyevsky) illustrated the moral and unsanitary conditions that existed in the inner urban areas which housed these masses. Concern from the middle and upper classes began to grow and action to alleviate and improve the living conditions and morality of the working classes was gaining ground in terms of advocacy (Chadwick 1966). From that point in time, the idea that the city is associated with every thing bad and that the country is good emerged and as we shall see later never disappeared (Lozano 1990).

The matter of public health was one of the strongest issues contributing to the provision of public open spaces. It was the opinion of many in that period that open spaces would provide clean air, sun and light to the people as well as aid in providing people with something better to do, with whatever free time they had, than gin dens and public houses (Walker and Duffield 1983). Thus, parks were provided by public agencies as well as members of the upper classes to improve the deteriorating health of the working classes. It is from this period in the history of public open spaces and parks the notion that parks and open spaces act as lungs to the city was derived. The Arboretum in Derby (England) in 1840 was the first example of public parks that was followed by many cities in England and was to later influence Frederick Law Olmsted who designed many of the early public parks in the United States including his first: Central Park in New York (Chadwick 1966).

Open space and park provision continued into the twentieth century. Planning in the form that exists today also began to take hold over developments throughout the urban environment (Gehl 1987, Broadbent 1990). The advent of public agencies in charge of controlling and planning urban growth brought with it concepts that these "professionals" thought was the best way to control and provide. Many of these concepts are still being advocated and practised today, for example the Garden City movement, the City Beautiful movement and the concepts laid down by Le Corbusier (Broadbent 1990). These movements had a large part to play in the way in which open space related to the built form. The monumental style of the City Beautiful movement provided open spaces in which monuments and landscaped avenues were of major significance to its concepts (Hall



1988, Broadbent 1990). Likewise, the Garden City movement, which was concerned more with the decentralisation of the population, meant open spaces were to surround the settlements rather than have a piece of nature in the middle of the city (as is the case in New York) (Broadbent 1990, Cranz 1982).

As well as the changes that were occurring in the physical environment, there were also some social or attitude changes that affected the lives of children and as a consequence their play behaviour and the areas that catered for this behaviour. In the early parts of the nineteenth century, children were not given the freedom that today's children have in terms of free time. Children were expected to contribute to their families in terms of income and hence were part of the work force. However, with prosperity and the righteousness attitude of Victorian times, labour laws that prevented employees from hiring children in a sense was the first step in separating children from the adult world. Children from that point of time till present day have been isolated in a world of their own in the form of schools, hospital wings and areas for their free time: playgrounds. As Eriksen (1985) put it,

..... children were separated from the adult world as a result of a combination of social changes: the passage of child labour laws; the growth of public education, with the later extension of the school year from four or five months to nine months; and the increasing prosperity of the middle and lower classes in the nineteenth century. Instead of working for wages, children were given the "job" of getting an education. Eventually, they were given more of the leisure time that today is a privilege of attending school,..... Thus, the need for a place for children to play developed only after the freeing of children from labour. (p.9)

Changes in planning and the provision for the increase in free time children have did not follow. Thus, children were provided with great amounts of time and a minimal of responsibility, and as cities grew and technology advance the child (and human beings, some would argue) became their victim. Perhaps the most significant period in open space and children's play provision is that following the second World War. The destruction of large areas of many of the European cities and the social and technological changes that took place were to play a very important and significant role in the existing situation we see around us today. From the many changes that occurred during the period, three main points have probably played the most significant role in affecting the planning and design of children's play environments.

- A) Planning and design standards.
- B) The lack of an interdisciplinary approach to planning and design.
- C) Planning agencies succumbing to political and financial pressures.

#### **A) Planning and design standards.**

The period after the second World War witnessed considerable developments in the Western city and indeed throughout the world. The relationship between the built and the open was also to witness a development in form and ideology. Preceding the war, open



space provision was, in the most part, under the authority of park commissions and authorities and the practice was one of providing large parks to the urban fabric (Cranz 1982, Walker and Duffield 1983). However, after the war the situation changed considerably. Land-uses were in competition for the little land that was available in the inner cities. Planning agencies that by this time have blossomed into a fully bureaucratic body, had to provide for the population in terms of housing and the other services that people came to expect after many years of hardship and tolerance due to the war (Cranz 1982). In addition, mobility brought about by the increase in automobile ownership coupled with the attitude that people had concerning the city as being bad or unpleasant acted as a catalyst for the development of sub-urban areas that were characterised by low density developments (Lozano 1990). In an effort to control all the developments that were taking place rapidly, planning agencies quickly and decisively made developers conform to planning and design standards concerning many issues of development, amongst which was the amount of open space any given development is to have (Broadbent 1990).

Although open space had become an integral part of the urban fabric, in many ways, it still acted as "lungs to the city". The planning standards laid down were little more than ensuring a certain amount of open space is provided for controlling developments, densities and urban form (Lynch 1981). Some might argue that open spaces throughout urban areas were areas where the inhabitants could engage in recreational activities. However, upon closer examination, they do not. For example, Cranz (1982) points out that recreation in the nineteenth century had been one of a passive nature with walks and coming in touch with nature was a rewarding recreational experience. However, since the early decades of the twentieth century, recreation has slowly become more vigorous in nature. While it is true that nature walks and coming in touch with nature is still a very rewarding experience, the new generations tend to also desire "bunggy jumping", ski-diving, snow boarding and other activities which cannot be anything but demanding and active. Open spaces and the standards laid down for them did not and still do not cater for the social changes that are occurring. Thus, open spaces have, more or less, failed in providing anything more than a picturesque area that is easily maintained (Cranz 1982). In addition, the standards did not consider local conditions nor people's desires and needs, as Cranz (1982) states,

The real design innovation of the era was the standardisation of all the old elements into a basic municipal package, one that was used repeatedly, without regard to local site conditions. Parts, materials, and procedures were reduced to a minimum..... As landscape architect Garrett Eckbo said in 1962, ".... American park design is more limited, conventional, stereotyped, repetitive, and resistant to innovation in form than any other area of design." (p.122)

Children's play areas were also to have the same fate. Planning standards ensured that a certain amount of space is provided for children's play, and planning agencies did not



venture much beyond that. Swings, slides and other conventional playground equipment that were present in the nineteenth century (although now they are constructed of new materials) were scattered on hard surfaces and called "playgrounds" (Eriksen 1985). Little attention was paid to what children wanted or indeed needed to play and enjoy playing, nor was attention paid to other factor of planning and design that ultimately decided the way and extent that these "playgrounds" were used. As Eriksen (1985) put it,

....., the trend continued toward standardised equipment, hard and flat surfaces, and easy, inexpensive maintenance. These playgrounds are still with us everywhere, even though they are dangerous and ignore many aspects of a child's learning and development. (p.16)

### **B) Lack of Interdisciplinary approach to planning and design.**

While planning and design standards played a major role in making children's play environments in cities an issue of planning and design concern, they were not the sole contributor to the problem. Children's play as a behaviour is a very complex and varied behaviour and to fully understand it, as will be illustrated in chapter II, will require some effort. Planning and designing environments that cater for this behaviour is probably more complex. The complexity lies in understanding what play is and then understanding what can be provided in the environment to suite children's desires, needs, in terms of development. The majority of professionals that are in charge of planning and designing children's play environments do not fully understand the extent nor the nature of the behaviour they are to provide for (Cooper 1970). The lack of this vital understanding is attributed to many reasons that will be examined in some detail in chapters III and VIII. However, the main reason professionals planning and designing play environments have failed, in the most part, when providing for children's play is one of education.

The education of the professional designer or planner means to provide the individual with as many design problems and situations as possible as to ensure the individual is capable of tackling real planning and design problems in reality. Furthermore, the professional gains most of this problem solving capability in design studios where instructors offer the student as much knowledge as possible. However, the time and the possibility offered to the student to learn from direct contact with social scientists, psychologists and other disciplines that affect environmental planning and design is very limited (Broadbent 1988). As such, the student graduates with a set of ideas and methods to tackle a problem that is deficient in terms of viewing a problem from different perspectives. The working world might provide the new professional with some more insight on problem solving in terms of planning and design, however the likelihood of the professional becoming integrated into the system where meeting standards and deadlines are more important than the quality of the solutions put forth is likely to be the winner. In addition, planning agencies and the professionals that work within them come from the same background with, more or less,



the same type of education and as such, cannot really contribute to improving the submitted plans and designs. Thus, children's play environments, along with planning and design in general, suffer from a more thorough approach to provision which stems from the approach followed by the majority in planning and design educational establishments.

The few professionals that have gone on and considered the problems with children's play environments and academics that have put down suggestions on improving the quality of provision face another problem: reluctance on the part of planning agencies to adopt the suggestions. This reluctance is not because planning agencies and the people that work in them are evil, it is due to factors and pressures that are exerted on these agencies in many forms and by many people.

### **C) The political and financial pressures.**

New approaches to the planning and design of children's play environments have been around for some time. For example, adventure playground (See Appendix III) were first established in the late 40s and early 50s, yet there are so few of them that in a city the size of London there are no more adventure playground than the number of fingers we have. The question then is: why are planning agencies in cities reluctant to improve the situation? The answer to such a question can be attributed to four main reasons.

- 1) The known is safer than the unknown.
- 2) The funding for such changes (especially in terms of maintenance) is considerable.
- 3) The desire for "neat" and "tidy" environments by the community and planning agencies.
- 4) The fear of insurance cost and liability.

Changing the present practice of children's play environment planning and design requires courage and carries with it a certain degree of risk. A risk most planning agencies are not willing to take (Wilkinson 1980). Furthermore, an effective change, one which will provide for better play environments, will require an interdisciplinary approach; and as was mentioned earlier this does not exist often enough to make an impact.

Another reason hampering the change is the lack of financial resources available to most planning agencies to undertake new play provision programs. The pressures exerted on the financial resources of planning agencies stems from the need to provide more tangible services such as infra-structure. As Wilkinson (1980) explains,

This lack of money for play and recreation opportunities is not, however, limited solely to the Third World. In these times of inflation and economic uncertainty, most public agencies in the developed countries are sorely pressed for funds. They are constantly being required to justify programmes or facilities. One common result is that they are forced into reinforcing their dependence on activities which



have been traditionally successful. Quite simply, the economics of government do not encourage innovation. The problem is more severe for play and recreation facilities and programmes than for other government services (e.g. sewers, transportation) because play and recreation do not lend themselves to cost-benefit analysis. (p.13)

In addition to the problems of finding resources and taking a fresh and new approach to planning and provision towards play environments, planning officials have to contend with the ideal held by most adults in the community that play areas must be neat and hygienic. Parents and adults in general tend to forget their own childhood and the nature of play. Play is an expressive behaviour (i.e. the rewards lie in the means rather than the ends) and as such, will require an environment in which a child can express it. Furthermore, one of the principle concepts of play is for the child to come in touch with nature in the form of water, sand, dirt, trees and other messy things (See Chapters II and III). However, parents, and the community at large, tend to desire play areas that are sterile and devoid of the things that playing children want. Instead, they prefer playgrounds that are clean and have the conventional activities and equipment (e.g. swing, slides, sea-saws). The result is seen all around us in the form of playgrounds that are very colourful, clean and unused or misused by children. Parents then start complaining about the lack of play areas and more of the same is provided: the endless provision of the same "hygienic" playgrounds without stopping and figuring out the real problem: children do not want these playgrounds and the experiences (or lack of experiences) they offer!

All these pressures and issues that planning agencies must contend with in relation to play areas provision makes their job a very difficult and an unenviable one. Unfortunately, they must also be concerned with the problem of insurance companies and legal issues. For some unknown reason insurance costs tend to either rise or companies will not insure at all when play areas that are more varied in nature and challenging to the child are provided although accidents in these types of play areas tend to be less than in conventional playgrounds (Cooper 1970, Moore 1989) (See Chapter III and Appendix III). However, the fault does not rest entirely on insurance establishments but must also be shared by parents. Accidents will happen, whether the child is playing at home or in a playground. It is true that safety should be one of the main concerns of play environment provision and design, however, to make safety the sole concern in play environment designs is only robbing the child of experiences and adventures that aid him in development. Parents, lawyers, planning officials, insurance companies and society must recognise this and they must also get their priorities right.

Thus, planning and design standards, the lack of an interdisciplinary approach to planning and design and the pressures exerted on the planning agencies are the main forces at play in the poor nature of the existing situation of children's play environment provision.



However, there are two more factors which have influenced the nature of play provision in cities.

- 1) The dichotomy between work and play.
- 2) The confusion that exists between play, leisure and recreation

The dichotomy between play and work is one which has its roots in the puritan ideology and has hampered people's perception and attitude towards play since the seventeenth century (See Chapter II). The general notion that play is a frivolous activity and has no significant role in the life of the child besides offering him an outlet for energy. Play is not viewed as having a significant role in the development of the child and only offers the child some kind of recreation. This attitude has influenced the nature of provision as well and is manifested in play areas with flat barren surfaces for children to "blow off steam". Work in the form of school achievements or play with a purpose (e.g. sports and organised activities) have been emphasised, during the twentieth century, greatly at the cost of play behaviour or activities that do not have a result or end product. Play for the sake of playing is still not a very popular attitude in the world and play provision will not change unless the attitude of people towards this activity changes.

Another problem facing play environment provision is that of confusing the activity with other activities, namely leisure and recreation. Play to the child is a necessity and the environment where a child lives, learns and walks should reflect this need. However, the situation that is prevalent in cities today is one where children are fenced into areas and spaces where they can learn and others that cater for their play. This categorising of spaces as school, street and playground is a land-use and adult conception. The child, in reality, plays everywhere and anywhere, he does not recognise the categorisation placed on space. Furthermore, play should be allowed and encouraged to take place in all areas of the environment, especially near a child's home. However, the built environment is continually making it difficult for the child to play in most areas. The areas that are provided for play, to increase the problem more, are considered by the space categorising concept as recreational or leisure spaces. The play of the child, unlike that of the adult, is not a leisure or recreational activity, it is a necessity. The distinction between these activities must be realised by planning officials and thereafter conveyed to the public to ensure such a confusion does not occur.

Most of the problems faced by play environment provision, unfortunately, exist in Jeddah today (See Chapter IV). As a matter of fact, the problems, with little differences, exist in most cities throughout the world. The city has become the prevalent type of human settlements today especially in the developing world (Holme and Massie 1970, Wilkinson 1980). As was mentioned earlier, third world nations have looked towards the West for ways and knowledge to develop their own nations. While it was not the intent of Western

nations to provide problems as well as knowledge, inevitably the problems that Western cities and development face have been handed down to the less developed nations. The situation and the problems children face in the city and the problems their play faces now has become an international one. So much so that the United Nations and other international agencies concerned with children's welfare have addressed the problem on several occasions (Wilkinson 1980). Children and their play in Jeddah today, as will be illustrated throughout this thesis and especially in chapter IV, face a great deal of problems. These problems are in many ways unique in terms of the social and environmental constraints and situations that affect the topic of play provision in the city of Jeddah.



## **I.C. The Aim of The Research**

The objective of this research could be viewed as follows: First, to consider a wide range of the information regarding children's play environments, and evaluate the relevancy of that for the Saudi cultural and physical environments. Second, to establish an approach to the development of children's play environment guidelines for the city of Jeddah. Ultimately, this research will aid in the establishment of planning and design guidelines for children's play environments in the city of Jeddah. Furthermore, with more research and effort, this research could be the starting point for establishing planning and design guidelines for children's play environments in Saudi cities. At this point it is important to distinguish to the reader the differences between planning standards and planning guidelines, especially after condemning planning standards in the previous section.

Standards could be seen as a set of laws to be followed in the plans and designs in order to conform with an established or accepted model.

Guidelines are a rough measure to provide a reference and can be (and indeed should be) altered and modified in order to adhere to local conditions and desires.

### **I) Considering the Information:**

The issue of the planning and design of children's play areas is a very complex one. The issues involved in understanding what play, as an activity, is and the nature of its many manifestations are complex. Furthermore, children's play and the provision for the activity is linked to many disciplines including child development, psychology, urban planning and others. Hence, in considering the information regarding children's play environments, a multi-disciplinary approach best served the research. In this research, the majority of information that the reader will come across is mainly from two disciplines:

Child/Developmental Psychology and Play Area Planning and Design.

The inclusion of developmental psychology in the information reviewed is due to the need to develop an understanding of what the child needs to support proper play: to identify the cause of the failure of contemporary play areas. Perhaps their failure is due to a lack of understanding of the activity of children's play, its meaning, manifestations, purpose and materials. It is mainly for this purpose that developmental psychology was reviewed. It is only by understanding these needs of the child that a planner or designer can come to grasp the needs of a child in the different stages of childhood (Chapter II). Rarely do designers and planners have expertise and training in the field of developmental psychology and often times planners and designers rely on memories of their own childhood and conceptions of what play should be which form the basis for the planning and design of children's play environments in cities. Such an approach to planning and design of children's play areas is not acceptable nor is it desirable. Hence, the review of the information available in child development is included to enlighten and improve the



planning and design approach.

The second portion of the information examined in this research is the existing literature regarding the planning and design of children's play areas. There are many individual planners and planning agencies that have researched children's play in the urban environment. It is hoped the review of this information will shed some light on the planning and design of children's play in terms of requirements and issues involved in provision (Chapter III). Furthermore, this information is vital in attempting to evaluate its relevance to the values Jeddah's society holds to be true in their children's play environments. The examination of the information is also directed at trying to establish some of the advances in children's play provision in more developed nations and cities.

Within this review on the planning and design of children's play environments, two parallel subject areas will also be explored. First, the religion of Islam's view(s) on children's play (Appendix I). This review is due to the significant role the religion plays in the moulding of the Saudi society's beliefs, attitudes and general life-style. Without understanding Islam and its views on the different subject matters, one cannot hope to understand the Muslim and/or Saudi society. Hence, Islam's view(s) on children's play is of significant importance to this research. The second subject that was concisely reviewed was the effects of television on children (Appendix II). The purpose for this review stems from the fact that television viewing is the principal activity children engage in while indoors (M.o.H.L.G. 1970, Murray 1976, Wilkinson 1980). While in this research, interests lies predominantly with the outdoor activities of children, it is important to realise the possible effects of forcing the child to rely on television as a substitute for play.

While there are many other fields and subjects that could have been reviewed in order to arrive at a plan of action for the establishment of planning and design guidelines for children's play areas in urban settings, it is beyond the time and manpower allowances of this research. For example when examining children's play areas one must examine the urban fabric in terms of physical and social structures. Furthermore, one must view how society interacts with the environment and visa-versa. There is also the need to look at the more practical considerations of political jurisdiction, maintenance and expansion or change in the future. With each one of these issues, considerations must be paid to whether or not the existing situation is best suited to that society or whether there is a need for change to something better, and one must then weigh and consider the effects that change may force and allow for "safety valves" in case the change is undesirable. Hence, the subject is a complex one and can never be treated in a trivial manner. In addition, the information required to reach a valuable end result requires the efforts of many. Having said that, it is the aim of this research to take the first step in a long journey towards that sizeable goal of developing planning and design guidelines for children's play



environments that function well and are enjoyed by the entire society/community.

## **II) Establishing an approach:**

The second major aim of this research is to establish an approach to the development of children's play environment guidelines in Jeddah. This is important for two reasons: First, in establishing an approach, the many disciplines and issues concerned will be identified and synthesised in a way as to allow planners and designers have access to a conceptual base on which planning and design decisions can be made. Second, an approach could aid in helping students of environmental design realise, from an early stage in their careers, what is involved in planning and designing children's play areas. As Perin (1970) points out, the institutions and the methods followed in most educational establishments are inadequate in providing the student (future planner and/or designer) with an interdisciplinary perspective to solving problems. Although reading lists are provided by instructors it is left to the student to extrapolate the significance of the information and make use of it in the design problem. Furthermore, as Greenbie (1976) argues, the student does not really know the philosophical basis which each respective discipline follows. Hence, it is hoped that in establishing an approach, students will come to realise the issues, the conceptual basis and philosophies involved.

It is beyond the scope of this research project to provide a final approach, however it is hoped that the research will aid in the establishment of an approach which will act as a foundation or skeleton frame on which the bricks of improvement can be placed.

Furthermore, some of the suggestions may not serve some societies and for that matter not all of Saudi society. The suggestions found here deal with the city of Jeddah, although some suggestions may apply to some other societies, cultures and cities. The applicability of some of the suggestions are perhaps due to the universal truths found in the subject matter rather than the intent of the author, of this fact the reader must be aware.

## **I.D. Achieving The Aims**

The aims of the research as described in section I.C. were achieved by carrying out a literature review (described in section I.C.) and a field survey carried out in Jeddah. The combination of the two has led to the formulation, and hopefully the achievement, of this research project and its aims in a proper manner. While the majority of the information and literature reviewed for this project considered children's play areas and the activity of play in general, for the workings of the research in terms of carrying out the research, a review of research methods was carried out (See Chapter VI). The choice of which method to use in achieving the research aims was made taking into consideration many factors that are to influence the quality of results. For example, the religious factor in Jeddah's society, as mentioned earlier, plays a very significant role not only in the attitudes of people but also



affects the way in which a research is carried out. Other factors that may affect the choice of methods and the way in which they may influence the research are described in greater detail in Chapters IV., V. and VIII.

The field survey carried out for this research consisted mainly of the distribution of a questionnaire to certain groups in Jeddah's society. The questionnaire is discussed in detail in chapter V and its distribution in chapter VI. However, at the present time the point that the questions in the questionnaire were arrived at by careful examination of the literature (Chapters II and III) and the society in which it is to be distributed (Chapter IV).

### **I.E. The Limitations of The Research**

This research like many that preceded it and many that will follow, has limitations. The reader must remember that this research is dealing with a society in a developing country. As such some of the things which are present or are taken for granted in more developed nations are still very hard to come by in a developing nation. Perhaps the most limiting factor to this research is the society and the system of Saudi Arabia. The Saudi society is very much a conservative society with many fundamental Islamic beliefs and traditions still in practice. As such the nature of this research and the data required to carry it out faced many obstacles. For example, interviewing people for some information is not very easily tolerated by the society. Furthermore, some people may view some family issues and information required for this study as being a private matter and as such not of concern to anyone. The bureaucratic system that the country still operates under also did not help in attaining as much information as would have been possible perhaps in another country or system. However, being from the society the author attempted to limit these misgivings to a minimum.

While ideally, the many issues that are connected to the subject matter should all be reviewed in relative depth, the time limit has meant that some issues may have not received as much examination as the author would have wished. Another factor which time may have affected in a negative sense is the method of gathering of information from the public. An ideal situation would have seen information being gathered using different and varied methods in different times to ensure the credibility of the data. Complete reliance on the questionnaire was due to many reasons, in terms of time, the questionnaire offered the best format to carry out the field investigation. An adequate amount of people had to participate in the research to offer any credibility to the responses that are given; and in the time offered to carry out the research, methods such as interviewing the respondents would not have given the wide response base that would allow for any conclusions to have validity. In addition, the time limit made it necessary to focus on a limited range of data gathering techniques; this research should be viewed and reviewed with this point in mind.

and financial. This research, in the time frame allocated for its completion, would have benefited a great deal from team work. One area where the participation of more people in this research project would have been beneficial would have been in their assistance in the distribution and gathering of questionnaires. Furthermore, the possibility of using different research methods (e.g. interviewing some respondents) would have been possible had the research project had more people working on it. As well as people, the research would have benefited from an increase in financial support. An increase in the financial resources would have perhaps aided in acquiring more human resources to aid and improve the research in general. For example, the employment of people to observe different play areas and facilities throughout the city would have given the research a great deal more information on the nature of the problem as well as the problems that exist. Furthermore, increased financial resources might have made tele-observation, with the use of cameras, of key areas such as Jeddah's parks, sea front and some neighbourhood areas possible.

Although this research may have many limitations and misgivings, the author sincerely believes that some valuable information has been gathered and issues discussed throughout this work. As was mentioned before this thesis does not claim to be the final work as far as children's play environments planning and design. On the contrary, this modest attempt is basically an attempt to find a foothold in the subject from which future attempts may benefit. Furthermore, the issues addressed here are those which have a direct influence or bearing on the main subject. However, there are many subjects the reader may argue should have been included. The question here the author believes is not how many issues should be addressed or how would a certain issue effect children's play environments. The main issue remains to be that children's needs and desires are not being satisfied in the present urban environment. Hence, although debate is very beneficial and should be at all times encouraged, the priorities called for at the present time is for action to improve the situation for children. As such the issues dealt with in this research are just that. They are issues that will hopefully lead to action rather than debate.



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## **Chapter II : Play in The Context of Science and Psychology**



## **II.A. Introduction**

In this chapter, play will be discussed. Many questions will hopefully be answered concerning play as an activity. For example, what is play? As Matterson (1989) put it,

If ten people were asked to define *play* they would give ten different answers. Musicians, actors, and professional sports players play for a living. Adults play for recreation during leisure time. School teachers send children out to play as a break from the teaching/learning routine of the classroom. A psychiatrist will observe the way a child plays as an aid to diagnosis. Mothers tell children to "stop playing about" when there is a need to hurry. A child spends all morning making a garage for his toys, and when he is called to put his coat on to go shopping says, "but I haven't had time to play with it yet". All these uses of the word *play* mean something quite different from each other. (p.3)

Therefore, one of the purposes of this chapter is to define play (if possible) for the purposes of this research (i.e. play environment provision in the urban environment).

Another concern of this chapter is to investigate whether or not play is an essential activity or behaviour for the development of the individual/child. For prior to embarking on provision of play environments, that may cost individuals and/or society a large sum of money, it is crucial to understand whether or not the investment will produce a return; in the form of a more completely developed individual. Connected to the provision of play environments, is the topic of what forms or types of play will provide this wholesome development of the individual. An understanding of the types of play will provide a basis from which an environment supportive of play and development may be develop.

Hence, this chapter is divided into three main parts. First, a concise overview of play theories. This section will look at how people have defined play, the purposes it serves, and other issues will be provided. The play theories to be examined are important in that they have influenced people's opinions and attitudes towards play through the ages. Furthermore, the types of play or the forms the activity takes are derived from these theories of play. In the second section of the chapter, the benefits of play to the development of the child will be reviewed. Finally, the third section will attempt at defining play for the purposes of play environment provision in urban areas. Having explained the various parts that make the chapter, the time has come to view the behaviour that has been a trait of humans and animals alike - PLAY.

## **II.B. The Child Enters Science**

Preceding an examination of play theories, it might prove beneficial to examine some of the factors and issues which led to the formulation of these theories. Through this investigation it is hoped to clarify some of the latter discussions concerning play and play theories. To simplify the investigation of the sequence of events which led to today's understanding and concepts of play, the search has been divided into four main periods. The first being Early Civilisations, followed by The Christian Era, thereafter The Renaissance Period and finally The Post-Seventeenth Century era. The overview is mainly concerned with western society perspectives, hence viewpoints that may have existed in other societies at any of the eras that will be discussed are not included. A summary of the four periods, their main contributions to the western conceptions of children and their play, and major figures to bring about these conceptions is provided at the end of the review (See Table II.B.1).

### **II.B.i. Early Civilisations**

From the earliest civilisations the problems connected with raising children have received the attention of philosophers, parents, and people in general. Attention has concentrated on the best method to bring them up, educate them, and the general handling of them. In all the ancient cultures the child was viewed as a being lacking in self control and helpless, relying on adults for food, shelter, and life maintenance (Borstelmann 1983). The Greeks viewed children as symbols of affection, representing the future of any society. Greek philosophers such as Aristotle and Plato maintained that children should have access to means by which they can develop their physical attributes, and that through play and the free use of their limbs this goal may be accomplished. In addition, the learning of adult roles/behaviours and occupations may be encouraged through play (Borstelmann 1983). Aristotle and Plato, however were absorbed by the dilemma of how much control should be placed on the child and how much freedom he should enjoy. Their views were to affect children and play in their societies and societies to follow. Aristotle's point of view was,

[self-control] is the aim of our control of children, our not leaving them free before we have established, so to speak, a constitutional government within them and, by fostering the best element in them with the aid of the like in ourselves, have set up in its place a similar guardian and rules of the child, and then, and only then, we leave it free. (Borstelmann 1983; p.6)

Plato also had points to make in formulating the "government within", he wrote,

while spoiling of children makes their tempers fretful, peevish, and easily upset by mere trifles, the contrary treatment, the severe and unqualified tyranny which makes its victims spiritless, servile, and sullen, renders them unfit for the intercourse of domestic and civil life. (Borstelmann 1983; p.6)

Thus the child was seen as a small member of society to be shaped by that society to suit



its requirements and standards so as to become a competent member in it. The child was not viewed from the perspective that it was a being with its own needs and desires. Nonetheless, the contributions of the Greeks, within the interest of this research, could be summed up in the following points.

- \_ The child is a helpless creature depending on adults for maintenance.
- \_ The child will acquire standards and knowledge of the society in which it was brought up.
- \_ Play is the means by which children develop physically.
- \_ Through play a child will conceive and perceive the skills of adult roles.

The Romans adapted most of the philosophy of the Greeks and hence there is little difference in the perception of the child and its attributes, although the Romans tended to stress education in its formal sense more (Borstelmann 1983).

### **II.B.ii. The Christian Era (Medieval Europe)**

As Christianity became the dominant religion and ideology in Europe, the concept of play and children changed to be encompassed in the new way of thinking. In these times the child was viewed within the context of a soul to be saved from evil, and humanely treated, as Borstelmann (1983) put it,

Throughout the Middle Ages the church was active in fostering more humane ideals and protective care of ..... children, all in the services of a concept of the child as an object of theological importance, a soul to be saved for the glory of God. (p.10)

However, these ideals were very different from daily parental and societal treatment of children, Borstelmann (1983) points out that children still had to cope with accepted practices of Medieval European societies. Abortion, sale and abandonment of children, and infanticide were still evident in those times. Childhood in general was considered as unimportant - a phase the youngster had to pass through to get to what was important, work; and as soon as the child was able to carry out simple tasks (about the age of seven) he was put to work regardless of social class (Borstelmann 1983).

Play, on the other hand, was looked down upon by the church. Stone (1971) states that "[the church] took a dim view of play, unless it followed the performance of work, and this view was subsequently adopted by police and other authorities"(p.6). This dim view concerning play is explained by Rubin et.al.(1983), who point out that the church at the time "dichotomised work and play, and passed evaluative judgement on the activities; work was considered to be an extension of God's work, while play was considered to be the province of the devil,"(p.697-8). This point of view prevailed for several centuries and



unfortunately in certain cultures can still be found today. Perhaps one of the main reasons hampering more play area provision is the dichotomy between play and work (Wilkinson 1980).

Hence the contribution to play, and the understanding of the child in Middle Aged western societies is very minimal and somewhat negative. Nonetheless the ideas and concepts created in this period had a large impact on subsequent formulations of theories, and viewpoints. The abstraction from this period in the evolution of thought concerning children and play may be summarised as follows.

- \_ The child is a creature with a soul that is to be saved from evil.
- \_ Childhood is an unimportant phase in the development of the person, its significance lies only in that it is a period of time hindering work.
- \_ Play was considered the opposite of work, which was the extension of God's work, and therefore play was evil.

### **II.B.III. The Age of The Renaissance**

From the fourteenth century onward, major political, economic, and ideological changes occurred in Europe (western world) which have changed the perception regarding play and children for all ages to come (Borstelmann 1983). For the sake of simplifying, the forces that were to bring about the radical changes from Medieval times, could be as Borstelmann (1983) pointed out, attributed to two major factors.

First, the emergence of a middle class of tradesmen which led to the formation of the nuclear family. The children of this class were to gain economic and political status through education. Subsequently an increase in the quantity of schools was witnessed. As a by-product, the period of childhood accepted by society became longer. Even aristocrats of the age accepted the education of their children, whereas before they held to the belief of education as dishonouring or offensive. Furthermore, the popular understanding or belief of the time was poverty is the cause of wickedness. This belief led to child labour for the lower income classes in an effort to improve the state of poverty as well as the overall economy of the state/nation. Besides the educational and spiritual efforts being made to improve children's lives, their physical well-being was also of great concern. Many manuals and literary material dealing with child-care were published and widely distributed.

Second, the separation of church and state was to assume a major role in how children, childhood, and play were to be viewed. The separation led to individuals deciding for themselves what was best through rational thinking, knowledge, and understanding of the universe. The work of scientists of the era slowly but surely replaced the beliefs of the

supernatural with the belief of rationale thinking and reason. Hence, the opportunity arose for theories to develop regarding children and their attributes to make an impact on society.

Although children were being educated, provided with physical care, and the childhood period increased in time; Cohen (1987) points out that even as late as the seventeenth century the disciplinarian attitude of the Puritan thinkers of the time was very much dominant and the causality was play. As Cohen (1987) put it, "throughout the seventeenth century, play was not seen either as valuable or as a topic for debate except for the occasional Puritan blast against sinful indiscipline"(p.21). Main points to come out of this era are as follows.

- \_ Education of children in the upper social classes meant that childhood was becoming elongated.
- \_ Child labour for the lower classes meant children were exposed to the hardships of the workplace.
- \_ Major changes in economy, ideology, family structures, etc. slowly leading to an improvement in children's physical care.
- \_ Play was viewed as lack of proper disciplinary upbringing by the Puritans.
- \_ Rationale and knowledge becoming a force in the thinking of the age.

#### **II.B.IV. Post-Seventeenth Century**

With the ideal conditions for theorising about play created during the Renaissance, many individuals were to emerge as influential providers of how children should be treated and educated, at the same time they were to establish the concept of a child as an individual with its own needs and desires. Three men, in particular, were to provide the basis from which others developed their attitudes and/or thoughts on play, education, and the study of children and their attributes. These men were John Locke, Jean-Jacque Rousseau, and Friedrich Von Schiller (Borstelmann 1983; Cohen 1987).

John Locke's main contribution was in the educational and child-rearing fields (Borstelmann 1983). Locke was the more influential of the three men in their time. The reason being his alliance in thought with the Puritans (Cohen 1987). Borstelmann (1983) indicates how well Locke's ideas were distributed when he states that Locke's book Thoughts On Education was "among the scant volumes belonging to persons who had but a single book shelf"(p.23). Locke's main thoughts, according to Borstelmann (1983), could be summarised in the following points.

- a) Establishment of firm body and mind habits as early as possible in children. The parents had a major responsibility as role models for the child's early acquisition of



these habits.

b) Parental authority placed upon the child by the combination of freedom/reward and punishment/discipline. Over time the relationship between child and parents should move from one of authority to one of friendship. Locke states,

Fear and awe ought to give you the first power over their minds, and love and friendship in riper years to hold it.(Borstelmann 1983; p.20)

However Locke did not approve of physical punishment. To him physical punishment served only in a negative way.

c) The child was to be treated as a developing human being, gaining knowledge and experience in time. Children should be treated according to their ability of understanding. Discipline was to be gained by a psychological manner.

Concerning play, however, Locke took the general attitude of the public of the time. Cohen (1987) points out that Locke saw play as a meaningless and silly activity. In Locke's words,

I doubt not but one great reason why many children abandon themselves wholly to silly play, and spend all their time trifling, is because they have found their curiosity balked and their enquiries neglected. (Cohen 1987; p.21)

Rousseau, on the other hand, was more of a radical ideologist (Borstelmann 1983; Cohen 1987). His major points on children and their rearing, according to Borstelmann (1983), are summarised below.

a) The child was innately good, and society (environment) is responsible for its corruption, and only society can salvage a child from wrong.

b) Discipline and freedom were not the best for the individual child, but rather for what the society wanted and accepted as a whole. The child is to gain knowledge through direct experience, but being unable to solve problems of adaptation to the situation/environment, a tutor, lawgiver, provider of information is needed to guide the child.

c) Before the age of twelve the child is incapable of true reason or concept formulation.

d) The child's behaviour is neither deficient nor is it pre-adult, but rather the correct behaviour for the child in its developmental stage. Where the child is constantly developing to compromise between its own needs and desires and the needs and desires of the ambient world.

Concerning play Rousseau took a very revolutionary view for that time (Cohen 1987). He criticised those who were trying, as he put it, to "rob these little innocents of the joys that pass so quickly"(Cohen 1987; p.22). Unlike his predecessors, Rousseau viewed play as

servicing a function as noble as work, reading, and writing. He says,

We must never forget all this should be play, the easy and voluntary control of movement which nature demands of them, the art of varying their games to make them pleasanter without the least bit of constraint. To a child of 10 or 12, work or play are all one.....[provided both are carried out].....with the charm of freedom. (Cohen 1987; p.22)

The third man, Schiller, viewed play in the context of a theory he had formulated concerning the development of the human being. In this theory he contends that reality ties the individual down, and in this case development occurs in a fragmented fashion (Cohen 1987). Play, for Schiller, provided an escape from reality and therefore contributes to full development. Cohen (1987) explains Schiller's views as follows,

Through play, Schiller said, "reality loses its seriousness." This could only happen once there was enough economic progress for human beings not to have to slave to feed, clothe and house themselves. But when there was enough general wealth for that to happen, play could make us whole and unserious. The aesthetic impulse - for Schiller saw play as being closely linked to beauty - could transform all our lives. It would make it possible to harmonise two opposing impulses - that of reason and that of sensuousness. (p.23)

Cohen (1987) concludes that Schiller provided a compromise in what play had to offer to man kind. As Cohen (1987) says,

Play did not lead to chaos and self-indulgence. It was a means for human beings to express their desire for beauty, for enjoyment, for pleasure and, through *having* those experiences, to become more whole. (p.23)

These men with their new ideologies and attitudes on play and children influenced the early educators; namely Friedrich Froebel and Maria Montessori (Cohen 1987; Curtis 1986). However, these early educators compromised the ideas to suit Puritan concepts of proper child-rearing. As Cohen (1987) put it, "they turned play from a natural activity into a purposive one"(p.23). In doing so they added considerably to the ideas on play and children. Froebel, the founder of the Kindergarten movement, viewed play as serving a developmental function. He argues,

Play is never trivial; it is serious and deeply significant..... The focus of play at this age [kindergarten age] is the core of the whole future, since in them the entire person is developed and revealed in the most sensitive qualities of his mind. (Curtis 1986; p.5-6)

Nonetheless, to make his points acceptable to the Puritan thought of the times, Froebel did not believe or say that play activities or types be left to the child to decide. On the contrary, he said,

Just because he learns through play, a child learns willingly and learns much. So play, like learning and activity has its own definite period of time and it must not be left out of the elementary curriculum. The educator must not only guide the play, since it is so very important, but he must also teach this sort of play in the first instance. (Curtis 1986; p.6)



Montessori, on the other hand, viewed play through stricter eyes (Curtis 1986). Although she believed that play was a vehicle for education, pretend or imaginative play was viewed as of little value since it did not provide adaptive learning (Curtis 1986). Montessori even argued that imaginative play, fairy tales, and fantasies were the enemy of the development of the child's imagination. As she put it,

We, however, suppose that we are developing the imagination of children by making them accept fantastic things as realities. Thus, for instance, in Latin countries, Christmas is personified by an ugly woman, the Befana, who comes through the walls and down the chimneys,..... In Anglo-Saxon countries, on the other hand, Christmas is an old man covered with snow who carries a huge basket..... But how can the imagination of children be developed by what is, on the contrary, the fruit of our imagination? It is we who imagine, not they; they *believe*, they do not imagine. (Cohen 1987; p.28)

As rationale became more and more dominant in thinking, and many points of view on play and children were being proposed; one more element was to contribute to today's understanding of play in western cultures. The Theory of Evolution by Charles Darwin influenced the establishment of scientific fields dealing with the study of children and their characteristics/qualities (e.g. Child Psychology) more than any other single factor.

Borstelmann (1983) states,

Indicative of the full force of evolutionary concepts about the child is the realisation that the broad spectrum of interests and theories among this diversity of thinkers all bear the mark of Darwinian origins. (p.35)

New scientific fields concerned with children and play were established on the principle that "humans are to be understood by the study of their origins in nature and in the child."(Borstelmann 1983; p.34). The child in the Post-Darwinian era was no longer an immature adult, a symbol of affection, nor linked with the supernatural. The child truly entered the domain of science, and parents aiming to provide the most advanced methods of child-rearing and care, took the advice of the knowledgeable experts, "the child had become a home laboratory experiment for the best scientific advice"(Borstelmann 1983; P.31). Hence the study of children and their attributes became a serious matter, serious enough to be examined by Psychologists, Biologists, and other scientific disciplines.

Although in future centuries or eras, play theories/concepts were to develop further, these early figures discussed briefly above still influence people dealing with children, their education, and their play in western countries (Borstelmann 1983). To summarise the main ideas/concepts to arise from the Post-Seventeenth Century period:

- \_ The child was seen as a developing person with his own desires and needs.
- \_ Play provided the complete development of a person; in the physical as well as

the mental abilities.

\_ Play used as a vehicle for education, hence justifying play to the Puritan/disciplinarian educators and society.

\_ The child was seen as the link in man's evolution. If the intention is to understand mankind (adults) the child must be scientifically studied.

\_ Rationale and reason in parents' thinking, provided 'specialists' (e.g. educators, scientists, philosophers) with access to the realms of family affairs. For parents looked to these specialists to gain answers regarding the best (most recent techniques/ideas) in child care and child-rearing.

Through the brief review of factors leading to the more recent thoughts of play and children, it is important to realise that people die, but thoughts never do. The point is, while there are some thoughts that have evolved and changed with the passing of time, the pace at which the average person's attitudes and thoughts change are much slower. Ideas and attitudes are championed by a few members of any society. The time that a certain idea and attitude percolates from those few to the general public is great. Furthermore, attitude change regarding something that is very well rooted in a society is very difficult to achieve. For example, as was mentioned before the dichotomy that exists between work and play, which was born and became well established in the medieval era is still evident today, although to a lesser degree. Hence, some of the issues and beliefs discussed in the times of old are still evident not only in western societies but throughout the world. The reader may want to keep this point in mind in latter discussions on children and play.



Period/Era	Major Viewpoints on Children/Play	Major Figures to Influence Views
Early Civilisations.	i) Child is helpless. ii) Play develops child's physique. iii) Play is a vehicle to acquire knowledge of adult roles/occupations. iv) Child is shaped by society.	Aristotle Plato
The Christian Era.	i) The child's soul to be saved from evil. ii) Childhood is insignificant in development, and delays work. iii) Play opposite to work, work is good therefore play is evil.	Christian (church) and Medieval ideology.
The Renaissance.	i) Education for the upper classes meant a prolonged childhood. ii) Child labour exposed children to the hardships of the workplace. iii) Changes in the economy, family structure and ideology slowly led to improvements in child-care. iv) Puritans viewed play as lack of discipline/improper child-rearing. v) Rationale and knowledge (enlightenment) becoming a force in the era's thinking.	Enlightenment and Puritan thinking.
Post-Seventeenth Century.	i) The child is a developing person with own desires and needs. ii) Play aids in complete development of an individual, both mentally and physically. iii) Play is an educational tool. iv) The child is a creature to be studied in order to be understood. v) Child care and rearing to be undertaken upon scientific advice. vi) Scientists, educators, and philosophers entered the domain of 'family business'.	J. Locke J. Rousseau F. Schiller F. Froebel M. Montessori C. Darwin and Evolutionary Theory development.

**Table II.B.1. A summary of Historical Points of View on Children and Play.**

## **II.C. Classical Theories of Play**

There are four classic theories of play which date back to the period of World War I. Whilst they are, as Gilmore (1971) points out, "concerned only with the antecedents of play and with the inferred purposes of play; these theories regard the specific content of play as irrelevant"(p.312), they played an important role shaping modern theories and general opinions regarding play, as well as play environments. This point is made very clear by McLellan (1970) when she states, "in the newer theories there is embodied a certain amount from older theories and that in order to appreciate the more modern outlook it is necessary to consider what the ...[early writers]... had to contribute"(p.7).

The first theory to appear dealing specifically with play was The Surplus Energy Theory, followed by The Recreational Theory, thereafter The Practice Theory, and finally The Recapitulation Theory. However, these early theories lack significant backing in research and experimentation. In the words of Rubin et.al. (1983)

Support for the classical theories of play remains mixed at best. Indeed, there have been few experimental attempts to confirm their validity. Alternatively, there have been attempts, largely philosophical, to refute a number of them. (p.694)

### **II.C.I. The Surplus Energy Theory**

As the title of the theory indicates, play is explained in terms of energy. More precisely, the theory views play as a means by which a child might use up excess energy. There are two figures which have been attributed to the formulation of this theory, Friedrich Von Schiller and Herbert Spencer (1870s). The former providing the foundation from which the latter erected the theory (Rubin et.al. 1983). Schiller viewed play as a method by which a young being rids itself of the excess energy in aimless activities. He writes,

When hunger no longer torments the lion, and no beast of prey appears for him to fight, then his unemployed powers find another outlet. He fills the wilderness with his wild roars, and his exuberant strength spends itself in aimless activity. (Child 1985; p.2)

From this idea stemmed Spencer's Surplus Energy Theory. The theory states that there is a tendency for humans and animals to be active. In engaging in activities, whether physical or psychological, nerve cells are torn down, and a certain amount of time is required for these cells to repair. When the cells have done so, the tendency to be active is renewed (Rubin et.al. 1983). Furthermore, the higher the species on the phylogenetic scale the more energy it possesses to discharge on non-life supporting activities. It is these activities that can be categorised as play (Rubin et.al. 1983). Hence for Spencer and The Surplus Energy Theory, play represented a non essential activity to "blow off steam" so to speak.



This theory has come under severe attack by child psychologists and others concerned with play. For a start the theory, as Child (1985) points out, only explains physical play. Others have argued that while a super abundance of energy is favourable in promoting play behaviour, it is not essential, nor is it the only factor in promoting play (Child 1985; Gross 1901; Rubin et.al. 1983). Another critique of Spencer's theory is that it contradicts Evolutionary Doctrine. Rubin et.al. (1983) explain by saying,

This doctrine states that particular organismic behavioural attributes will persist and will be elaborated on from generation to generation only if they are advantageous to the species. Since surplus energy forces the organism to engage in superfluous, non-productive enterprises,..... the behaviours would not appear sound in view of evolutionary theory.(p.695)

However impractical the theory may sound, Spencer made an important contribution to the study of play. Primarily, he introduced the idea that different types of play existed (Rubin et.al. 1983). Spencer's explanation for the existence of the various categories of play is that they arise from various innate instincts. Types of play identified by Spencer are as follows.

- i) The superfluous activity of sensory-motor apparatus: play with motor abilities such as running, jumping, etc.; and play which applies the senses such as balancing.
- ii) Artistic-Aesthetic play: such as dramatic/pretend play.
- iii) The co-ordinating powers of games: sports, and activities with rules.
- iv) Mimicry: imitative play.

Theory	Main Thoughts	Criticism of the Theory
The Surplus Energy	i) When the organism has unused energy and life supporting activities have been satisfied, play is the behaviour practised to rid the organism of the energy. ii) There are different types of play caused by different instincts in the organism. These types of play are: _ sensory-motor play; _ aesthetic play; _ games; _ mimicry.	i) Only explains physical play. ii) Energy not the sole nor the only requirement for play generation. iii) Contradicts evolutionary theory, since play serves no advantageous purpose.

Table II.C.i.1. Summary of The Surplus Energy Theory of Play.

### II.C.ii. The Recreational (Relaxation) Theory

While the Surplus Energy Theory described play as a method by which an organism rids itself of energy, the Recreational theory put forth by Moritz Lazarus (1880s), took an opposing explanation of play. The theory suggests that labour and work tire the physical and mental capabilities of the individual; to rest and sleep is only to recuperate partially, full recuperation occurs when the individual engages in activities which allow for an escape from reality and/or reality-based constraints associated with work (Rubin et.al. 1983). This



description of play suggests that:

- i) through play energy (physical and mental) is replenished; and
- ii) play acts as an escape from reality.

Regarding the second point Gross (1901) states,

Through the feeling of freedom, the recreation theory attains a special psychological significance..... As soon as the individual has progressed far enough to realise the seriousness of life the liberty of play signifies to him relief from this pressure. The more earnest is a man's life, the more will he enjoy the refuge afforded by play when he can engage in sham occupations chosen at will, and unencumbered by serious aims. There he is released from the bondage of his work and from all anxieties of life. (p.83)

A latter extension to the theory was to be introduced by G.T. Patrick (1910s). To Patrick work and occupation in the modern era requires new evolutionary behaviour (i.e. hand-eye co-ordination, abstract thought); the mental stress caused by these new behaviours need to be relieved by engaging in basic human activities (i.e. fishing, hunting) and play (Rubin et.al. 1983). However, both men's theories failed to provide an adequate explanation of play in children since children do not work in the sense both men discussed (Child 1985). In addition, children usually play when not tired and adults seek recreation not out of fatigue but out of boredom (Child 1985). Although criticism of the theory is plentiful, perhaps it should be viewed in the light that for the first time play was seen to be beneficial to the individual in some way other than in physical and/or social contexts. In the words of Mclellan (1970), "perhaps one should consider it [play] to be merely another kind of work - a change of occupation"(p.9).

Theory	Main Thoughts	Criticism of the Theory
Recreational Theory	<ul style="list-style-type: none"> <li>i) Work leads to mental and physical fatigue. Through play/recreation recuperation occurs.</li> <li>ii) Hence play/recreation leads to better work.</li> <li>iii) Play is a vehicle for escaping reality.</li> </ul>	<ul style="list-style-type: none"> <li>i) No explanation of children's play.</li> <li>ii) Play/recreation usually occurs independent of fatigue.</li> </ul>

Table II.C.ii.1. Summary of The Recreational Theory of Play.

### II.C.iii. The Practice Theory

Karl Gross at the turn of the century, who was influenced greatly by Darwinian Evolutionary theories, was the first to put forth a theory of play based on biology (Mclellan 1970). The central argument in Gross' theory was that for play to exist over the generations, it must have a function beneficial to the species. According to Gross, this beneficial function was: play is a behaviour by which the young of the species practice emerging instincts so as to allow full mastery of these instincts by the time of maturation (Rubin et.al. 1983). He also calls to attention the fact that the more complex the species, the longer the period of immaturity for the young of these species have greater tasks to master, both in terms of quantity and quality. In explaining the theory, he says,



It is a very widespread opinion that youth, which belong, strictly speaking, only to the higher orders, is for the purpose of giving the animal time to adjust itself to the complicated tasks of its life to which its instincts are not adequate. The higher the attainment required, the longer the time of preparation..... Now we see that youth probably exists for the sake of play. Animals cannot be said to play because they are young and frolicsome, but rather they have a period of youth in order to play; for only by so doing can they supplement the insufficient heredity endowment with individual experience, in the view of the coming tasks of life. (Gross 1896; p.66)

Gross was also to recognise that different play types and activities existed, and that these types of play changed according to development (Rubin et.al. 1983). He defined two major groups under which all play behaviour falls. These categories according to Rubin et.al. (1983) are,

- i) Experimental play: which serves as an aid in personal control and development. This category includes,
  - a) Sensory-motor play,
  - b) Constructive play (play with objects, tools etc.), and
  - c) Higher mental powers of rule governed games.
- ii) Socioeconomic play: which serves the interpersonal relationship development. This category includes,
  - a) Rough-and-tumble play (play fighting, chasing etc.),
  - b) Dramatic play, and
  - c) Social play (play with others).

Gross's Practice theory was "the most comprehensive and formidable early theory of play" (Rubin et.al. 1983; p.696). However, like all theories it has been awarded some criticism. The major criticism of the theory is that "the theory is over dependent on the concept of instincts as the central force in development" (Rubin et.al. 1983; p.697). Another critique is that the theory relies on the assumption of a pre-existing knowledge of responses practised during youthful play that will be called upon in adulthood (Rubin et.al. 1983). Nonetheless, the Practice Theory and its author have made a significant contribution to the study and appreciation of play, especially in the young. Now there was a biological function for play, and this function, in the theory's hypothesis, serves a developmental goal.

Theory	Main Thoughts	Criticism of the Theory
Practice Theory	i) Play is a vehicle for practising instincts that are needed for adulthood. ii) One of youth's main objectives is to cater for play. iii) Experimental play (sensory-motor; constructive; and games play) aids in the development of self control and development. iv) Socioeconomic play (social; rough-and-tumble; and dramatic play) aid in the interpersonal relationship development.	i) Over-reliance on instincts as a means of development. ii) Theory emanates from the assumption that the young knows what responses are needed in adulthood hence they are practised in childhood.

Table II.C.iii.1. Summary of The Practice Theory of Play.

### **II.C.IV. The Recapitulation Theory**

Writing under the shadow of Darwin, G. Stanley Hall in the early 1920s, formulated a theory of play. In this theory a child went through the stages of evolution in his play. Hence giving the name of Recapitulation to the theory. As Hall argued, the child recaptures the history of the species' evolution from animal to man in his play. In his words,

Why is it, this writer asks, that a city man so loves to sit all day and fish? It is because this interest dates back to time immemorial. We are sons of fishermen and early life was by the water's side, and this is our food supply. This explains why certain exercises are more interesting than others. It is because they touch and revive the deep emotions of the race. Thus we see that play is not doing things to be useful later, but it is rehearsing racial history..... Just as psychic states must be lived out up through the grades, so the physical activity must be played off, each in its own time. (Cairns 1983; p.53)

Hall identifies five stages in which the child recapitulates the evolution of man. According to Rubin et.al. (1983), these stages are as follows.

- a) The animal stage: in which the child runs, climbs, swings, and generally exerts a significant amount of energy in gross motor abilities.
- b) The savage stage: in this stage the child engages in activities such as hunting, hide and seek, and rough-and-tumble play.
- c) The nomadic stage: here the child is intrigued by animals giving rise to domestication of them in the form of pets.
- d) The agricultural/patriarchal stage: the child is engaging in activities such as doll play and earth manipulation (i.e. digging).
- e) The tribal stage: the child is participating in social activities such as team games and sports.

The Recapitulation Theory has received numerous criticisms. Amongst these is the very simple fact that children skip earlier occupations (stages), and engage in activities that are supposedly reserved for later stages (Rubin et.al. 1983). The theory also does not define a stage that would account for play with technological devices (i.e. cars, bicycles), nor one which could explain fantasy oriented play (Child 1985 ; Gilmore 1971). However damaging the criticism of the theory may be, it should be pointed out that Hall viewed play as providing a platform from which instincts were expressed. Through this expression of human instincts in play, they will be weakened; allowing more complex behaviours seen in present man to surface (Rubin et.al. 1983). Thus, play is now an expressive behaviour; relieving tension from, and weakening instincts.



Theory	Main Thoughts	Criticism of the theory
Recapitulation Theory	i) Through play a child relives the evolutionary stages of man. ii) The stages of evolution/play are: – gross motor, – rough and tumble, hide and seek, chasing, etc., – play with animals, – earth manipulation and doll play, – games, social play, and sports. iii) Play provides an outlet for instincts, in so doing relieves the tension they possess.	i) Play does not follow sequential stages proposed. ii) No explanation for play with advanced technology objects (trains, cars, etc.). iii) No explanation for types of play that are based on fantasy, mimicry, etc.

Table II.C.iv.1. Summary of The Recapitulation Theory of Play.

The Classical Theories provided a "spring board" for future theorists and their work. While the classical theories of play in the most part lacked a scientific basis, they did establish the idea or fact that play as an activity worthy of thought: Thought concerning the activity itself and the role it plays in an individual's life. Furthermore, the existence of the theories indicated the overwhelming number of people that were increasingly becoming involved in the activity of play, from philosophers to educationalists. The classical theories established the idea that different types of play existed. With general interest in play increasing and the increase in the numbers of disciplines interested in the study of play, advances in the understanding of the activity and further theories were laid down which will be discussed in the next section.

The effects and influences that the classical theories of play have had on the provisions for play are still witnessed today. School yards that are flat and barren are still a common feature in the urban environment, these large spaces devoted for "blowing off steam" are the effect of the surplus energy theory. Furthermore, toys such as carts and animals could be linked to the recapitulation theory of play. The classical theories of play have provided reasons for the existence of this lucrative activity. However, these reasons in the most part try to explain play as having a direct function rather than being an activity serving an end to itself. These are perhaps the major differences between the classical theories of play we have just reviewed and the modern theories of play that we will examine shortly.

## **II.D. Modern Theories Of Play**

The modern theories of play differ from the classical ones in that, as Gilmore (1971) put it,

They invoke explanations of play behaviour based on dynamic factors of individual personality, and they are geared to explaining individual shifts in play behaviour. (p.315)

These modern theories that will be viewed in the coming pages, focus on the development of the child/individual rather than trying to explain why, and for what purpose does play exist. These theories of play are very influential in the definition of play, and attitudes of people towards play as a behaviour in modern western societies. For these theories, unlike their predecessors, possess theoretical validity; this is to say that these theories have been examined by means of research and experiments (Rubin et.al. 1983). There are several modern theories of play. Of these, three are directly relevant to this research. First, the psychoanalytic theories of play, followed by the cognitive theories of play, and finally the theories of play that view play in terms of seeking sensory stimulation.

### **II.D.I. Summary of The Psychoanalytic Theory**

In order to understand the Psychoanalytic (cathartic) theories of play, one must begin by examining its theoretical basis: Sigmund Freud's Psychoanalysis Theory. The main point that Freud's theory suggests is that nothing that an individual does is done by mistake, or as an accident (Lansdown 1984). Instead, behaviour is governed by the processes of the conscious and the unconscious. In the unconscious lay the primitive personality traits which have energy (not in the literal sense) and need to be expressed. However, through socialisation the conscious will suppress or channel these drives, and the manner by which these drives are channelled/suppressed gives rise to the perceived personality of the individual (Lansdown 1984). This continuous struggle between the unconscious and the conscious leads to anxieties and conflicts (Storr 1989).

The process of socialisation, is the controlling mechanism constraining the drives of the unconscious. According to Freud, human instincts need to be satisfied and in satisfying these instincts the human being will gain pleasure. It is this satisfaction that is the basis for Freud's "Pleasure Principle". However, if the instincts are not satisfied a state of anxiety or tension is created in the individual. This anxiety could affect the individual in a minor or serious manner, depending on the drive or instinct that is being suppressed. Thus the process of controlling and satisfying human drives or instincts are the basis of the psychoanalytical approach of psychology (Storr 1989).

In an effort to explain the process of suppression and pleasure gaining, Freud set a theoretical mechanism which illustrates how drives or instincts become behaviours. Freud



names this mechanism **Cathexis**, this mechanism controls the process of inhibiting and/or fulfilling drives. Cathexis, is very much linked to socialisation, for it is through socialising that an individual develops this mechanism and hence personality. The mechanism has many inter-linked parts that work together and/or to control one another. The first of these parts is the **Id**; in the **Id** drives need to be satisfied immediately, Lansdown (1984) gives an example that may clarify the concept of the **Id**.

The young child knows what he wants and he wants it now and he is not prepared to wait..... he will stamp his feet and have a tantrum because he wants it now and he really does not care what other people think about him. (p.24)

We see here a personality that is very young in its development and as such, "a state of tension is experienced if satisfaction is denied and the result is painful, whereas relief from tension gives pleasure or satisfaction" (McLellan 1970; p.16).

The second development in the Cathexis (socialisation) system is the **Ego**. The **Ego** is part of the **Id**, the difference between the two is that the **Id** remains in the unconscious, on the other hand the **Ego** is separated from the unconscious to "make contact with the external world" (Lansdown 1984; p.24). Therefore, the **Ego** is realistic, and its primary function as Lansdown states,

..... delays and inhibits drives, representing the role of enlightened self-interest. Gratification is still the goal, but gratification gained in a more mature way than is found if one follows the **Id**. (p.24)

The third and final development of the system is the **Superego**. This concept in the system is responsible for complete restriction of the **Id** and unconscious drives (Lansdown 1984; Storr 1989). In explaining the role of the **Superego** in personality formation Lansdown (1984) says,

Freud saw the **Superego** as playing a policeman-like role, acting to serve the good of society as a whole by curbing the self-seeking energy of the other two aspects [**Id** and **Ego**] (p.24).

Freud also describes **Defence Mechanisms** which are methods of dealing with guilt, sorrow, anxieties, and dreaded events. These painful experiences would "run riot" in the mind if the defence mechanisms were not provided (Lansdown 1984). In experiencing an unpleasant or negative experience the developing Cathexis will tend to move the experience (that has occurred in a conscious state) to the unconscious. However, because the experience contains unpleasant feelings to the individual, the unconscious will relieve some of the pain caused by the experience in certain behaviours and/or actions. The methods by which the unconscious releases these unpleasant experiences to conscious actions and behaviours are what psychologists of the psychoanalytical tradition refer to as defence mechanisms. These mechanisms include,

- \_ Repression: the painful experience is constrained to the unconscious and forgotten.
- \_ Displacement: replacement of a painful element/item with a more acceptable one.
- \_ Reaction Formation: replacement of the painful item/situation to the exact opposite (i.e. hatred to kindness).
- \_ Projection: the individual attributes the drive to another person and/or item.
- \_ Denial: the individual sees the world as he wants to, not as it really is.

The Psychoanalytic Theory is very debatable as a scientific theory, for the simple reason data to test the theory, namely feelings and thoughts, are impossible to accurately come by (Lansdown 1984). However for the purposes of this research the interest lies in the contribution of the psychoanalysts and their schools of thought to the study of play rather than psychological theories.

### **II.D.I.a. Play in Psychoanalytic Psychology**

Since no behaviour is accidental in psychoanalytic beliefs, then how is play viewed in this context? Cheska (1978), points out that to the psychoanalysts, play is mastery, wish fulfilment and assimilation of traumatic events by repetition; and the transformation of the player from a passive to an active role.

#### **1) Mastery:**

The child, according to Freud, is more susceptible to traumatic events (Rubin et.al. 1983). For the Ego and defence mechanisms have not yet developed and are organised to deal with anxiety-producing situations and events. Play is a means by which the child comes to terms with the unpleasant (anxiety-producing) situations, and through playful repetition the child masters the situation (Rubin et.al. 1983). Play allows the child to be the active master of the situation/event rather than the passive victim. In Freud's words,

We see that children in their play repeat everything that has made a great impression on them in actual life, so that they thereby abreact the strength of the impression and so to speak themselves masters of the situation. (Herron and Sutton-Smith 1971; p.107)

#### **2) Assimilation:**

In mastering a situation in play the child takes an active role, whereas in reality he was the passive victim of the situation. Peller (1971) provides a good example that may provide a better understanding of this role transformation, she explains,

A tonsillectomy can be a shocking event if the child does not know what to expect -e.g. that he will go to sleep, wake up with pains, be unable to swallow, and so on. If the child has been told about these things beforehand, he will still be physically



inactive and a person much stronger than he will give the orders and inflict pain, yet the shock is likely to be far less severe. The child who is taken by surprise, who has not had the chance to go over the event beforehand in thought, is more likely to play it out persistently afterwards in an effort at 'adjusting and self-cure'..... We can also put it in the short formula : play stands for pre-event anxiety, and anxiety for post-event play. (p.125)

### **3) Wish Fulfilment:**

However, Freud and other Psychoanalysts viewed play not only in the manner that it provided a stage for re-enactment of traumatic events, but also as a means by which the child can alter the outcomes of the experiences and/or to assume different roles and fulfil their wishes (Child 1985; Gilmore 1971; Rubin et.al. 1983). In this sense the child "fantasises some situation he would like to exist" (Gilmore 1971; p.320). In explaining this idea Freud says,

Might we not say that every child at play behaves like a creative writer in that he creates a world of his own, or rather, re-arranges the things of his world in a new way which pleases him? (Child 1985; p. 6)

While it is easy for us here to categorise each type of play as assimilation, wish fulfilment and mastery, the reality of the matter is that it is very difficult to do so when one sees a child at play. To us they are fantasies and these fantasies, according to Peller (1971), fall into one or a combination of the following categories/choices:

- a) Choices based on love/admiration: The child plays at being someone he admires/loves (e.g. parents, teacher, king, fairy). In doing so the child enjoys prestige and power denied to him in reality.
- b) Role assigned to an object: The child appoints a toy, doll, pillow, etc. to the role of a child (himself, or another child). In order to satisfy a desire to have someone dependant on him and/or to help the child understand (comes to terms with) some of his past experiences.
- c) Roles based on fear: The child assumes the role of someone or something he fears (e.g. doctor, teacher, monster), and may inflict the cause of the fear on an object or person. Thus, he takes the active role in a fearful situation rather than being the passive victim.

Anna Freud reports the case of the child who conquers the fear of crossing the dark hall by pretending to be the ghost she dreads to encounter. (Peller 1971; p.113)

The child in assuming this role will in a sense decrease the severity of the traumatic effect of the experience. This may also equip him better for undergoing future passive roles. As Gilmore (1971) says, "... play may serve not only to lower anxiety around a given context through promotion of active coping devices, but it may

serve a *defensive* purpose as well by denying any grounds for anxiety"(p.321).

d) The role of the losing (submitting) party: The child assumes the role of the sick child who has to take medicine, go to bed, etc., and in war type games takes the role of the enemy (hated party). One of the explanations Peller (1971) provides for this behaviour is that the child may think he will be left out of the play situation if he does not take such a role. Another explanation is the child is showing signs of a passive or masochistic personality.

e) Roles based on disguises (Incognito Indulgence): Two types of disguises exist.

e.I) The child, unlike the above roles, assumes roles that are *passed and below* him. For example a child may assume the role of a baby or an animal. This could be explained in that the child disguises himself in these roles allowing his Superego to drop, and allowing him to enjoy pleasurable things that are not compatible with his sense of dignity and others' expectations (parents, teachers) (e.g. the child may suck his thumb, crawl, get dirty/messy, insists on being carried). This is more likely to occur in children that are under pressure from having to be sensible and grown up.

e.II) Another disguise a child uses is that of clowning (humour). In an effort to become a master of a situation in which the child is a victim of a blunder or embarrassment, he *clowns around*. An example of this is as Peller (1971) describes,

A group of seven-to-nine-year-old campers stand on the platform near the train. Suddenly the locomotive releases steam with a loud hissing noise. "H.", who stands near it jumps with fright. He notices that the others are looking at him, about to laugh. An embarrassed smile comes on his face and as the hissing recurs a few seconds later, he repeats and exaggerates his former movements..... He repeats these antics with every blast of steam. Now he has the laughter on his side; he is the hero who parodies getting scared. He is not the victim of the situation, but the victor. (p.116)

The difference in the clowning and other wish fulfilment choices the child may make is that clowning requires a group to witness the behaviour - an audience.

f) Deflected vengeance: Here the child deflects the feeling of hostility on an object or person rather than gaining direct vengeance from the individual that caused the hostility or frustration. Anna Freud in the following example illustrates this behaviour.

The dentist had hurt him. He is angry and unfriendly and starts maltreating the things in my room. His first victim was an eraser. He wants me to give it to him as a present. I refuse and so he wants to cut it in half with a knife. Then he turns to a big role of cord and wants this as a present, explaining to me how well he could use it as a leash for his animal. Again I refuse and so he gets a knife and at least cuts off a long piece for himself. But he does not use it. Instead, he cuts it all up into small pieces..... It would be wrong to say that he plays at being a 'dentist'. The image of the dentist does not enter his behaviour. (Peller 1971; p.118)



g) Anticipatory relation: As the title suggests, in this category the child anticipates certain behaviours or emotions of others. Furthermore, the child may desire different behaviour or emotions from others directed at him. Peller (1971), provides an example which might be helpful in grasping the idea, she states,

The child's play with the doll may follow any one of these formulas : This is the way mother treats me or, this is how she *should* treat me or, this is the way she *feels* toward me, or this is the way she *will* treat me once she finds out what I have done. (p.119)

Hence, the child is anticipating and assuming the role/behaviour of another person and in his play he behaves towards people/objects with that person's behaviour or anticipated behaviour.

h) Happy endings: In play the child can alter the situation and/or event. The re-enactment of the anxiety-producing event/situation will be the same as it occurred with the exception of the ending which the child would change to a pleasant one. Another type of happy ending play is the child repeats an every day occurrence to assure himself that happy endings are within his power or there will always be happy endings. Peller (1971) provides insight on this type of fantasy when she states,

The younger child's hide-and-seek play follows a formula different from the game of older children..... The younger child's hide-and-seek game is but a pantomimic assurance: "whenever mother is out of sight, I can reunite with her in a short time. I am the one who brings about our separation, and I can bring about our reunion." (p.120)

l) Playful repetition and manipulation: Throughout the previous categories some feature(s) of reality has been removed. With the child taking different points of view, assuming and assigning roles to people and/or objects. This category of play however, the child does not alter reality, examples of this type of play are throwing a ball, running sand through fingers, and so on. Peller (1971) points out several attributes of play that this category lacks. It lacks in plot, role assumption (assignment), drama, climax, and symbolic value. Is it play then? Peller (1971) argues,

To exclude them [these types of play] is to ignore an important and at times revealing segment of the child's interests..... In a way, these activities are the direct precursors of latter experimentation, of the physical, chemical, geographical explorations of the older child. (p.121)

Nonetheless, to link the above play type to the psychoanalytic theory, Peller (1971) contends that this type of play is initiated by the child's emotional problems.

Another figure to contribute to the psychoanalytic conceptions of play is K. Menninger



(Herron and Sutton-Smith 1971; Rubin et.al. 1983). He saw play as a means of releasing aggression that can not be released in any other way. Furthermore, Menninger argued that aggression in a playful context would reduce aggressive behaviour in other contexts (Rubin et.al. 1983). This argument is explained by Herron and Sutton-Smith:

The most important value of this unrealistic nature of play is the opportunities that it affords for the relief of aggressions..... , the aggressions and hostilities which the games are supposed to absorb, break through the repression into consciousness and quarrelling ensues..... This applies not only to child's play but to the more symbolic contests such as table games..... The very fact that the little girl plays with dolls at all - which the mother takes to be sweet and natural act of imitation - is in the child's unconscious an aggression against the mother. It is an aggression in that it is a way of saying, "It is I who should have the children, not you"..... it is a way of saying, "Mother you are no longer necessary; I am a big lady now, and it is I who should have the long dresses and babies, not you; you can be dispensed with". (Herron and Sutton-Smith 1971; p.108)

Throughout the review of psychoanalytic definitions and/or viewpoints thus far there is a very limited perspective on play. Namely play is essentially seen as serving a purely psychological role. As Herron and Sutton-Smith (1971) say,

Play behaviour originating thus in conflict, providing a mastery of anxiety, and yielding the subject some compensatory value appears to have been the most often repeated explanation of play in subsequent Psychoanalytic writings, Although there are varying formulations and the terms *catherism*, *tension reduction*, *wish fulfilment*, *passivity to activity*, and *leave of absence from reality* are often made use of. (p.109)

If one examines these viewpoints one is to find most of the play behaviour described thus far emphasise the role of the Id (Lansdown 1984). This is to say that the Id or the unconscious drives and reality are the main issues that have been addressed. However, in the theory proposed by Erik Erikson a shift from the Id to the Ego is noticed (Cheska 1978; Lansdown 1984; Herron and Sutton-Smith 1971). Erikson, unlike other psychoanalysts, viewed play as serving a growth function in the child (Herron and Sutton-Smith 1971). Erikson defined eight developmental stages which a person goes through from birth to death. Within each stage lies a central problem that is universal, but the way it is manifested is culturally determined (Farahat 1977; Lansdown 1984). In order to develop from one stage to the next, an individual must conquer (solve) the central problem of the previous stage. Success gives motivation to move on to the next developmental stage, failure can lead to developmental stagnation or even regression until the individual regains confidence to try and conquer the stage (or the stage problem) again (Farahat 1977). These stages of development, coupled with cultural institutions, develop the Ego of the individual (Rubin et.al. 1983). Play, in the development assumes the role of developing an understanding of the "integration of the social and biological spheres of functioning" (Rubin et.al. 1983; p.704). Meaning that through play the individual will learn matters concerning himself and the society. In doing so, play aids in the resolution of the central problem of each developmental stage. Play as Erikson states, creates "model situations in which



aspects of the past are re-lived, the present represented and renewed, and the future anticipated" (Rubin et.al. 1983; p.704). Hence, play is viewed as an aid to the overall development of the individual. In his proposal Erikson contends that,

To grow means to be divided into different parts which move at different rates. A growing boy has trouble in mastering his growing body as well as his divided mind..... I would look at the play act, as vaguely speaking, a function of the Ego, in an attempt to bring into synchronisation the bodily and the social processes of which one is a part even while one is self..... The emphasis, I think, should be on the Ego's need to master the various areas of life, and especially those in which the individual finds his self, his body, and his social role wanting and trailing. To hallucinate Ego mastery is the purpose of play - but play..... is the undisputed master of only a very slim margin of existence.

The playing adult steps sideways into another reality : the playing child advances forward to new stages of mastery. I propose the theory that the child's play is the infantile form of the human ability to deal with experience by creating model situations and to master reality by experiment and planning. (Herron and Sutton-Smith 1971; p.109)

In synchronising the self and social processes, Erikson suggests that play unfolds in three broad categories (Cheska 1978). These categories will be briefly reviewed in the following paragraphs.

a) Autocosmic play: The child is primarily concerned with himself (body, mind, etc.).

Erikson explains,

The child's play begins with and centres on his own body..... It begins before we notice it as play, and consists at first in the exploration by repetition of sensual perceptions of vocalisation, etc. (Herron and Sutton-Smith 1971; p. 267)

b) Microsphere play: The child begins to learn properties of things, behaviours of others, and the laws and/or rules of society (beginning with the family), and nature.

Erikson explains this category by saying,

The microsphere, i.e. the small world of manageable toys, is a harbour which the child establishes, to return to when he needs to overhaul his Ego. But the thing-world has its own laws : it may resist reconstruction, or it may simply break to pieces; it may prove to belong to someone else and be subject to confiscation by superiors. Often the microsphere seduces the child into an unguarded expression of dangerous themes and attitudes which arouse anxiety and lead to sudden play disruption..... It can keep children from trying to play just as the fear of night terror can keep them from sleep. If thus frightened in the microsphere, the child may regress into the autosphere, day dreaming, thumb sucking, masturbating. On the other hand if their first use of the thing-world is successful and is guided properly, the pleasure of mastering toy things becomes associated with the mastery of the traumata which were projected on them, and with the prestige gained through such mastery. (Herron and Sutton-Smith 1971; p. 267)

In the latter part of the explanation Erikson suggests that play may cause anxieties if the child finds the *thing-world* too arousing (Gilmore 1971; Rubin et.al. 1983). In Gilmore's (1971) words,



Not only does anxiety lead to play of a relevant nature,..... but play can get out of hand, as it were, thus mobilising the very anxiety with which it is trying to deal. The result is an abrupt stop in play behaviour. (p.321)

c) **Macrosphere play:** In this, the third category, the child begins to associate socially (outside the family domain). He learns how to *share* his world with someone else. Erikson Says,

Finally, at nursery school age playfulness reaches into the macrosphere, the world shared with others. First these others are treated as things, are inspected, run into or forced to *be horsy*. (Herron and Sutton-Smith 1971; p.267)

In concluding the viewpoints of Erikson it is necessary to point out that play does not end at the Macrosphere stage. Furthermore, Erikson contends that the stages/types of play he described are all practised throughout developmental stages (Herron and Sutton-Smith 1971). The stages of play all work hand in hand to teach the child how to resolve problems, master reality, and synchronise self to the social processes. As Erikson put it,

Learning is necessary in order to discover what potential play content can be admitted only to fantasy or only to autocosmic play; what content can be successfully represented only in the microsphere world of toys and things; and what content can be shared with others and forced upon them..... As this is learned each sphere is endowed with its own sense of mastery. For quite a while, then, solitary play remains an indispensable harbour for the overhauling of shattered emotions after periods of rough going in the social seas. (Herron and Sutton-Smith 1971; p.267-8)

The psychoanalytic theories of play have come under criticism from Psychologists for the simple reason of lack of concrete backing in the form of research data, because one cannot test the unconscious fantasies of an individual (Hardy et.al. 1990; Lansdown 1984). Furthermore, the theories are based on many assumptions (e.g. Id, Ego, Defence Mechanisms) which as Hardy et.al. (1990) state, "if there is no other way to decide between two theories, the last resort is to accept the one that makes the least assumptions" (p.97). Nonetheless, the psychoanalytic tradition has offered a new approach to look at play, as Hardy et.al. (1990) suggest,

Adults often find it useful to talk through their problems and anxieties with a sympathetic listener. The other person doesn't have to say much, simply show all the signs of listening and perhaps ask questions from time to time to allow the talker to explore their own feelings. During these sessions,..... unconscious conflicts may come to the surface and be resolved. For children, play may serve the same function. (p.98)

Psychoanalysis and the many ideas the theory contends have had a significant impact on the twentieth century. The influence of Freud and his followers can be witnessed in everyday life in Western cultures. Some of the Freudian concepts are household terms (e.g. the ego, neurosis). Psychoanalysis has also made a very significant contribution to



the understanding of play. The theories of the psychoanalytic tradition of psychology provide an emotional/unconscious reasoning for play. While some of the aspects of the theories are not as well defined as would have been desired, nonetheless they seem to offer some truth, to the extent that play is now being used to in the clinical arena (i.e. play therapy) (Hardy et.al. 1990; Rubin et.al. 1983).

Theory	Main Thoughts	Criticism of the Theory
<p>Psychoanalytic Theory of play</p>	<p>i) Play serves a mastery function, it allows the child to get over anxieties of previous traumatic events/situations and develop a preventative measure against future traumas.            ii) Play serves a wish fulfilment role in that it allows the child to achieve desires in play situations denied from him in reality.            iii) Child fantasies in play provide an emotional stabiliser, as well as social behaviour understanding.            iv) In play, models (representations) of life are created, giving the child an opportunity to comprehend parts of life that he finds confusing.            v) Play provides an outlet for aggression, thus constraining aggressive behaviour in other non play situations.            vi) Play shifts from the Autocosmic play to Microsphere play to Macrosphere play, in this shift the child grasps the meaning of self and society. In addition he will use play in problem solving of situations of life.†            vii) Play represents a tool aiding in emotional problems and development in general.</p> <p>† Erik Erikson.</p>	<p>i) Theory untestable - no access to unconscious, emotions, and fantasies.            ii) The many assumptions the theories are based upon diminishes its comparative value to other theories.</p>

Table II.D.i.b.1. Summary of the Psychoanalytic Theories of Play.

## II.D.II. The Cognitive (Piagetian) Theories of Play

In the forthcoming pages one of the most influential theories of play will be discussed. Its influence lies in its overall views on the subject, within a larger framework of the development of the child/individual. Jean Piaget, a Developmental Psychologist has put forth a theory of development that is oriented towards the cognition of the child/individual. The theory places emphasis on how a child adapts to his environment (Lansdown 1984). Hardy et.al. (1990) explain the cognitive development concept that Piaget based his theory on:

Babies, toddlers, infants and adults all live in the same *physical* world but because their minds work differently their *psychological* worlds are very different. Psychologists use the term *Cognitive Development* when talking about changes which occur in thinking, perceiving and memory as we grow up. (p.1)

Before discussing the theories and ideas concerning play that arise from this tradition of psychology; it may prove advantageous to the reader if a summary of Piaget's developmental theory is provided.

### II.C.II.a. The Developmental Theory of Jean Piaget

Piaget's theory relies on mechanisms that contribute to cognitive development. The first of these mechanisms is the **Schemata** (singular: Schema). The Schemata are, as Hardy et.al. (1990) explain, "the internal representation of a series of physical or mental actions; they can be linked to a set of rules about how to interact with the environment" (p.2). Piaget contends that when a Schema has been formulated the child will act upon his accessible environment with this Schema, and in doing so the child will develop cognitively (Hardy et.al. 1990). There are two mechanisms by which a child (person) can formulate a Schema. These two mechanisms are **Assimilation** and **Accommodation**. Assimilation is "how the organism can handle new problems with existing mechanisms [Schemata]" (Lansdown 1984; p.20). However, if the situation cannot be fitted to an existing Schema, then a state of **Disequilibrium** exists. An example provided by Hardy et.al. (1990) may explain further,

As a baby in his first few months exercises the grasping and sucking schema, some objects will make a noise when grasped. The existing mental organisation cannot deal with this, and disequilibrium exists..... (p.3)

To reach an equilibrium state the mechanism of accommodation must be activated. Accommodation is "the modification of mental structures [Schemata] made by someone when confronted with a slightly novel situation or environmental signal [stimulus]" (Child 1985; p.6). Through assimilation and accommodation the child/individual develops his cognitive abilities (See Diagram II.D.II.a.1). As Hardy et.al. (1990) state,

Continued action will bring new forms of stimulation to the child and the process of



changing Schemata,..... [accommodation] ..... will occur again. If a child is only exposed to information and experiences that can be easily assimilated, no accommodation will occur and development will be retarded. On the other hand, accommodation cannot occur if experiences are too far removed from those with which the child is familiar. (p.3)

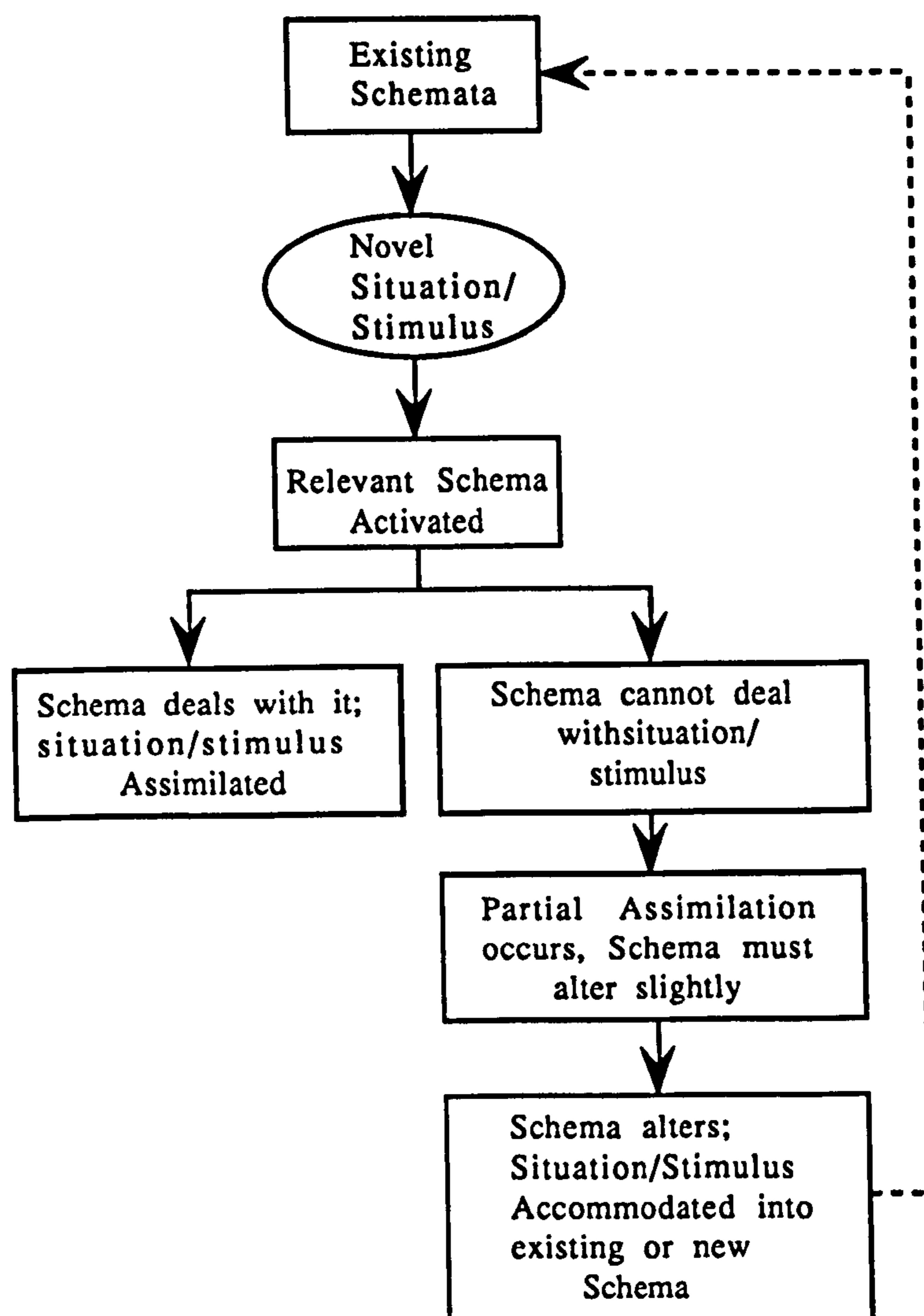


Diagram II.D.ii.a.1. The processes of Assimilation and Accommodation in Cognitive Development [Adopted from Lansdown (1984)]

These mechanisms occur in all the stages of development that Piaget identified. A summary of the stages and the main features of each stage is provided in Table II.D.ii.a.1.

Another very important concept in Piaget's developmental theory is that of **Egocentrism**. While the term might indicate selfishness and arrogance to the reader, the manner in which Piaget uses this term is different. According to Piaget, the child in the early stages of development cannot differentiate between self, objects and environment. Furthermore, the child cannot comprehend the views and perspectives of different people, as Miller 1989 explains,

[egocentrism]..... refers to (a) the incomplete differentiation of the self and the world, including other people, and (b) the tendency to perceive, understand, and interpret the world in terms of the self.(p.58)

As the individual develops to the more advanced stages of Piaget's developmental stages, the cognitive abilities gained will allow the individual to become **Decentred**, this is to say that the individual will recognise the self as being an object in a world full of objects and will learn to perceive other points of views and perspectives. However, as Miller (1989) points out, egocentrism will persist in a mild manner throughout human life.

Developmental Stage	Main Features/Characteristics of Stage
The Sensorimotor Stage (Birth-2 years-old)	<ul style="list-style-type: none"> <li>i) The child is born with instinctual reflexes (e.g. sucking, grasping, looking at objects)</li> <li>ii) Assimilation-Accommodation processes form new Schemata from reflexes.</li> <li>iii) Prior to eight months no concept of object permanence (i.e. an object exists even if out of sight)</li> <li>iv) Space and depth are understood by 8-12 months of age allowing for movement.</li> <li>v) Experimentation/discoveries assist in Schemata formulation.</li> <li>vi) The child practices at actions known until they are produced at will.</li> <li>vii) Pleasure in the effects of his actions on the environment.</li> <li>viii) Observation of others' behaviours assists in Schemata formation.</li> <li>ix) The child alters his movements in experimenting.</li> <li>x) Acquisition of language.</li> </ul>
The Pre-Operational Stage (2-7 years-old)	<ul style="list-style-type: none"> <li>i) Growth of symbolic representation.</li> <li>ii) Improved communicative ability (language).</li> <li>iii) Improved memory assists in making better predictions about the environment.</li> <li>iv) Thinking/intellect is Egocentric (i.e. unaware that others have different viewpoints).</li> <li>v) Only one aspect of a problem may be considered (e.g. the height of a liquid in a glass determines the amount of liquid, regardless of the glass' width).</li> <li>vi) Growing ability to conceptualise.</li> <li>vii) Insistent questioning to enable him to make his intuition correspond to reality.</li> <li>viii) Attempts are made to understand the rules of older children/adults.</li> <li>ix) Non reversible thought schemes.</li> <li>x) Begins to understand the concepts of Conservation of Matter (i.e. change in form does not lead to change in the quantity of matter)</li> </ul>
The Concrete Operational Stage (7-11/12 years-old)	<ul style="list-style-type: none"> <li>i) The child still depends on the appearance of objects (concrete objects) in problem solving (e.g. different sized dolls can be placed in order from largest to smallest, however if the problem is presented verbally the child may not be able to solve it).</li> <li>ii) Conservation concepts of weight, size, and numbers beginning to be mastered.</li> <li>iii) The child is becoming more flexible in thought.</li> <li>iv) Reversibility of thought/action processes understood allowing for different points of view (of other individuals) to be taken.</li> <li>v) Intellect/thinking becomes Decentred (opposite of Egocentric).</li> <li>vi) Interest in how things (concrete) work, and their make up.</li> </ul>
Formal Operational stage (11/12-Adulthood)	<ul style="list-style-type: none"> <li>i) An ability to formulate general laws/rules, principles, and hypotheses.</li> <li>ii) Ability to abstract (symbolise) thoughts and actions no longer tied to concrete objects.</li> <li>iii) Ability to proposition ideas on objects/properties never experienced in reality.</li> <li>iv) Flexibility in thought and action is that of an adult.</li> </ul>

Table II.D.ii.a.1. A summary of Piaget's Developmental Stages. [Adopted from. Dattner (1969); Hardy et.al. (1990); Lansdown (1984); Parker (1984)]



### **II.D.II.b. Cognitive Theory of Play**

Play, according to Piaget, can be explained as a behaviour in the context of his developmental theory. Gilmore (1971) explains the Piagetian concept of play when he states,

Piaget sees play as the product of a stage of thinking, through which the child must pass in developing from an original egocentric and phenomenistic viewpoint to adult's objective and rationalistic outlook..... every human encounter with the environment has two discernible aspects..... On the one hand,..... [a person] bends reality to fit what he 'knows' [assimilation]. On the other hand,..... [a person] in some way adjusts himself to better fit the new reality [accommodation]..... Piaget implies that these two aspects of behaviour spring from different sources, appear at different times, and develop at different rates.

Play, for Piaget, is all behaviour in which the aspect of adjustment to reality [accommodation] is de-emphasised. Play occurs insofar as behaviour is purely one of 'taking in', of bending reality to fit one's existing forms of thought [assimilation]. Since this is an aspect of all behaviour, every behaviour has at least some play-like aspects. One can't speak of play versus non-play in Piagetian scheme of things; behaviours are only less or more playful insofar as they do or do not make some attempt to cope with reality [accommodation]. (p.116-17)

However, Piaget viewed learning or intelligent adaptation in cognitive development as a function of the state of equilibrium (Child 1985; Hardy et.al. 1990). This is to say, learning for Piaget occurred when assimilation and accommodation are in balance. In which case, does play, in which assimilation overshadows accommodation, lead or aid in cognitive development? Piaget distinguishes between two types of assimilation. On the one hand, there is assimilation which is based in the individual, which Piaget calls "Sensory-Motor Assimilation". The second type of assimilation, "Rational Assimilation" Piaget claims lies in the object or activity (Piaget 1951). The latter of the two involves some accommodation (Hardy et.al. 1990). To elaborate,

Rational assimilation is complementary to accommodation to things, and therefore in almost permanent equilibrium with experience, while sensory-motor assimilation is as yet undifferentiated from accommodation and gives rise to a fresh 'displacement of equilibrium' with every new differentiation. Phenomenism and egocentrism are the two undissociated aspects of elementary consciousness as distinct from experimental objectivity and rational deduction.

This being so, children's play is merely the expression of one of the phases of this progressive differentiation: it occurs when assimilation is dissociated from accommodation but is not yet re-integrated in the forms of permanent equilibrium in which, at the level of operational and rational thought, the two will be complementary. In this sense, play constitutes the extreme pole of assimilation of reality to the ego, while at the same time it has something of the creative imagination which will be the motor of all future thought and even reason. (Piaget 1951; p.167)

An example of Piaget's argument is,

Suppose a child is given a magnet. At first a four-year-old might play with the new object using old schemata. He might suck it, throw it, or tip it from the back of his truck (assimilation). Then he finds that whilst it slips from the plastic truck it refuses to slip from a certain metal one. This presents a problem - the child has no schema to deal with this. So now he plays with the magnet in a different way; he might walk



around the room touching it on different objects to see which it sticks to. He is building up a new schema, i.e. his play now involves some accommodation. (Hardy et.al. 1990; p.125) (See Diagram II.D.ii.b.1)

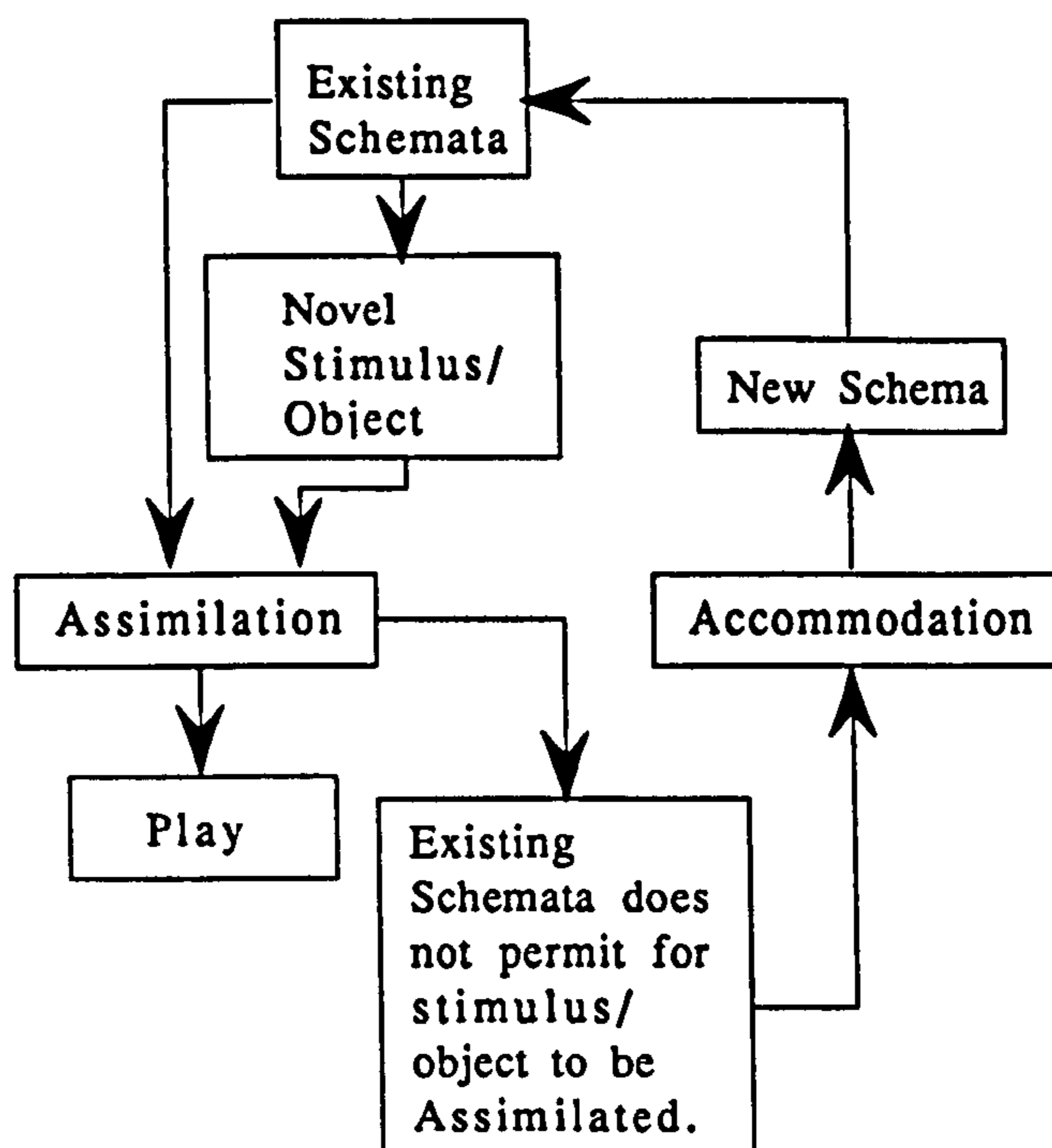


Diagram II.D.ii.b.1. The Role of Play in the Cognitive Development of the Child.

Once a child has formed a schema, as was previously noted, he will use it in an attempt to master the schema as well as learn more and more of his environment. According to Piaget, as the child develops from one stage to the next, his ability for rational thinking and concept formulation increases (Piaget 1951). This fact gives rise to different types of play which Piaget identifies. These types of play correspond to the child's cognitive abilities, and to Piaget's developmental stages. Furthermore, as the types of play change according to development, the mechanisms of cognitive development (namely assimilation and accommodation) become more differentiated (Rubin et.al. 1983). To become "Formally Operational" an individual must differentiate between the two mechanisms (Piaget 1951). In addition, Piaget claims that as the child becomes decentred (social) as opposed to egocentric, the flexibility and objectivity in thought will increase (Eifermann 1972) (See Diagram II.D.ii.b.2). Piaget, according to Gilmore (1971), believed that as the child develops and becomes older, play diminishes. The decline in play is mainly due to two reasons, as Gilmore (1971) explains,

First,..... adults can and do show some play-like behaviour, as for instance in dream life. But they also do so, to varying degrees, in many other areas. Doodling is an example of one of the *most* play-like adult behaviours. Thus, one answer is that play doesn't drop out, it remains in certain areas of adult experience and in *unconscious* behaviours. A second answer,..... the child acquires new possibilities for inventing improved, more rational, modes of handling encounters with the unfamiliar environment..... Eventually, with adult mastery of the environment, the person has a greatly reduced *need* to resort to bending reality to



fit his state of the moment. (p.318)

Hence, play in more developed individuals is disguised in other behaviours, and it is through development that the child becomes better equipped to deal with his ambience (i.e. more schemata).

In the coming few pages a review of Piaget's play types will be provided and discussed. Each play type contributes to the overall cognitive development of the child. Although as will be apparent, some types of play contribute more to a certain type of development than do others.

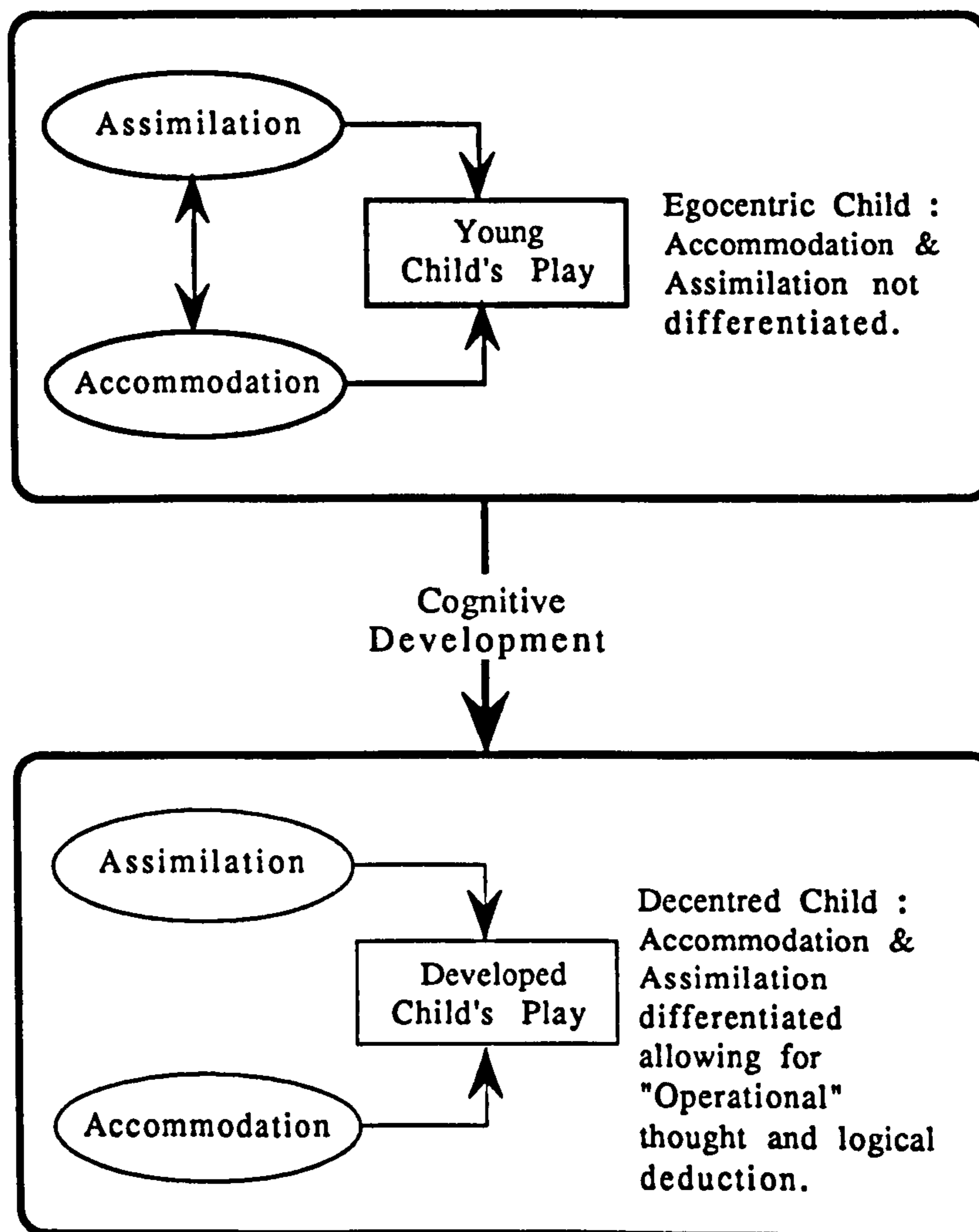


Diagram II.D.ii.b.2. Differences of Early Play and Developed Play in Piagetian Theory.

### II.D.ii.b.1. Practice (Mastery) Play

The first of Piaget's play types is practice or mastery play. According to Piaget this type of play begins at the early stage of the Sensorimotor Stage of development (Piaget 1951). As the child builds Schema from his reflexes, he learns to repeat the Schema in a playful and pleasurable mode. As Piaget explains,

After learning to grasp, swing, throw etc., which involve both an effort of accommodation to new situations, and an effort of repetition, reproduction and generalisation, which are the elements of assimilation, the child sooner or later grasps for the pleasure of grasping, swings for the pleasure swinging etc. In a word, he repeats his behaviour not in any further effort to learn or to investigate, but for the mere joy of mastering it and of showing off to himself his own power of subduing reality. (Piaget 1951; p.167)

The Schema that the child repeats in practice play is repeated in an effort to master the Schema, as well as to further his understanding of it. As Dattner (1969) states,

Whatever the project- dropping things, walking, filling a pail with sand- it is repeated with a great sense of urgency and intense concentration until the child feels that his performance is well within the range of his ability, at which time it will be replaced by another, more difficult, undertaking. (p.27)

In a sense, practice play caters for functional learning and Schemata formulation. This type of play, although dominant in the Sensorimotor Stage, will continue into latter stages (Hardy et.al. 1990; Mclellan 1970; Rubin et.al. 1983). However, because of the emergence of other types of play, coupled with the increase in Schemata formulation, practice play takes a lower percentage of the child's total play behaviour and/or time (Dattner 1969; Mclellan 1970; Pollowy 1977). In addition, practice play may incorporate features of other play types, giving rise to different play forms. As the child enters Piaget's Pre-Operational Stage, symbolic (make-believe, pretend) play becomes the prevailing type of play (Rubin et.al. 1983; Parker 1984).

### **II.D.II.b.2. Symbolic Play**

One of the underlying features of the Pre-Operational child (2-7 years-old) is the ability to create symbols and imitate the behaviours of others (See Table II.D.II.a.1). Dattner (1969) points out that just as practice play provides a means by which the child can come to master bodily skills, symbolic play provides "a way to assimilate the newly emerging skills of representing (symbolising) objects and events"(p.27). Furthermore, unlike practice play, symbolic play involves mental activity and thought. Rubin et.al. (1983) provide further clarification when they state,

The understanding that one thing (a signifier) can stand for something else (that which is signified). This form of play also reflects an assimilative orientation to the environment. In the previous sensorimotor period, these actions were exercised and elaborated for their functional value; now these actions are exercised for their representational value. (p.705-6)

In explaining symbolic play, Vygotsky (1933) put forth a model that clarifies the cognitive/mental development required before engaging in such play. Vygotsky maintains that in order for a child to engage in symbolic play (which is assuming a role/character, or assigning a role to an object which is not the object envisioned) a child separates in his



mind the meaning from the physical entity. Furthermore, Vygotsky believes that a "pivot" (a signifying element, action, etc.) is required to allow the child to initiate a symbolic play episode (see Diagram II.D.ii.b.2.1).

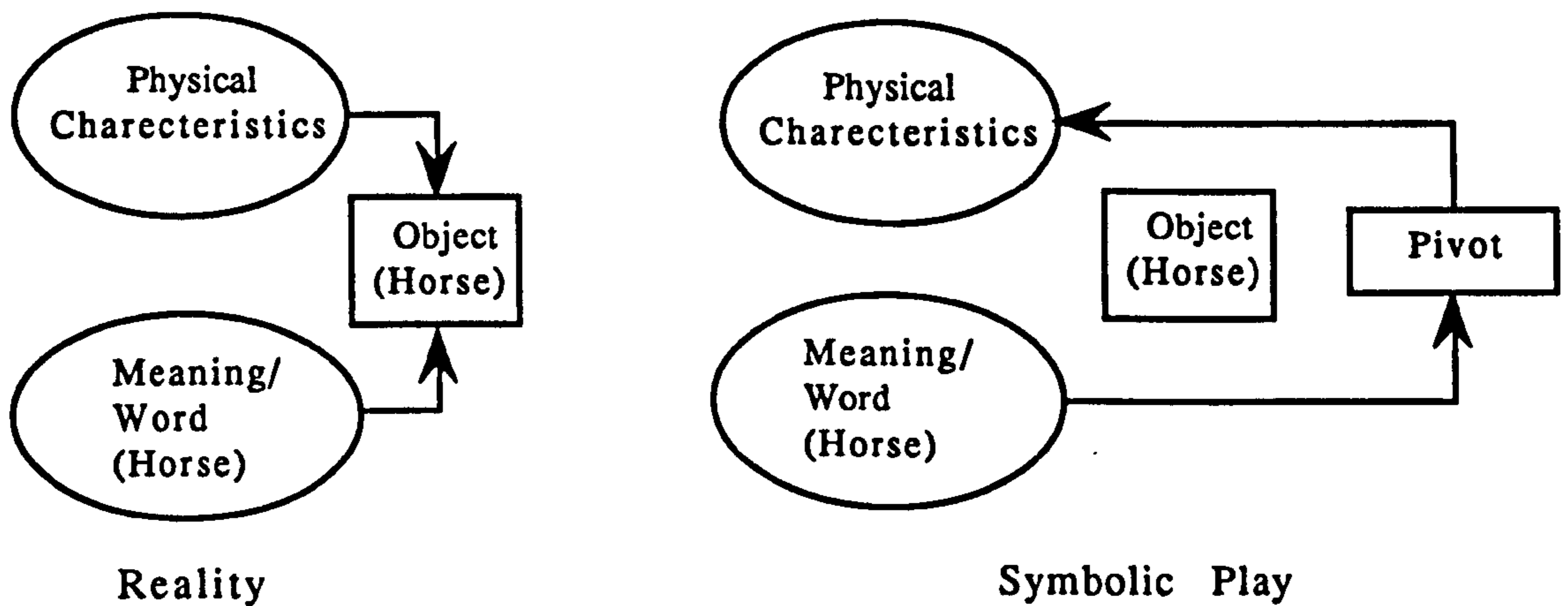


Diagram II.D.ii.b.2.1. Vygotsky's Model for The Mental Activity Involved During Symbolic Play.

In clarifying, Vygotsky (1933) states,

Separating words from things requires a pivot in the form of other things. But the moment the stick - i.e., the thing - becomes the pivot for serving the meaning of 'horse' from a real horse, the child makes one thing influence another in the semantic sphere. He cannot sever meaning from an object, or a word from an object except by finding a pivot in something else, i.e. by the power of one object to steal another's name. Transfer of meanings is facilitated by the fact that the child accepts a word as a property of a thing; he does not see the word but the thing it designates. For a child the word 'horse' applied to the stick means, "There is a horse"; i.e. mentally he sees the object standing behind the word. (p.547-8)

In explaining symbolic play which involves only action with no objects attached to the action Vygotsky states,

What we said about severing meaning from object applies equally well to the child's own actions. A child who stamps on the ground and imagines himself riding a horse has thereby accomplished the inversion of..... [the meaning attached to the action].

Once again, in order to sever the meaning of the action (riding a horse, without the opportunity to do so), the child requires a pivot in the form of an action to replace the real one [stamping on the ground]..... now the structure is invented and meaning becomes determinant. Action retreats to second place and becomes the pivot; meaning is again severed from action by means of another action. (p.550)

According to Piaget, symbolic play at the end of the Pre-Operational Stage of development will be gradually replaced by rule-governed play; even though symbolic play will continue well into the Concrete Operational Stage (Hardy et.al. 1990; Rubin et.al. 1983).

### **II.D.II.b.3. Rule-Governed Play**

In the final two stages of Piagetian developmental theory (Concrete and Formal Operational), rule-governed play will be the prevailing type of play exercised by children. As the title suggests, rules are the major feature in this category of play. Piaget viewed the development of this type of play as a function of the child's ability to decentre (take the view of another) and share enjoyment with others (Hardy et.al. 1990). In doing so, rule-governed play becomes an important feature in the development of the child's social skills. By cognitively exercising the complexities of rules in play and games a child becomes better equipped to enter the "rule-governed social relations" (Rubin et.al. 1983; p.707).

Although rule-governed play and/or games appear in the Concrete Operational Stage and continues into adulthood (i.e. in the form of sports), the distinction is that while in the Concrete Operational Stage, it is the play association with rule-governed play and games that the child finds stimulating, whilst in the Formal Operational Stage, it is the rules themselves and the possibilities that may arise due to alterations of the rules that stimulate the individual. As Dattner (1969) puts it,

The adolescent's concern for the form of thoughts and events is manifested in a preoccupation with rules of games. Not just concentrating on games with rules, as before, he becomes fascinated with anticipating all possible situations that might arise in a game, and codifies rules to meet every contingency,..... the young person delights in creating situations that rival the complexity of adult situations. (p.30)

Piaget argued that the emergence of rule-governed behaviour was directly linked to morality development in the child. Two sources of "rules" were identified by Piaget, leading to two types of "moralities" in the child. Vygotsky (1933) explains this,

As Piaget shows, some rules come to the child from the one-sided influence upon him of an adult. Not to touch other people's things is a rule taught by the mother, or to sit quietly at the table is an external law for the child advanced by adults. This is one of the child's moralities. Other rules arise, according to Piaget, from mutual collaboration between adult and child, or between children themselves. These are rules which the child himself participates in establishing. (p.543)

It is the rules that the child participates in forming that Piaget linked to rule-governed play (Vygotsky 1933).

However, many concerned with the study of play disagree with Piaget. They do not believe rule-governed play is first witnessed during the Concrete Operational Stage (i.e. from 7 years-old). The main argument put forward is: if rule-governed play first appears at school age (6-7 years-old), how can earlier play episodes involving sequence and regulation (i.e. rules) be explained? Garvey (1990) argues that rule-governed play appears from infancy (Sensorimotor Stage), she states,

It is possible that the games with rules of latter childhood actually have their roots in



the earliest playful experiences of infancy..... Peek-a-Boo shows clear differentiation of participant roles and an internal structure comprised of moves apportioned between the players..... What makes a good game of Peek-a-Boo is the mutual respect of each participant for the rules- that is, their shared expectations concerning what happens next and their willingness to conform to the agreed upon procedures. (p.104-5)

Furthermore, Vygotsky (1933) argues that even symbolic play involves rules:

Wherever there is an imaginary situation in play there are rules. Not rules which are formulated in advance and which change during the course of the game, but rules stemming from the imaginary situation. Therefore to imagine that the child can behave in an imaginary situation without rules, i.e. as he behaves in a real situation, is simply impossible. If the child is playing the role of a mother, then she has rules of maternal behaviour. The role the child fulfils, and her relationship to the object if the object has changed its meaning, will always stem from the rules, i.e. the imaginary situation will always contain rules. In play [symbolic play] the child is free. But this is an illusory freedom. (p.542)

If rules appear in all types of play types described thus-far, then what is Piaget's rule-governed play? The rules described in practice and symbolic play are rules that help in sustaining the play situation. However, in rule-governed play/games, an added element distinguishes it from the previous play types: The element of competition and the concept of winning and losing (Dattner 1969; Garvey 1990; Opie and Opie 1969; Parker 1984). As Piaget put it when explaining this category of play,

[Games with rules] are games with sensory-motor combinations..... or intellectual combinations..... in which there is *competition* [my italics] between individuals..... and which are regulated either by a code handed down by earlier generations, or by temporary agreement. (Rubin et.al. 1983; p.707)

Nonetheless, competition is not the sole element in this type of play. As many have argued, to be playful an activity must in some way be outside the bounds of reality and enjoyable (Gilmore 1971; Huizinga 1955). Hence, in some way rule-governed play/games, to truly be a play type, must encompass another element beside competition; for competition is closely related to reality and may prove not enjoyable. Vygotsky (1933) put forth a suggestion in which he states,

Every game with rules contains an imaginary situation. For example, what does it mean to play chess? To create an imaginary situation. Why? Because the knight, the king, the queen and so forth, can only move in specified ways; because covering and taking pieces are purely chess concepts; and so on..... Take the simplest children's game with rules. It immediately turns into an imaginary situation in the sense that as soon as the game is regulated by certain rules, a number of actual possibilities for action are ruled out.

The development from an overt imaginary situation and covert rules to games with overt rules and a covert imaginary situation outlines the evolution of children's play..... (p.542-3)

From the above arguments, one may come to a compromising stance on rule-governed play. Although rules in play behaviour appear at an early age, they are covert and serve to

facilitate or cater for other types of play that are assisting in the child's cognitive development directly (Schemata formulation) for that stage of development. When the child arrives at a cognitive level suitable for the rules to become overt and for games to have strict rules and competitiveness, rule-governed play/games prevail as a play type in the child's play behaviour. As Huizinga (1955) put it,

[we] all want to achieve something difficult, to succeed, to end a tension. Play is *tense*, as we say. It is this element of tension and solution that governs all solitary games of skill such as puzzles, jigsaws, mosaic-making, patience, target-shooting; and the more play bears the character of competition, the more fervent it will be. In gambling and athletics it is at its height..... rules in their turn are a very important factor in the play-concept. All play has its rules. They determine what *holds* in the temporary world circumscribed by play. The rules of a game are absolutely binding and allow no doubt..... As soon as the rules are transgressed the whole play-world collapses. The game is over. The empire's whistle breaks the spell and sets *real* life going again. (p.678)

Therefore, in a way the challenge offered in play also evolves in time. That is to say, as an individual moves from one stage of development to the next the challenge the individual seeks from a play situation also develops (Eifermann 1971; Parker 1984). In addition, the rules in play will evolve and later, as mentioned earlier, become societal law of which the child is a member. It is this law on which civilisation is created. As Huizinga (1955) put it,

Civilisation presupposes limitation and mastery of the self,..... Civilisation will, in a sense, always be played according to certain rules, and true civilisation will always demand fair play. Fair play is nothing less than good faith expressed in play terms. Hence the cheat or the spoil-sport shatters civilisation itself. (p.687)

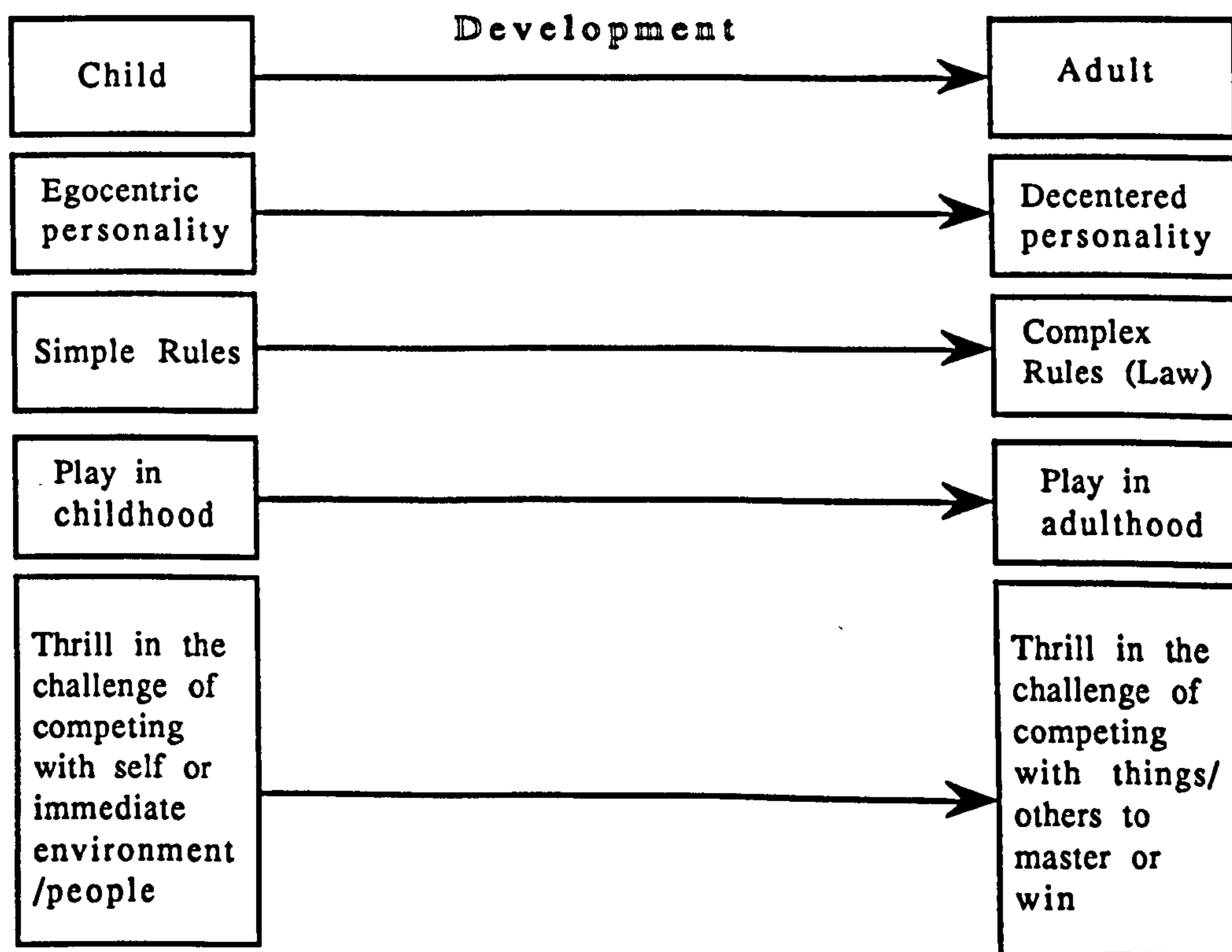


Diagram II.D.ii.b.3.1. The Development of Rule-Governed Play as a Function of Piagetian Developmental Theory.



Game Type	Sensori-motor	Pre-Operational	Concrete Operational	Formal Operational
Social and Object Contingency Games. (i.e. child's/person's actions/signals bring about a response in others/objects)	<ul style="list-style-type: none"> <li>_ Peek-a-Boo</li> <li>_ Shaking rattles</li> <li>_ Object dropping, rolling, etc.</li> <li>_ Tickling, rocking games</li> </ul>	<ul style="list-style-type: none"> <li>_ Hide and Seek</li> <li>_ Verbal teasing games</li> <li>_ Noise based games e.g. driving cars, spaceship etc.</li> <li>_ Running, jumping, climbing etc.</li> </ul>	<ul style="list-style-type: none"> <li>_ Jokes</li> <li>_ Verbal teasing games</li> <li>_ Play with fire</li> <li>_ Building huts, tree houses etc.</li> </ul>	<ul style="list-style-type: none"> <li>_ Flirting</li> <li>_ Courting</li> <li>_ Building things (buildings, roads, etc.)</li> </ul>
Symbolic (make-believe) Games	<ul style="list-style-type: none"> <li>_ Imitation and mimicry</li> <li>_ Pat-a-Cake type of games</li> </ul>	<ul style="list-style-type: none"> <li>_ Symbolic play games involving daily activities e.g. playing 'house', 'school' etc.</li> </ul>	<ul style="list-style-type: none"> <li>_ More complex symbolic play e.g. war games, club games, etc.</li> </ul>	<ul style="list-style-type: none"> <li>_ Inventing codes, language, cities, styles, etc.</li> </ul>
Rule-Governed Games	<ul style="list-style-type: none"> <li>_ Simple alternating games e.g. Peek-a-Boo</li> </ul>	<ul style="list-style-type: none"> <li>_ Small group action e.g. "follow the leader", "ring around the rosy", etc.</li> </ul>	<ul style="list-style-type: none"> <li>_ Simple field and iconic games e.g. "snakes and ladders", five-a-side football, etc.</li> </ul>	<ul style="list-style-type: none"> <li>_ Strategic iconic and field games with formality and logical deductions in the game.</li> </ul>

**Table II.D.ii.b.3.1. Types of Rule-Governed Play/Games as a Function of Piaget's Developmental Stages. [Adopted from Parker (1984)]**

#### **II.D.ii.b.4. Social Play**

Although Piaget explains the different types of play according to the child's actions in play (i.e. the child is pretending, the child is playing a game etc.), social interactions between the child and other children were not discussed by Piaget (Eifermann 1971). Mildred Parten, while observing children at play, formulated a categorisation of play according to the number and type of social interactions that took place in children's play (Adams 1990; Hardy et.al. 1990). The classification formulated by Parten seems to be within the confines of Piaget's theory, in that it displays the hypotheses that a child develops from an egocentric personality to one which is decentred/social. Parten's categories are summarised in the table below.

Type of Play	Interaction Description	Example
Solitary	<ul style="list-style-type: none"> <li>_ Child plays alone with own materials, and with no reference to others.</li> </ul>	<ul style="list-style-type: none"> <li>_ Child plays with his truck</li> </ul>
Looking-On	<ul style="list-style-type: none"> <li>_ Child watches another child's play activity.</li> </ul>	<ul style="list-style-type: none"> <li>_ Child watching others on "Monkey-Bars"</li> </ul>
Parallel	<ul style="list-style-type: none"> <li>_ Child plays alongside another, using same materials but no or little interaction takes place between the two children or their play.</li> </ul>	<ul style="list-style-type: none"> <li>_ Children at play in a sand box/pit</li> </ul>
Associative	<ul style="list-style-type: none"> <li>_ Children use same materials, and interact with others that are engaged in a similar activity, however no goal is shared between the children.</li> </ul>	<ul style="list-style-type: none"> <li>_ Children playing with building blocks</li> </ul>
Co-operative	<ul style="list-style-type: none"> <li>_ Children organise themselves, help each other in achieving a common goal.</li> </ul>	<ul style="list-style-type: none"> <li>_ Team sports</li> <li>_ One child acts as petrol pump attendant, another acts as a driver of a car requiring service</li> </ul>

**Table II.D.ii.b.4.1. Summary of Types of Play According to Social Interactions. [Adopted from Adams (1990); Hardy et.al. (1990)]**

If one views Piaget's play types in the light of the categories provided by Parten, further classifications/types of play will arise. Table II.D.ii.b.4.2. aligns the Piagetian play types and Parten's social interaction play categories in an attempt to simplify.

Parten's Play Categories	Piaget's Play Types		
Solitary Play	Practice Play (as described above)	Symbolic Play (as described above)	Rule-Governed Play (as described above)
Looking-On Play	_ Child observing others engaged in practice play	_ Child observing others involved in symbolic play	_ Child/Person observing others involved in rule-governed play/games
Parallel Play	_ Practice play in which the children use same object(s)/ material(s) in mastering new Schema (e.g. slides, climbing structures, etc.)	_ Children using same materials for their own symbolic play	Not Applicable
Associative Play	Rough and Tumble Play	Dramatic Play	Not Applicable
Co-operative Play			_ Team sports/games

Table II.D.ii.b.4.2. The Origins of Dramatic and Rough-and-Tumble Play.

### **II.D.ii.b.5. Dramatic Play**

As the child becomes more social, symbolic play no longer facilitates the mastery of events and objects. As such, symbolic play evolves into dramatic play, in which there is drama, acting, learning, and even creativity, which will be discussed later (Garvey 1990). In dramatic play, social constructs are essential in playing out the dramatic episode. Garvey (1990) states,

There are primarily two kinds of social constructs - socially shared views of the way life is - that serve to integrate pretend play. One is an action plan, a sort of blueprint for arranging actions and events into a coherent episode. The other is the role or identity assumed by the pretender.....

The social constructs that comprise the resources for make-believe are the child's growing knowledge of classes of individuals and their relationships, of categories and types of goals, and of the possible actions and sequences of action that can be employed to accomplish these goals. To these must be added the *correct* relationship of objects and actions, the expected emotions or attitudes of individuals toward events of various types, and the characteristic combinations of persons and their activities with particular settings and times. (p.80-2)

Garvey (1990) also points out that dramatic play has certain characteristics. These are summarised in the table below (Table II.D.ii.b.5.1) and indicate how much more complex dramatic play is from symbolic play. Furthermore, one can detect the mental and cognitive abilities a child must have to engage in this play type.



<b>Dramatic Play Characteristics. (activities a child does in dramatic play episodes)</b>	<b>Description</b>
1. Planning	Decision making on what to do, what roles to assume, what objects to be used, etc.
2. Metacommunication	<p>Communicating with peers by verbal and non-verbal (signals) techniques. Seven types identified</p> <p>i) Overt Proposals: The child as himself, communicates with others regarding the play episode.</p> <p>ii) Implicit Pretend Structuring: The child as himself, communicates with others on the objects to use etc.(planning).</p> <p>iii) Prompting: Child interrupts the pretend episode, "steps out of role", to correct another's actions or feed them lines</p> <p>iv) Story-Telling: Child provides information about the pretend episode (e.g. motives for actions, etc.) in or out of role.</p> <p>v) Underscoring: Verbal identification of actions or situations in the pretend episode (e.g. the child may state, "I'll pour the tea", while carrying out the action).</p> <p>vi) Utterior Conversation: Child in role provides others with suggestions, lines, etc., in an effort to advance the plot/prolong the episode.</p> <p>vii) In-Role: The child communicates all desires, thoughts, etc., in the role he is enacting.</p> <p>With development the child becomes better at communicating his thoughts, ideas, etc. Furthermore, with development the child need not step out of role to express himself, metacommunication becomes complex.</p>
3. Structural Change	As children mature, the structural components of pretending mature (i.e. object and situational transformations), becoming more complex and closer to reality.
4. Conflict and Negotiation	Symbolic (pretend) play involves desires of acting out a certain episode. When it is done socially (dramatic play), desires conflict and through negotiation children resolve their differences.
5. Themes	Themes of dramatic play range from daily activities (e.g. playing house or school), to more imaginative ones which may be based on stories or television programs (e.g. Robin Hood, The Incredible Hulk). As the child develops the themes become more imaginative.
6. Effective Displays	Although children involved in dramatic play display, for the most part, positive emotions (e.g. smiles, giggles etc.), negative emotions (e.g. fear, shock, disgust, etc.) are also displayed. For the most part, negative displays are limited to the pretend episode (i.e. special effects to spice the play episode). Both types of displays indicate a high level of engrossment and excitement in the play episode.
7. The Pretend Real Boundary	Children may exit from the make-believe episode for no reason except assurance that the arousing feelings accompanying the episode is only play. As the child develops the need to step out of the episode decreases and reassurance is gained from within the episode.

Table II.D.ii.b.5.1. Summary of The Characteristics/Activities of Dramatic Play.[Adopted from Garvey (1990)]

### II.D.ii.b.6. Rough and Tumble Play

Piaget has received criticism for not providing a category or explanation for rough-and-tumble play. As Humphreys and Smith (1984) state,

Piaget's categories of functional and dramatic play, and constructive activities, scarcely allow a place for rough-and-tumble. By the 4-to 10-year-old period, when so much rough-and-tumble takes place, children were expected to be involved in socio-dramatic play, progressing on to games with rules. (p.242)

However, an examination of the action patterns involved in rough-and-tumble play reveals



that Piaget's theory, if thoroughly examined, will provide an explanation of rough-and-tumble play. The action patterns involved in rough-and-tumble according to Garvey (1990), Humphreys and Smith (1984), and Jones (1967) are divided into two main categories - physical and social as shown below.

<u>Physical action patterns</u>	<u>Social action patterns</u>
a) Running	a) Laughter
b) Chasing	b) Playful Face
c) Fleeing	
d) Wrestling	
e) Falling	
f) Jumping	
g) Beating with open hand	

If one inspects the physical action patterns, one will find most involve actions that need to be mastered through repetitive performance (i.e. running, jumping, falling). Wrestling, chasing, and generally aggressive patterns are in some way a play pattern picked up by children in early childhood play with parents. Humphreys and Smith (1984) state,

Origins of peer-peer rough-and-tumble lie in earlier parent-infant interactions..... An adult may slowly run from the child, eliciting following, and then turn and chase the child in a play attack. This seems to be a genuine early form of play-chasing,..... vigorous adult-infant play prepares the child for later rough-and-tumble with age-mates. (p.246-7)

Through the child's play with parents, the child will gain the social action patterns which distinguishes rough-and-tumble from real aggressive behaviour (i.e. laughing, playful gestures) (Humphreys and Smith 1984). Hence, a compromising position may be reached regarding the explanation of rough-and-tumble play according to Piagetian theory. On the one hand, the physical attributes of rough-and-tumble play may be explained by the practice (mastery) play type of Piaget. For although the child seems to have mastered running, this may not be the case. The child needs to practice mastery of his continually growing body. Hence, practice continues but in other play forms and social contexts. As Jones (1967) points out,

Rough-and-tumble play subsequently seems to develop rather sharply into formalised games like "Tag" and "Cowboys and Indians". There are the same motor patterns but rules and verbal explanations have been added. (p.356)

Perhaps one should view Piaget's play types in that they do not correspond to a definite age, but rather they exist together in all developmental stages. The developmental stage (which determines cognitive development/abilities), provides a proportional account i.e. what type of play will prevail in a certain stage. In their study of 7, 9, and 11-year-old children in a school-ground, Humphreys and Smith (1984) found that overall rough-and-tumble took place in only 10% of the school-ground time. At the same time the occurrence of rough-and-tumble play decreased with age (from 13.3% for the 7-year-olds to 4.6% for



the 11-year-olds), due to the considerable increase in rule-governed play/games.

Rough-and-tumble play changes not only in the extent of occurrence but also in form.

Table II.D.ii.b.6.1. shows how differences in play form occurs with age.

Age	Rough and Tumble Play Form Description
3-4 years-old	<p>Consists mainly of chasing and wrestling. At times incorporating symbolic play, in which the child may pretend to be an animal, monster, or witch.</p> <p>Environmental factors contributing to the initiation of rough and tumble play.</p> <p>Occurrences are greater when,</p> <ul style="list-style-type: none"> <li>i) Large areas are available.</li> <li>ii) Not many toys/equipment available.</li> <li>iii) Large (&gt;10) same-age group.</li> <li>iv) Playground/School-ground operating under <i>free play</i> regime</li> </ul> <p>Children that engage in rough and tumble play often were characterised by,</p> <ul style="list-style-type: none"> <li>i) Generally being more social.</li> <li>ii) Engage less in object play or play which requires of them to be seated.</li> <li>iii) Are perceived by others as not aggressive.</li> <li>iv) Score low on aggressive behaviour.</li> </ul> <p>Children that are considered to be aggressive or with behavioural disorders are those who have problems in engaging in rough and tumble play (they misinterpret playful signals and respond aggressively).</p>
6-12 years-old	<p>Children wrestle but in an attempt to overbalance the play partner and gain superior position, tripping or throwing him to the ground then sitting or lying across his man to keep him to the ground. Roles might then be reversed.</p> <p>Children engage in hitting play (imitative boxing, spy thriller type of fighting, Kung-Fu matches, etc.), "apparently heavily television influenced." In these cases symbolic play is evident, for in adopting a fighting style the child might adopt the role of the person he is pretending to be.</p>

Table II.D.ii.b.6.1. Summary of Rough-and-Tumble Play Changes. [Adopted from Humphreys and Smith (1984)]

There seems to be a consensus that "as far as peer relations are concerned, some rough-and-tumble play is a normal and healthy part of the behavioural repertoire" (Humphreys and Smith 1984; p.248). However, parents, teachers, and adults in general seem to think of this type of play as violent, rough, and aggressive. It is for this reason that this type of play has not become socially approved of (Humphreys and Smith 1984). The disapproval perhaps lies in the fear that rough-and-tumble play will lead to serious acts of aggression. However, Humphreys and Smith (1984) distinguish between aggression and rough-and-tumble in the following statement,

Play and serious fighting can be clearly distinguished in young children. In older children, however, it has been suggested that these two types of behaviour are less easily separated..... *rough-and-tumble* and *aggression* which were distinct in both context and behaviour. *Aggression* tended to be concentrated into disputes over possession of objects and consequently included object-specific behaviours such as *grab* and *take* while *rough-and-tumble* did not occur in this context. Although some of these behaviours were similar (and might have been more so had the children been out of doors and therefore at liberty to throw themselves about more), the two factors were loaded differently for facial expression. The playful rough-and-tumble factor was highly for the categories *laugh* and *playface*, whereas the expressions associated with aggression were *frowns* and *fixate*. (p.251-2)

The Question now arises, can children interpret expressions correctly? The answer is provided by Humphreys and Smith (1984) in the table below (Table II.D.ii.b.6.2), keeping in



mind that the children observed are pre-school children who have generally less knowledge than older children.

Facial Expression	Total number of rough and tumble play episodes	Outcomes					
		Number of positive outcomes (i.e. no aggression)	%	Number of neutral outcomes	%	Number of negative outcomes (i.e. aggression)	%
Positive (i.e. laugh, playface)	409	297	73	106	26	6	1
Neutral or Unclassified	144	48	33	72	50	24	17
Negative (i.e. frown, fixation)	44	9	20	9	20	26	60

**Table II.D.ii.b.6.2. Rough-and-Tumble Play and its Outcomes. [Adopted from Humphreys and Smith (1984)]**

In concluding the discussion concerning rough-and-tumble play, there are certain points worth mentioning. First, even though rough-and-tumble play, as far as children are concerned, seems to be part of a normal repertoire, it is highly disapproved of especially as children get older (Humphreys and Smith 1984). Second, rough-and-tumble play is a male dominated play type (Jones 1967). This is not to say girls do not engage in such play, however, the majority of rough-and-tumble play takes place between boys (Garvey 1990; Humphreys and Smith 1984). Perhaps the explanation lies in play with parents, for more boys engage in rough-and-tumble play with parents than girls. In addition parents, especially fathers, initiate this type of play with their sons more often than with their daughters; and rough-and-tumble is more vigorous between the son and the father (Humphreys and Smith 1984). In addition, the fact that rough-and-tumble play moves or evolves from a purely physical (functional) play type in younger children to one with symbolism and rules suggests that Piaget's theory is applicable (Garvey 1990). Moreover, rough-and-tumble play can be witnessed even in adult games such as Rugby and American Football. This fact signifies the importance of this play type.

Piaget's developmental theory has come under great criticism from many individuals. The criticisms that exist are perhaps due to the reason that "it has become fashionable to criticise Piaget" (Miller 1989; p.96). Nonetheless, Piaget's work is not perfect and is liable to criticism. However, his theory is one of the most influential theories not only in the field of Developmental Psychology, but in many fields concerned with human knowledge and thinking. As Flavell (1963) states, "one way to test the mettle of a system is to find out how extensively it can contribute to and invigorate areas of inquiry other than its own" (p.416). Piaget's theory has contributed greatly to many areas such as education, social development, philosophy, and occasionally environmental design (Dattner 1969; Flavell 1963; Miller 1989).



Piaget's system or theory is especially valuable to environmental designers, for Piaget has stressed the importance of a rich environment in schemata formation and development of the individual. It is a regrettable fact that very few environmental designers and/or planners have examined how vital a good play environment is for the overall development of the child. The more an environment has to offer to the child the higher the likelihood that the child will interact and learn from this environment, as Flavell (1963) put it,

When reduced to its essentials, Piaget's equilibration model seems to say that you get out of an encounter with the environment what you put into it; an active engagement with data, ..... (p.418)

The greatest opposition to Piaget's theory of play seems to be Piaget's categorisation of play behaviours as acts of assimilation (Post 1977; Sutton-Smith 1971c.). Because assimilation in Piaget's theory serves no adaptive learning role, it is then implied that play serves no function in the individual's cognitive development. Perhaps Sutton-Smith's (1971c.) critique summarises this point best when he explains,

Imitation and play come to be formulated as particular types of relationships between accommodation and assimilation. When accommodation to external reality dominated over assimilation, there existed a state which Piaget termed imitation. Alternatively, if assimilation of external reality to pre-existing concepts occurred, then there was the state to which the term play was given.

Imitation is said to be an extension of such negatives into positive action..... In due course, it is said, these imitations become interiorized as images, and then, later, when these images become attached to, and differentiated from, external symbols during intelligent activity or during play, they are transformed into concepts. It follows that sustaining and initiating this whole process of representative activity are the encapsulated photographic negatives which occur during accommodation. (p.327-29)

Having explained Piaget's stance on imitation and play, Sutton-Smith then puts forth the major critique of Piaget's view of play (Post 1977). Sutton-Smith (1971c.) concludes by stating,

We thus have a situation in which the symbols of play are merely the reproductions of images pre-established through the copyist activity of imitation following accommodation. On this interpretation then, imitation is an essential factor in the construction of representative activity, where as play is not. It has no essential role in the structure of intellect as conceived by Piaget. Intelligence cannot proceed without imitation. It can proceed without play. (p.329)

Having illustrated the main critique to Piaget's conception of play, it is worth looking at other criticisms directed at Piaget's theory of play. First, in his review of critical literature on Piaget's theory of play, Post (1977) points to Sutton-Smith's critique of Piaget's belief that play decreases with age. As was mentioned earlier by Gilmore (1971), play drops-out, according to Piaget for two reasons.

- i) Play takes form in other activities (e.g. doodling),



ii) The adult has a decreased need to bend reality (i.e. assimilate).

However, Sutton-Smith, according to Post (1977), disagrees. Sutton-Smith contends that play, especially symbolic play, does not decrease with age for the following reasons.

i) Adult games are highly symbolic, and are not in any way connected to reality (i.e. assimilation/play continues).

ii) Play is a vital activity in the functions of the mind (especially Convergent and Divergent Thinking processes, See Section II.E.i.b), and play saturates adult activities and socialisation (e.g. flirting see Table II.D.ii.b.3.1). Sutton-Smith concludes by stating,

Without such a point of view it is difficult to understand the verbal play of adults, their social and sexual play, their rituals and their carnivals, their festivals and fairs, and their widespread and diversified playfulness. (Post 1977; p.37-8)

Another criticism put forth by Eifermann (1971, 1972) is that Piaget's play types do not, according to his large study (14,000 children), fit into the stages of development that Piaget proposed. This is to say, that when a certain play type was supposed to appear or dominate the child's play behaviour it did not. Eifermann (1971, 1972) found that practice and symbolic play continued in children's activities at an advanced age when rule-governed play or games were supposedly to have been the dominant play type.

In concluding, it is necessary for one to look at the positive contributions made by Piaget and the cognitive theories of play, as well as the negative ones. It is true that Piaget's theory of play is not perfect. However, to refuse the entire theory for minor faults, which can be corrected by further research and work in the study of play, is to reject and waste a great deal of today's understanding of children and play. Piaget's theory is one of the most complex theories put forth in history, as such it should be viewed with care and more importantly with moderation. The cognitive theory of play is especially valuable to people dealing with the built environment. One of the foundations on which the theory stands is that an individual grows and develops by receiving cues and signals from the environment that will lead to learning and cognitive development. If one aims at providing better play environments for the urban child, if one aims at providing play environments that promote learning and development Piaget's theory needs to be viewed as one of the most important starting points in the process. Its emphasis on the environment means that for environmental designers and planners there is a task to provide environments that are rich in cues and signals to the child. In addition to providing a better play environment, this will also reduce boredom which might lead to undesirable behaviour and attitudes in children (See Chapter III).



Theory	Main Thoughts	Criticism of the Theory
<p>Piagetian Cognitive Theory of Play.</p>	<p>i) Play is assimilation, the bending of reality to fit existing behavioural or knowledge set of schemes (Schemata).            ii) In early childhood play, assimilation and accommodation (the mechanisms of cognitive development) are not differentiated.            iii) As the individual develops cognitively assimilation and accommodation become differentiated.            iv) Play diminishes and takes different forms or types as an individual develops cognitively.</p> <p><b>– Play Types</b></p> <p>a) Practice Play (See Section II.D.ii.b.1).            b) Symbolic Play (See Sec.II.D.ii.b.2)            c) Rule-Governed Play (See Sec.II.D.ii.b.3)            d) Social Play (See Sec.II.D.ii.b.4)            e) Dramatic Play (See Sec.II.D.ii.b.5)            f) Rough-and-Tumble Play (See Sec.II.D.ii.b.6)            v) The play types correspond to the cognitive developmental stages, hence age.            vi) The play types may all coexist at any particular age.            vii) The environment and the diversity within it aids in a great way in the cognitive development of the individual.</p>	<p>i) The theory does not allow play to have a role in cognitive development.            ii) Play types do not conform to stages in which they are supposed to appear or dominate.            iii) Play does not disappear or drops-out with age, as the theory suggests.</p>

Table II.D.ii.b.6.3. Summary of The Piagetian Cognitive Theory of Play.

### **II.D.iii. Play as Sensory Stimulation**

D. Berlyn put forth a theory in which play was viewed in terms of sensory stimulation (Rubin et.al. 1983). He suggests that,

The central nervous system of an organism seeks to maintain an optimal level of arousal. When this level is elevated as a result of novelty, discrepancy, or an uncertainty, the organism seeks to reduce the arousal level by acquiring information. This is achieved by exploring those specific features of the environment that are the source of the arousal. These behaviours are collectively termed "specific exploration".....

When environmental stimulation falls below the optimum level, during which the organism is said to be bored, the organism is thought to engage in stimulus-seeking activity. Berlyn labelled this type of activity "diverse exploration." Diverse exploration is aimed at decreasing arousal by producing stimulation rather than reducing it. (Rubin et.al. 1983; p.710)

Sensory stimulation may occur through all five senses of the organism/child (Baldwin and Baldwin 1977). In seeking sensory stimulation, an organism/child may combine all the sensory inputs or just obtain stimulation from one (Baldwin and Baldwin 1977).

In a way the stimulation seeking process can be summarised as four stages that a child/organism goes through in order to achieve an optimal level of arousal (See Diagram II.D.iii.1). If the arousal levels the child receives from objects/environment exceed an optimal arousal level, the organism/child will not explore, gain information, or play (Baldwin and Baldwin 1977). Instead, the child/organism will retreat to familiar objects, situations, environments, or figures (e.g. mother) in an effort to reduce the stimulation level to an optimal one (Rubin et.al. 1983).



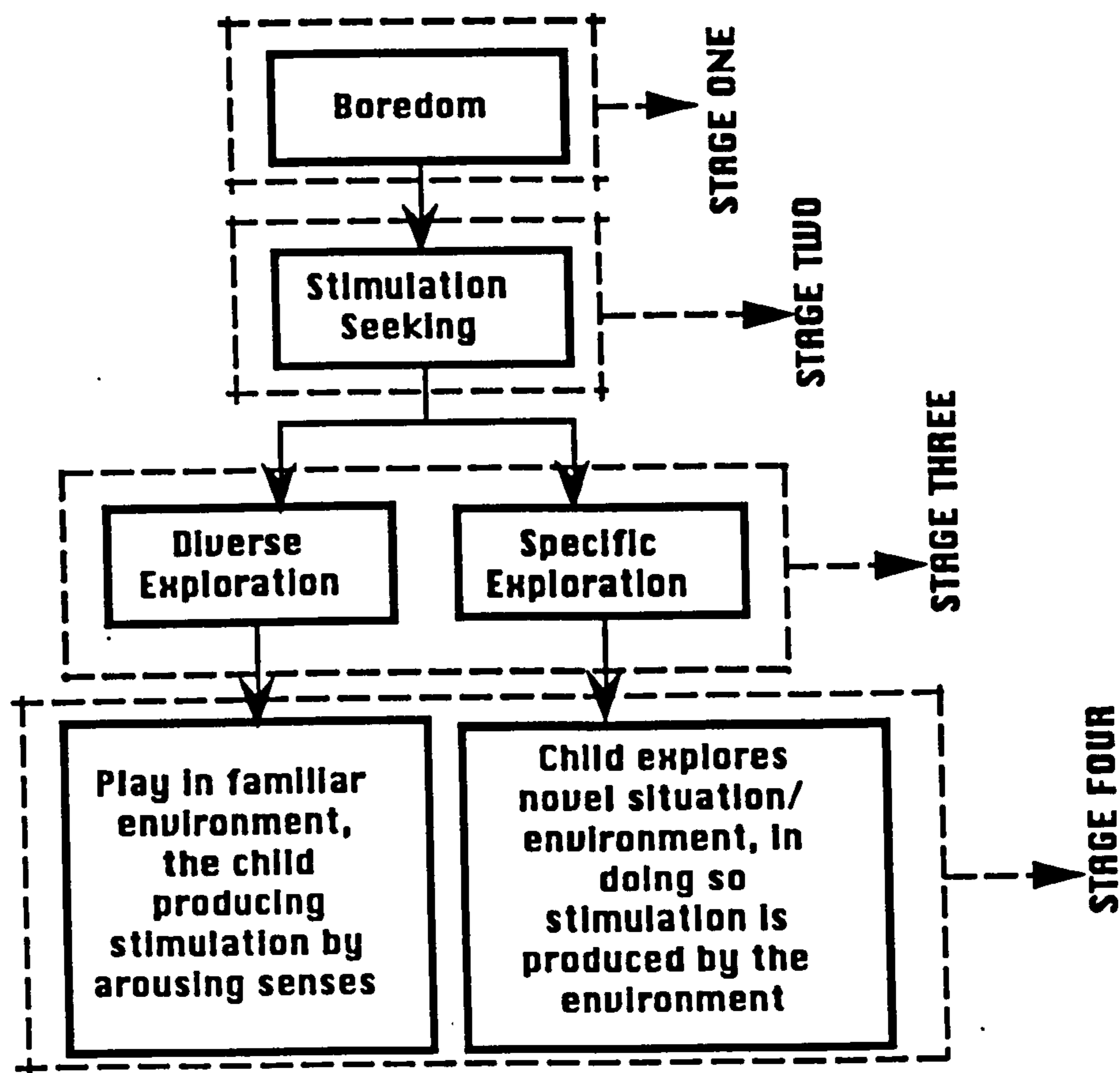


Diagram II.D.iii.1. The Stages of Stimulation-Seeking.

What is the line between stimulus seeking, exploration and play? According to Baldwin and Baldwin (1977), there are six phases to primate exploration and play which largely reflect Hutt's (1966, 1971) studies of children's exploration and play. These six phases are:

- i) Early Exploration: The organism/child encounters the novel situation/object. He keeps a distance to prevent over-arousal caused by proximity, and in keeping a distance the object/situation takes a smaller area in the field of vision. The child/organism may then approach and/or touch, thus some novelty is lost. (This phase resembles looking-on play in early social interactions; See Table II.D.ii.b.4.2)
- ii) Intermediate Exploration: The child/organism becomes familiar with novel situation/object (over-arousal becomes optimum arousal). Examination of object/situation commences from all directions, leading to stimulation as the angles of viewing change. In examining, the child/organism learns properties of the object/situation and becomes familiar with it. As this occurs the child/organism shows a decreasing number of exploratory responses.
- iii) Late Exploration: The child/organism is no longer stimulated by the object/situation and will try to avoid it. However if,

- a) no alternative stimuli with more impact is available, or
- b) the child/organism no longer succeeds in increasing the impact of the situation/object with his repertoire of creative behaviour, then exploration continues at a low-key, half-hearted, easily interrupted way.

iv) **Early Play:** The child/organism starts doing things with the object/situation (e.g. rolling it, dropping it, changing some features). This will elicit more sensory stimulation than was available in exploration stages. In performing actions/behaviours with the object/situation, stimulation may be aroused to the level of over-arousal, hence leading to retreat for a period of time.

v) **Late Play:** The child/organism exhausts novelty in the object/situation by doing things to it in early play. If other novel objects/situations in the environment are available, late play may never be reached. However, if no alternatives are found late play is practised. In late play the child/organism engages in low-key play which resembles play of adults, who have exhausted novelty in the environment. Hence, this phase could be summed up in the phrase, "some stimulation is better than nothing".

vi) **End of Exploration and Play:** The child/organism ceases to play and explore situation/object for it has lost all arousal inducing capacity. The child may, however, return to it in retreating from over-stimulating encounters with novel objects/situations.

Garvey (1990), has formulated a different sequence for exploration and play than the above sequence. The principals are similar, however the number of phases are different. She lists four phases in the process, a) exploration, b) manipulation, c) practice, and d) repetition with or without imaginative elaboration. To explain the phases by means of an example might be beneficial in visualising the phases.

A three-year-old boy saw a large wooden car in our playroom for the first time. (a) He paused, inspected it, and touched it. (b) He then tried to find out what it could do. He turned the steering wheel, felt the license plate, looked for a horn, and tried to get on the car. (c) Having figured out what the object was and what it could do, he got to work on what he could do with it. He put telephones on it, took them off, next he put cups and dishes on it..... Finally, the car was understood, its properties and immediate usefulness reasonably clear. (d) He then climbed on it and drove furiously back and forth with suitable motor and horn noises. We can readily accept the last activity as play. The activities that led up to the last incident, however, seem less playful. Though (a), (b), and (c) do not seem quite like hard work, they do suggest a process of continuous testing and learning what the object is and how it might be treated. (Garvey 1990; p.47)

Thus, the theory suggests that play naturally follows on from exploration. A child explores in order to maintain an optimum level of sensory stimulation. If over-stimulated, however, a



child will retreat to the familiar; whether it is an object, situation, environment, or person. Concerning the child's retreat to the familiar, Hutt (1966) found that children explore a novel environment more in the presence of familiar objects or people, as well as exploring novel object/situation in a familiar environment. In addition as the child grows or develops, the theory seems to suggest, novelty in objects/situations becomes more rare. As Baldwin and Baldwin (1977) put it,

For the new-born infant, the whole world is novel, hence the neonate is easily over-stimulated and in great need of a mother for arousal-reduction. The neonate need only open its eyes or move its body to experience novel input. However, as familiarisation and habituation rob the nearby world of novelty, the infant ceases to find passive looking, listening, or simple body movement sufficiently arousal-inducing to escape boredom. (p.56)

Furthermore, Hutt (1966) suggests that in early childhood exploration and play are not easily distinguishable. As the child develops, these two activities become more differentiated until in adulthood they are separate activities. In Hutt's (1966) words,

Thus, in infancy it is perhaps difficult to distinguish between investigatory responses and play responses..... However, these two activities diverge, and become more easily separable, until in the adult there is a sharp distinction between investigatory activities on the one hand, and play activities on the other, which are often an extremely ritualised kind. There may indeed be many instances where both features of exploration and play are present, but these should not prevent us from attempting to make the distinction. (p.212)

This theory of play seems to resemble Piaget's theory and it is tempting to think of it as an extension of Piaget's theory of play. Although Piaget did not hold to the thought of boredom as the factor initiating play, nonetheless, the processes by which a novel situation/object is dealt with is very similar. Piaget's theory of play is based on schemata building through assimilation and accommodation. If a novel object/situation cannot be partially assimilated (i.e. too novel) then no accommodation can take place. Similarly, in the Sensory Stimulation theory of play, over stimulation by an object/situation leads to retreat and no learning or adaptation (i.e. accommodation) can take place. Furthermore, in exploring the child learns properties of an object/situation (accommodates) prior to play (assimilation). In the Piagetian concept of play, some learning/adaptation (accommodation) may arise in play, as is the case in the Early Play phase of exploration in the Sensory Stimulation theory. Another similarity is how exploration and play and accommodation and assimilation with development and growth become differentiated. The result of exploration is knowledge and cognitive development (i.e. schemata formation), which may explain why the environment as one develops becomes familiar or is exhausted from novelty; for one has explored (developed cognitively) enough to explain things or not find things stimulating any longer.

There is one main criticism of the Sensory Stimulation theory of play: The fact that the

theory retains some elements of instinctual drives proposed by Karl Gross (See Table II.B.iii.1). Namely the theory suggests that play is an outcome of the instinct of exploration or familiarisation of the organism to the environment (Rubin et.al. 1983). The theory may serve to explain some of the play behaviours/types, but by no means does it explain the wide range of play behaviours or types (Rubin et.al. 1983).

Theory	Main Thoughts	Criticism of the Theory
<p style="text-align: center;"><b>Sensory Stimulation Theory of Play</b></p>	<p>i) Child seeks to maintain an optimum level of stimulation in the nervous system.            ii) Boredom/under-stimulation leads to stimulation seeking in the form of exploration.            iii) Exploration has two types,            a) Specific Exploration of novel objects/situations, and            b) Diverse Exploration in which the child produces stimulation by engaging in activities/actions that stimulate the senses.            iv) Specific exploration has phases in unfolding.            v) Play is triggered by stimulation seeking/exploration.            vi) Novelty must not be over-stimulating, otherwise child will not explore hence no play can occur.            vii) If situation/object is over-stimulating the child will retreat to familiar object, situation, environment, or figure.            viii) Novel objects in familiar environments and/or novel environments with familiar objects/people lead to more exploration by the child, hence increasing the possibility for play.            ix) Play and exploration in early childhood are not easily differentiated. As the child develops they become easier to distinguish, until in adulthood they are very much separated.</p>	<p>i) The theory assumes instincts/drives (familiarisation of the child to the environment) are the motivations for exploration, hence play.            ii) (See criticism of The Practice Theory Table II.B.iii.1)</p>

Table II.D.iii.1. A Summary of The Sensory Stimulation Theory of Play.



## **II.E. Working Definition of Play**

The establishment of a working definition of play is essential for the purposes of this research. This however, is not to say that play can be easily defined. As was evident from the review of the play theories, people have defined play in several ways. Some truth lies in all the theories, in none a full explanation. As Mclellan (1970) put it,

No one theory will fit neatly into one activity of a child, but that each theory has some contribution to make. If one could, as it were, take a strand from each, a strong rope might be woven with which to tie up this strange parcel, labelled "play". (p.3)

It may prove impossible to define play, as Garvey (1990) says, "it has become increasingly clear within the last decade that it is impossible to define play as a particular type or set of actions"(p.5). Perhaps the difficulty in defining play lies in its expressive character. As Sutton-Smith (1971a) states,

Play, like other expressive characteristics (laughter, humour, and art), does not appear to be adaptive in any strictly utilitarian sense. Rather, it seems possible that such expressive phenomena produce a superabundance of cognitions as well as a readiness for the adoption of an "as if" set, both of which are potentially available if called upon for adaptive or creative requirements. (p.258)

However, dealing with the physical environment requires concrete basis to proceed on. An architect would not be able to design, for example, a living-room without having an idea, a concept, a working definition, of what types of activities that are exercised in this space. Likewise, for the purposes of this research, play must have a definition. In attempting to reach such a definition, an emphasis will be placed on;

- a) What connections are there between the child's development and play - i.e. the benefits a child gains from playing, and
- b) What are the commonly accepted characteristics of play, which contribute to the definition of play?

### **II.E.I. Benefits of Play**

In examining some of the suggested advantages of play to the child's development, and in order to cause minimal confusion, the benefits of play will be divided into the areas of benefits to the child. The reader may want to keep in mind, that while some benefits are listed under a certain category, in reality or in actual play behaviour the benefits may arise in many, if not all, the categories, and from all play types.

#### **II.E.I.a. Physical Developmental Benefits**

Perhaps the least disputed argument for the benefits of play is its contribution to the physical development of the child. Ever since ancient civilisations the physical aspects of play has been regarded as beneficial to the child (See Table II.A.1). Physical activities (e.g.

running, climbing, jumping) develop the child's physique, and provides physical fitness (Abernethy 1968). There are two areas in which play contributes to the child's physical development, (a) gross motor (large muscle) development, and (b) fine muscle and co-ordination development (Martin 1989, Weininger 1980). The latter involves the use of "the small muscles of hands and fingers" (C.M.H.C. 1979; p.8). Furthermore, through the use of fine muscles in play "hand-eye co-ordination and the implications of space and time are practised and learnt" (Martin 1989; p.6). Physical play not only benefits the child's physical attributes, but also his self-esteem.

The mastery of physical skills has an important effect on the child's self-image. When he is obviously good at something he feels good! (C.M.H.C 1979; p.9)

In addition, Brown (1980) points out that children suffering from unfavourable environments (e.g. environments that do not support varied play activities) and/or learning disabilities have been observed to show improvements in overcoming their disabilities through "vigorous" physical play. Brown (1980), also reports on how physical play leads to better social integration of the child amongst his peers. He states,

Children also grow in social status with physical play. Studies show that those children who score high on physical/motor traits tend to be extroverted, sociable, dependable, and tolerant, prone to be leaders and popular with their peers. (Brown 1980; p.283)

Hence, what seems to be pure muscle exercise and energy consumption not only contributes to the child's physical development, but to learning, co-ordination, self-esteem, popularity, and social integration of the child in general. Such is the nature of play.

### **II.E.I.b. Cognitive Developmental Benefits**

It has been hypothesised, especially by the Piagetian school of thought, that play serves or aids in the cognitive development of a child (Barnett 1990). Learning and thinking, the mental attributes to cognition, have been linked to play; especially divergent and convergent thinking (i.e. creativity and problem-solving). Barnett (1990) provides explanations of how this link has come about,

Play is regarded as an orientation which affords the individual the ability to apply much of his/her playful experience with objects and procedures to real-life problems which didn't appear in the original play situation [convergent thinking]. It is speculated that by exploring and manipulating objects in play, individuals learn the properties of those objects as well as their potential for application to various other problem situations [divergent thinking]. (p.139-40)

To examine such hypotheses several studies and research have been carried out. In their study Sylva et.al. (1974) carried out an experiment, and formulated a method to examine the hypotheses discussed above. They devised a problem in which an object was to be



retrieved. The method of retrieval required the use of materials and their connection (two sticks and a clamp). The children ranging in age from 3-5 years-old were divided into four groups. One group was allowed to engage in free play with the materials prior to the task (retrieval of the object). The remaining three groups were exposed to different situations, (1) saw the task being carried out by an adult; (2) instructed on how to carry out the task; and (3) shown by means of animated characters, the task being carried out. The results of the experiment indicate that children who had an opportunity to freely play with the materials performed as effectively as the group that watched the adult perform the task. Sylva et.al. (1974) conclude by stating,

Those who play before attempting problem-solving seem to do better for the following reasons. (1) Solving problems required self-initiation and our playing children were the only ones in the experiments whose actions were self-initiated. (2) Tool invention (like other forms of problem-solving) requires serial ordering of the constituent acts involved. The players were the only ones who had an opportunity to explore alternative serial orders. (3) Play reduces the stress of anticipating success and failure. Our players, less stressed, were able to proceed with less frustration and fear of failure - they were more goal-directed..... The effect of prior play seems to be not only in combinatorial practice, but also in shifting emphasis in a task from ends to means, from product to process. (p.256)

However, Sylva (1977) cautions against making hasty conclusions concerning play and learning or problem-solving. She points out that play does not directly lead to problem-solving or learning. Instead, through playful manipulation of objects (environments), she suggests a child builds "a store of information that can be called upon when need arises" (Sylva 1977; p.59). Sylva (1977) views the role of play in aiding problem-solving (convergent thinking) as follows,

What is acquired through play is not specific information but a general set towards solving problems that includes both abstraction and combinational flexibility..... The evolutionary data are correlative : the species who most *need* flexibility demonstrate the most play (p.60-1)

Brian Vandenberg, in a similar study, examined children aged 4-10 year-olds. Differences in the experiments, besides the age of children, were the number of tasks posed to the children. In Vandenberg's experiment there were two tasks. One very similar to Sylva's, the other required the children to dislodge a sponge stuck in a transparent pipe by tying two pipe cleaners together. The play group again performed as well as the trained group in solving both problems without having performed task-specific activities in their play (Rubin et.al. 1983). Hence, the connection between play and problem-solving or convergent thinking exists. How, exactly, play contributes to convergent thinking is the mystery. As Barnett (1990) states,

Research generally supports the connection that play may have a significant impact on problem-solving ability, although the way in which it makes this contribution is still un-clear..... Play is not necessary for producing the correct solution to a task, since many children performed well on the experimental tasks without any prior related play experience. Rather, what the literature does suggest is that it is more likely that play provides the individual with flexible



approach to his/her environment, and contributes to the development of a generalised mode of cognitive approach which the individual utilises in the problem situation. (p.141)

Besides problem-solving, play has been hypothesised to be an active agent in promoting the individual's creativity (Barnett 1990; Rubin et.al. 1983). The connection is based on play's characteristic of providing a child with a wide range of repertoires, skills, responses, as well as a set of flexible approaches to situations. The first link that may exist between play and creativity or divergent thinking was proposed by Brian Sutton-Smith, who found that pre-school children produced more associations and/or usage of objects that they played with regularly (Dansky and Silverman 1973; Rubin et.al. 1983). However, because of methodological weaknesses in the study, the results lost some of their impact in linking play to creativity (Rubin et.al. 1983). Nevertheless, more research was to take place in an effort to reach a more definite answer.

Dansky and Silverman (1973) carried out an experiment involving ninety pre-school children. The children were divided into three groups: (1) children permitted to play with objects; (2) children asked to imitate the use of the objects by the experimenters; and (3) children given a neutral experience not involving the objects (control group). The results found that although all groups used the objects for their initially designed purposes (i.e. a screwdriver for screwing screws), the children "in the play condition produced significantly more non-standard responses for every object" (Dansky and Silverman 1973; p.652). Furthermore, the differences in object use between the imitation and the neutral group were non-significant. The experimenters, in attempting to explain the significant differences, attribute some of the effects to the environment. As they put it,

Another factor which contributed *significantly* [my italics] to the differences between the three treatment conditions was the considerable use which the play subjects made of available environmental cues..... The open-ended instructions given the play subjects may have stimulated an active search of the environment for cues indicating various ways in which the available objects could be used. (Dansky and Silverman 1973; p.653-4)

Smith and Simon (1984), after reviewing research and experiments aimed at finding an answer to the question of the connection between play and divergent thinking or creativity, concluded by stating the following,

A general superiority of play over non-play conditions seems evident for divergent tasks. Since it would be for divergent tasks that much of the hypothesised advantages of play would apply (in terms of flexible behaviour and unconstrained combinations), (p.204)

Divergent thinking, however, is not only linked to the use of objects in a playful manner. As Barnett (1990) points out, "it appears that the symbolic transformations that occur in make-believe play are the key link between play and this type of creative thinking"(p.142). The



connection between symbolic play and creativity can perhaps be put forth best by the research carried out by Dansky (Rubin et.al. 1983). Dansky classified children in his research into two categories: (1) "players", which engaged in pretend (symbolic, dramatic) play for more than 28% of their free play time and/or activities; and (2) "non-players", who only engaged in pretend play for a maximum of 5% of their free play time and/or activities. When given objects, Dansky found that the "players" were more likely to use the objects in a non-literal (creative) fashion than the "non-players". In addition, when asked to propose alternative uses of the objects, the "players" were significantly more able to do so than the "non-players" (Rubin et.al. 1983). Dansky concluded by arguing that,

The relationship between play opportunities and fluency of thought specifically depends on the occurrence of make-believe [symbolic, dramatic play]. (Rubin et.al. 1983; p.751)

Is Dansky's argument valid? Does imaginative types of play lead to creativity? Although there is no clear-cut answer to this question, Singer and Singer (1979) in reporting on their research findings state,

People who have been chosen as especially creative in arts or in sciences are asked what some of their early childhood experiences were like, and the things that seem to discriminate them are reports of greater daydreaming in childhood and of having had imaginary companions. (p.211)

To conclude the discussion, the statement provided by Partington and Grant (1984) best summarises the connection between play and creativity.

Fantasy play,..... provides innovative learning experiences. These are necessary to equip children with generalised behavioural repertoires appropriate for dealing with the novel roles and relationships to be encountered in whichever probabilistic future may unfold. (p.217)

### **II.E.i.c. Emotional Developmental Benefits**

Freud's theory of play suggested that the child through his play will reduce anxieties in reality, as well as fulfilment of wishes in play that may not be attainable in reality (See Table II.D.i.b.1). Although it is very difficult to test such a hypotheses, as was mentioned previously, research has been carried out to find whether or not play stabilises emotions in the child (Barnett 1990). Children attending play sessions associated with clinical procedures were found to come to terms with their anxieties better than those children who did not (Barnett 1990). Furthermore, Barnett carried out a study with pre-school children to test the relationship between play and anxiety reduction. Reporting on the results, Barnett (1990) states,

[Results] ..... were that support was found for the importance of a play period which the children used to neutralise the anxiety they were feeling. (p.148)

In addition, Barnett found that the children used symbolic play to alter outcomes, or

reverse roles from the passive to active (See Section II.D.b.i), hence fulfilling their wishes in play (Barnett 1990). Cass (1971) reports on observations of children's play during the period of the second world war. She states,

During the war many children who spent the night in shelters listening to the crash of falling bombs also spent a lot of their play in acting out these scenes. They would build imaginary air-raid shelters with tables and blankets, then hurry everyone into them, shouting that the bombs were falling. They would play endless shooting and bombing games accompanying them with as many appropriate sounds as possible. (p.47)

A definite link between play and anxiety reduction or wish-fulfilment remains tentative at best (Barnett 1990). However, there are indications to suggest the possibility of such a link.

### **II.E.i.d. Social Developmental Benefits**

Play offers a medium from which a child may learn about the society, as well as how to interact with members of the society (Barnett 1990; Garvey 1990). According to Barnett (1990) and Beach (1971), research with social animals (primates), has connected play in a definite way to the following;

- a) Peer play is instrumental in normal development,
- b) In play, the animal learns its role in the group, and behaviour appropriate to that role is developed,
- c) Through social play the animal learns to socially co-operate with others, and
- d) Through play the animal will learn social skills, such as communication and dominance/power hierarchy. The human species is the most social species on earth. Is play necessary for the social development of the individual or child?

There are, according to Barnett (1990), two hypotheses on how play is linked to social development of humans. The first states "that fantasy play is related to and causes the development of social and social-cognitive skills" (Barnett 1990; p.146). The second states,

Sociodramatic play is merely a reflection of the child's egocentric thought and the primacy of assimilation over accommodation. Therefore, it is reasonable to find a positive relationship between the child's egocentric perspective-taking and his/her incidence of fantasy play. (Barnett 1990; p.146)

In order to find if such a connection between play (all types) and social developmental benefits, the discussion will be divided into the purposes play serves in social development. While discussing social developmental benefits of play, the reader may want to keep in mind that social play is the combination of social interactions (i.e. two individuals or more) and play (Smith 1977).

#### **II.E.i.d.1. Play and Social Skills**

Humans practice many skills in interacting with others. Communication is one of the most



fundamental and basic forms of interactions. How does play aid in the development of communicative skills? An example of children at play may provide some indication of how play helps in social skill development and learning.

A request (A): "Give me that hammer"; express non compliance (B): "I got it first"; paraphrase the unsuccessful request (A): "Well I need it"; and negotiate the demand (B): "You can have the pliers". (A): "NO, I'll give you the flashlight if you give me the hammer". (Garvey 1990; p.13)

In this brief example, the two children seemed to practice many communicative skills. Besides the use or practice of language, they seemed to learn how to request something in a way that will suit the play partner. They seemed to learn how to negotiate, and reach a compromise. These skills are needed in adulthood and in social interactions in general. Furthermore, in engaging in symbolic play the child assumes a role of a character while at the same time being himself (it is this aspect which Piaget and Vygotsky held to be the beginning of decentralisation, See Section II.D.ii.b.2), and in doing so he learns to take different points of view (Rubin et.al. 1983). Taking different points of view will lead the child to understand the reasons for some social behaviours (Hardy et.al. 1990). Games and rule-governed play practices many of the social skills such as strategy, calculations of odds, memory and, of course, complying to the rules of the game/play situation; all of which will be called upon in adulthood, and the social world of work and reality (Parker 1984).

Moreover, skills such as the ones found in rough-and-tumble play (i.e. play signals, and even play-fighting) are a means by which the child communicates and interacts with others (Humphreys and Smith 1984). Hence, play seems to be positively correlated to the attainment of social skills. Although, as Barnett (1990) points out, play is not the only form or activity by which the child gathers information regarding social skills. Nonetheless, play does contribute to the child's learning of such skills (Barnett 1990; Smith 1977).

### **II.E.i.d.2. Play, Co-operation and Role Performance In a Group**

It is very clear that in order to participate in any type of play which involves more than one participant (social play), co-operation is required if the play situation is to continue (Garvey 1990; Smith 1977). In an effort to prolong or elaborate on the play situation, children co-operate and acquire a skill needed for social interactions in the future. Furthermore, the role the child assumes in a game or a dramatic play episode requires him to perhaps sacrifice some of his personal desires for "the sake of the team" (Parker 1984; Peller 1971). This sacrifice or role assignment is, in a way, to sustain the play situation, and in another way, teaching the child the concept of team work: The basis of society and civilisation. In addition to social skills, a child may learn other things such as problem-solving in social play. As Adams (1990) points out,

A number of experiments have demonstrated that if pairs of children are presented with a problem and have differing points of view on its resolution, they make more



progress solving the problem together..... There is further evidence that..... children who have solved problems within a group setting produce more sophisticated reasoning to explain their conclusion.....[some have argued that a less able child will copy a more able child]..... However, it has been demonstrated that not only do children possessing the same cognitive abilities progress, but even the more able child can progress through interaction with a less advanced child.

Benefits of social interaction..... are not confined to the development of cognitive abilities, but also have a positive effect on social and effective development such as peer-liking, attitude to school and education, and self-esteem. (p.29-30)

### **II.E.i.e. Play and Development**

Unlike other social species, the human species cannot reach a verdict on whether or not children's play is necessary for normal development (Cohen 1987; Garvey 1990; Herron and Sutton-Smith 1971; Rubin et.al. 1983). The position taken is perhaps best stated by Smith (1977),

A shift of consensual views as to the value of play has occurred over the last century. Certainly, play is a tremendously enjoyable activity. Certainly, some skill development can take place through playful activities. However, statements that play has an *essential* function in development are scarcely justified at the present time. Generally speaking, it has yet to be demonstrated that playful activities have functions in development which could not equally be served by non-playful practice of those activities - for example in extracting rules or hypotheses of behavioural sequences or sub-routine assemblies from a set of examples and extending to new instances - it is extremely difficult to demonstrate this experimentally. The main difficulty lies in the nature of control groups, and the near-impossibility of either depriving or supplementing the playful experiences of children without affecting practice experiences as well. (p.130)

The review of play benefits may have raised more questions than answered. The difficulty as was mentioned earlier by Sutton-Smith (1971a) is perhaps due to the nature of play. If it is possible in the future for science and research to come up with answers concerning the benefits of laughter, love, and art; then perhaps a definite answer concerning the benefits of play may be reached. Until that time, however, play remains a subject worthy of study. Furthermore, the benefits of play remain hypothesised, even though some experiments and research suggests play leads to some benefits.

Play has been described as an elusive phenomenon. Pinning down the effects of play is proving just as elusive. (Smith and Simon 1984; p.213)

### **II.E.ii. Characteristics of Play**

The definition of play that is accepted by many child psychologists and others concerned with play, stems from the characteristics of play behaviour (Garvey 1990). However, the characteristics put forth by those that have studied play and play behaviour vary in number as well as in content. Therefore, a brief look at some of the proposed main characteristics of play will be undertaken in order to arrive at a definition of play for the purposes of this research.



The most accepted characteristics of play according to Beach 1971, Burghardt 1984, Garvey 1990, Sylva et.al. 1974, and Rubin et.al. 1983 are:

- a) Play is pleasurable, positively valued by the player even if no signs of mirth are evident.
- b) Play is voluntary, self-initiated by the individual.
- c) Play serves no immediate biological function, nor does it serve to attain any other goal, it is the process that is rewarding to the individual rather than the product (means over ends).
- d) Play requires of the individual some type of active involvement.
- e) Play has certain features or systematic relations to what is not play.

These are the characteristics that have given rise to a commonly accepted definition or explanation of play behaviour today (Garvey 1990). Nevertheless, some people concerned with play have put forth their own characteristics of play. Beach (1971), for example, adds to the above list three more characteristics which are related to individual species. His characteristics state that, (a) the forms of play are species-specific (i.e. dogs play in different ways than horses, and horses in different ways than man, etc.); (b) the higher the species' position on the phylogenetic scale, the more time spent in play, as well as the more diverse the play behaviours; (c) play is a behaviour or an attribute of the young of a species; adults of a species may play, but they do so less frequently.

Sylva et.al. (1974) also add two new characteristics to the commonly accepted list of five, as well as refining one in the original list. By being free in nature, they contend, play invites the individual to notice seemingly irrelevant details in objects and events. This is to say, a child will notice more things in play because of play's free quality. Sylva et.al. (1974) also argue that in play a child practices assembling bits of behaviour patterns and non-play activities into unusual sequences, which is in some way related to the original list of play characteristics (play is related to what is not play). They also state that because of play's borrowing of non-play behaviours, play then serves to practice these behaviours in a less risky situation. As they put it,

A young baboon simulates attack; a child simulates meal preparation. These acts share with other simulations, e.g., wind tunnels for aircraft and dress rehearsals for drama, the lessening or elimination of risk. (Sylva et.al. 1974; p.244)

This characteristic of borrowing behaviour, or play behaviour resembling non-play behaviour, also leads to the pretence behaviours involved in play as Rubin et.al. (1983) point out, and thus another characteristic of play arises: "play behaviours are not serious renditions of the activities they resemble" (Rubin et.al. 1983; p.699). It is perhaps this characteristic which has led many to take the view of play not being *real*, or as Huizinga



(1955) put it, "a stepping out of *real* life into a temporary sphere of activity with a disposition all of its own" (p.676).

Another characteristic of play, put forth by Burghardt (1984), is that play is stimulation-seeking. In other words, a child plays in order to stimulate the senses. Through exploration of an environment, object, and/or situation this stimulation is gained (See Table II.D.iii.1). However, Rubin et.al. (1983) disagree with the proposition that play is exploration and/or stimulus-seeking. They state,

*Exploration is guided by the question, "What is this object and what can it do"? Exploratory behaviour is dominated by the stimulus insofar as it is oriented to obtaining information about its features. In contrast, play is guided by the organism-dominated question, "What can I do with this object"? Presumably exploration occurs when objects are unfamiliar or poorly understood..... Play, on the other hand, occurs when objects are familiar; it serves to produce stimulation and maintain a particular level of arousal. Thus play, unlike exploration, is organism [child] rather than stimulus dominated. (p.699)*

Rubin et.al. (1983) also clarify the fourth common characteristic of play (that requires a person to be actively engaged in a behaviour), by stating that this characteristic has been adopted in order to distinguish play from other passive states (such as daydreaming, aimless loafing) that are initiated by boredom or inactivity. However, Rubin et.al. (1983) disagree with others on the inclusion of daydreaming as a passive state. Their reasoning for the disagreement is, they believe that,

Daydreaming, during which the individual "plays" with ideas, has been considered one of the developmental successors to the young child's active involvement with objects, action, and others. Thus, it is important that we recognise the potential developmental kinship between the play of young children and the daydreaming of older children and adults. (Rubin et.al. 1983; p.700)

Still, another proposed characteristic of play is Huizinga's (1955) claim that play is a cultural function. This characteristic is not sanctioned by many concerned with play, however it offers a new dimension to play. Huizinga (1955) contends that because play is not real or is an escape from reality, it is relaxing. Relaxation is, according to him, an integral part of life for the individual as well as society. As he explains,

[Play] as a regularly recurring relaxation, however, it becomes the accompaniment, the complement, in fact an integral part of life in general. It adorns life, amplifies it, and is to that extent a necessity both for the individual - as a life function - and for society by reason of the meaning it contains, its significance, its expressive value, its spiritual and social associations, in short, as a culture function. The expression of it satisfies all kinds of communal ideals. It thus has its place in a sphere superior to the strictly biological processes of nutrition, reproduction, and self-preservation. (Huizinga 1955; p.676)

Thus, play has been characterised by many properties; from being an activity outside the realms of reality to an activity that is a cultural function or necessity. It is not surprising then, that a definition of play cannot be reached. Nonetheless, for the purposes of this research



it is necessary to define play. The characteristics of play from the past discussion are listed below.

- i) Play is pleasurable, and is positively valued by the individual engaged in play.
- ii) Play is self-initiated and voluntary.
- iii) Environmental stimuli initiate exploration which becomes play as stimuli loses novelty.
- iv) Play is an activity associated with the young of a species, and play differs from species to species.
- v) The higher the species on the phylogenetic scale, the more complex the species' play behaviour.
- vi) Play serves no immediate biological function. Furthermore, play is not goal oriented, pleasure is attained from the means/process in play.
- vii) Play can involve or resemble non-playful behaviour, actions, and features; however because they are practised in a playful context, they are not serious renditions of the activities they mirror.
- viii) Play offers a safe niche in which an individual may simulate behaviours, or actions with no serious consequences.
- ix) Play is an activity outside the realms of reality, it is free in the sense that what holds in reality may not hold in play and visa-versa.
- x) Play enables the individual to notice details of behaviours, objects, and environments because of its freedom.
- xi) Play through its freedom is relaxing, and is thus, a complement of life for both the individual and society.
- xii) Play requires an active involvement from the individual, whether mental or physical.

### **II.E.III. Establishing A Definition**

Play is pleasurable, anyone observing children or adults at play will testify to this claim. Play is self-initiated. However, the environment, and/or the play setting has some influence on the initiation of play. Play serves a function and a goal in the development of a child. It may not be certain, but evidence suggests play does help the child perform many tasks. In play a child learns, and develops his physical, cognitive, emotional, and social attributes. The child may not engage in play activities or behaviours with the learning of these things in mind; however, through play the child acquires some of the information which leads to the mastering of them. Because it is play, the child is free to experiment, test, and notice some of the elements that the activity, situation, and behaviour is composed of. This continuous examination and experimentation will help the child to perform in a certain society to that society's definition of competent behaviour or actions. As Garvey (1990) suggested,

Although playful activities generally derive from non-play behaviour patterns, those patterns need not be mature or complete to serve as a basis for play ..... A behaviour pattern performed in the simulative pattern [play] can be elaborated and combined with other similarly "displaced" patterns. When the behaviour is next performed in a non-play mode, it may be more skilled, better integrated, and associated with a richer or wider range of meaning. In this way play can contribute to the expertise of the player and to his effectiveness in the non-play world. (p.167-8)

It is in this way, coupled with its expressive value that play becomes a societal function. A function shaped by culture. It is emotional, and mental. It is physical and social. It is play, serving many functions; some functions have been realised others remain to be discovered. Hence, for the purposes of this research, play can be defined as follows.

Play is an activity a child/individual engages in, in a mental, physical, and emotional manner. The child/individual involves himself in play in an enjoyable and voluntary way. Through play the child/individual may gain information which leads to a better understanding (learning) of non-play situations. Involvement in play is not goal oriented, however certain outcomes do occur in play. As such play is a need or a priority for the child to be involved in. It is society's responsibility to cater for play, especially the play of the young of the society. In society's provisions for play, the environments/play settings are to be conceived and/or designed certain purposes. The purposes should target to aid in the complete development of the child (physical, intellectual, emotional, social, etc.), according to the best possible advice available from people concerned with play as a developmental tool which will aid in the child's overall well-being.

#### **II.E.IV. Implications of The Definition**

The planner and/or designer of children's play environments may find this chapter a little too complicated as well as having too many ideas. In this section an effort to provide the planner/designer with a brief review of the chapter in a more concise manner and to indicate some of the implications of the definition derived at from reviewing the psychological context of play.

In psychology, the child is looked at and examined as a specimen or organism in situations that, for the most part, do not resemble the usual environment that the child lives and plays in. However, the theories that do stem from these observations and experiments explain some of the activities that are noticed in the real environments children live in. This fact is reason enough to justify the need for planners/designers to study the child with a psychological approach. In doing so, the planner/designer will give reason to some behaviours that were not comprehended before. Furthermore, the main purpose of such



an undertaking is to ensure that the planner and designer understand as much about children's play as possible. This better understanding will ultimately lead to better play environments that are effective in catering for the needs of children and the society.

Play and playful behaviour does exist in all mammals. In some species this behaviour serves a biological function and is very important for the survival of the organism. In humans, the most sophisticated mammal, play behaviour is the topic for a great and lengthy discussion. While it is not certain that play in childhood serves a biological need for the species, it would seem unnatural for children not to play. It is this assumption that has led many to try and give reasons for the existence of this behaviour. Some have argued that play is necessary for the development of the sense of freedom, others have stated that play is important in that it allows the child to release some energy. To those that have studied this activity in the context of overall human development have tried to provide reasons within the theories they have outlined. Freud and his followers have suggested that play is a means by which the child can master situations, assimilate unpleasant events and fulfil wishes. Piaget has provided the argument that play aids in the cognitive development of the individual by providing a platform for learning through experiment and experience. Yet others have argued that play is a vehicle for stimulation of the senses. Which one is correct and which one is not? The answer to such a question is beyond the limitations of this research, however, the reasons that many have given to the existence of play all carry some truth. As environmental designers, we must make the effort in translating these truths into physical realities; into good play environments.

In the framework of this research it is important to clarify that the activity of play is important to all - especially children. Play is vital to the individual child and to the society. To the child, involvement in play behaviours is not only exertion of energy and the movement of limbs, engaging in play and playful behaviour is to initiate mental, physical and emotional activities. However, we still tend to think of play in a dichotomised way. Perhaps through employing different methods, most importantly education, people will come to realise that play behaviours are not a complete waste of time to the child. Learning, although not in the institutional sense, can and is one of the many results that a child might gain by playing. Thus, an effort is required by many to ensure that the urban environment does not rob the younger generations of this activity. As environmental designers, we must guarantee to the young of the society environments and areas that cater for their play. It is a difficult task, however, difficult tasks are what make the rewards greater.

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## **Chapter III : Play in The Context of The Urban Environment**



### **III.A. Introduction**

The play of children, as an activity, is very important not only to the child but to the whole community. To the child play is an activity which comes to be practised naturally. However, within the urban areas of the world today the play of children has been restricted in many forms and as a result, some of the social ailments that seem to be associated to youngsters in urban areas are at semi-epidemic levels. Drugs, crime and violence are increasingly becoming one of the many traits of urban areas and the young of these urban areas are getting more and more of the blame for these anti-social behaviours. While play and the provision for play will not, on its own, cure these disorders they will have a positive contribution towards this goal. The play of children is too important to leave to chance and the urban areas of the world should provide for this activity.

The provision for play in the urban environments has been hampered by many factors and issues (See Chapter I). Amongst the most important of these issues are:

- A) The shift in planning practices after the second World War towards standardisation in open space provision.**
- B) The lack of interdisciplinary co-operation in the planning and design of play spaces.**
- C) Pressures exerted on the officials by parents and politicians to provide "groomed" and "hygienic" play areas that require little financing in terms of maintenance.**
- D) The anxiety people have with regards to safety and liability in play areas.**

These general issues that impede play and the provisions for play are discussed in greater detail in Chapter I. While these issues are crucial in understanding the problems that exist with play and play areas in the urban setting, there are other issues that are more specific in nature. Specific in the sense that they could be considered as planning criterion for play area provisions in the urban environment. This chapter will examine these issues in some detail. In the first section of the chapter (Section III.B.) the issue of accessibility will be addressed. This issue is perhaps the most important criteria in play environment provision for the simple fact of spaces (no matter how abundant and proper) are of little use if the child has no means of access to them. The discussion of accessibility is divided into two main parts. The first is the Range Behaviour of children (Section III.B.i.) thereafter an examination of The Built Environment (Section III.B.ii.) and how it affects the access of children. The second section of the chapter will tackle the issue of Diversity (Section III.C.). This section will deal with the diversity play areas in terms of the Distribution of Play Areas (Section III.C.i.) within the urban fabric and the Diversity in Play Areas (Section III.C.ii.) in terms of activities, facilities and layout. In the third section of the chapter a discussion on the issue of Children's Participation in Planning and Design (Section III.D.) will be provided. While there are more issues worthy of examination and discussion, these three are in

many ways the stalk from which other issues stem.

### **III.B. Accessibility**

All the benefits that play might contribute to the overall development of the child is of little significance if the child is prevented from playing. To fully develop, a child needs to be exposed to many stimuli and situations which with time build the repertoire that he calls upon throughout life (See Chapter II). For this reason, the child must be exposed to as many things as possible from a very young age. Further, the outdoor environment is an ideal environment for the child to understand a considerable amount of the physical and social makeup of the world. However, this exposure for the child is becoming less and less where the opposite should be the case (Parr 1967). Why?, there are no clear cut answers to such a question. Nonetheless, over the next few pages some of the issues and reasons limiting children's access to play opportunities outside their homes will be reviewed and discussed.

The limitations an access to places where play could occur can be categorised into several reasons. On the one hand there are the features of the physical environment that threaten the safety of the child, or are not supportive of play. These include for example the dangers posed by streets and the limiting effects of high rise living. On the other hand, there is the parental control on the child, which will hinder the natural processes of range expansion and development (See Section III.B.i). Control over the outdoor activity of the child, or parents' permissiveness of such activities taking place, is dependant on many factors. The most important of these being: the attitude of the parents to how important outdoor play is, the characteristics of the environment (both physical and social) outside the dwelling (i.e. safety, features of the physical environment, attitude of neighbours, etc.) and the characteristics of the child (e.g. sex and age of child). Both these broad reasons for the limitations of the child to the outdoor environment could be (in theory) thought of and analysed independently, however, in reality they work hand in hand. One is dependant on the other in limiting the use of the outdoors by children for their play. Furthermore, there are issues that limit accessibility that are child specific. The child's awareness of the play opportunities and his ability to use or access these opportunities is dependant on the child's own skills and knowledge of the environment, although the environment and its ability to give child access to different parts of the environment will contribute to the child's development of these skills and knowledge (See Section III.B.i).

Before the review of the physical factors limiting the access of children to outdoor play opportunity, one subject will be looked at. This subject is children's range behaviour.

Although range behaviour of children (i.e. how far children wander in an environment) is for the most part dependant on the physical and social characteristics of the environment



(Hart 1978), the underlying source for the behaviour is very much a biological one (Proshansky and Fabian 1987). The discussion of range behaviour is very important with respect to the accessibility an environment provides for the child's outdoor play.

### **III.B.i. Range Behaviour**

As both Piaget and the Stimulation Seeking theories of play have stressed (See Chapter II), the child is a developing organism and as such, is for ever seeking stimuli and information. As the child develops and becomes a mobile person the hunger for information grows and soon the environment of the home no longer satisfies the child's innate desire for information and stimuli. The child soon (around the age of five) wants to venture into the outdoors environment to seek out more information (Parkinson 1987). As Van Vliet (1983) put it,

There is no question, however, that spatial mobility plays a crucial role in children's physical, social, and intellectual development. In order to mature, children need to explore opportunities in their environment. (p.63)

The home, however, is still a very significant component of the child's range behaviour. Hence, while the child desires a greater range and more exploits, he still needs the home (as a familiar space) for the security it offers, as the stimulus seeking theory suggest will happen in the case of over-stimulation (See Section II.D.iii., in Chapter II). All this may be explained as two instincts in conflict. On the one hand the child seeks to explore and become a more competent organism, while on the other hand he seeks security and attachment to those that provide it. As Parkinson (1987) explains,

Children venture from their homes in ever widening circles, or ranges, the distances they travel being affected by a number of social, demographic, ecological, ethnological and cultural factors. This pattern enables a child to learn about the outside environment, whilst still retaining contact with home, which provides the protection of a secure base from which to explore. It enables a child to become increasingly more independent and self-sufficient as the home ties are gradually loosened. (p.1)

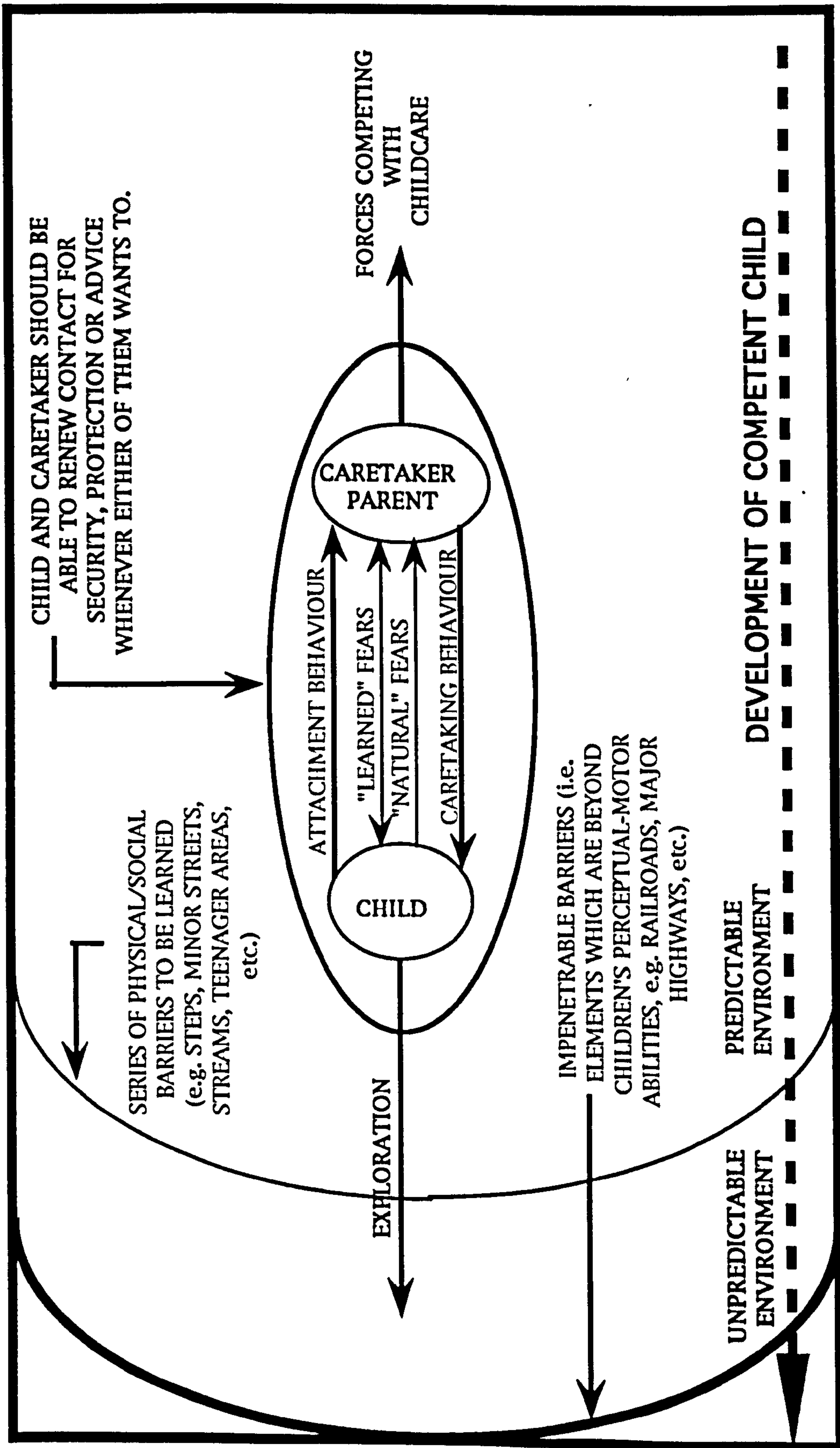


Diagram III.B.1.1. Schematic Representation of the Forces Involved in The Range Behaviour of a Child. [Taken from Perez and Hart (1980). p.255]



There are different range types that Parkinson (1987) and Moore (1986) define. These ranges differ both in terms of the amount of time the child spends within the range and the distances a child has to travel to them.

**I) Habitual Range:** is the first of these ranges. This is the range closest to the child's home and is the place where most of the child's outdoor time is spent. The child might not spend long lengths of time in one visit to this range, however it is the most frequented range in terms of overall time. It is the range where the child is most likely to make friends and engage in socialising activities. It is also the range where most of the child's every day play occurs. Usually this range is just outside the child's unit.

**II) Frequented Range:** this is the second range and covers a larger area than the first. The distance from home is very much dependant on environmental features of the neighbourhood such as the relative safety of the area. Although the time spent in this range is variable, the distance a child must travel to this range and the planning involved to get there, tends to ensure that the visits are longer than in the Habitual Range. Nonetheless, this range is not frequented as often by the child as the habitual range, the child may only visit this range on weekends and/or school holidays. Spaces that might be of interest to the child in this range could be parks, sports fields, public swimming pools, etc.

**III) Occasional Range:** as the name suggests this range is not visited by the child very often. This range contains novel areas that are visited only as a special privilege to the child. This range might encompass a forest or stream on the edge of town, or a fairgrounds.

Range behaviour extends and develops with time. Extension of range is very much associated with the age of the child, although some factors which will be discussed later also have a significant role to play in the extension of the child's range. As the child grows older and starts visiting friends in nearby streets or parks, and starts attending school, these milestones all help in the extension of the child's habitual and frequented ranges. As Parkinson (1987) explains,

..... once a child starts going to school, to nearby streets, playgrounds, empty sites and parks. The acquisition of a bicycle plays a large part in the extension of this range [habitual range] though, initially, bicycles are only used on paved areas within sight of home. Range extension occurs in fits and starts, often associated with developmental landmarks, such as starting school, learning to ride a bicycle, using the buses alone or being given permission to cross a busy street that has for years been the rigid boundary of a child's world. (p.4)

Children with bicycles tend to extend their ranges faster and farther than those without (Moore 1986). This would imply that city children's ranges are much slower in extending and do not cover as great an area as suburban or rural children for the fact of being limited by dangers in the form of busy roads and automobiles (Hart 1979, Van Vliet 1983).

Furthermore, since boys tend to acquire bicycles more often than girls, they tend to have a greater range (Parkinson 1987).

Having discussed the extension of ranges and the process that may be at work, it is important to point out some aspects of the *development* of ranges. Although the range extension and range development seem to be the same thing, they are not. Extension of range is roughly the extent (distance) the child ventures from home, while development, as Moore (1986) points out, is related to the degree of intimacy or familiarisation the child has to the place. This quality is developed with repeated visits to the same space. Hence, children that do not venture very far from home and visit the same places tend to develop their ranges but not extend them and vice-versa. As Parkinson (1987) put it,

With every visit to the same place, with every repeated episode of play, new possibilities are discovered, tested and verified, to provide accumulated experience, together with knowledge and understanding of the environment. Some children may cover a great deal of territory as they range from home, but not get very deeply involved with it; others may become intimately involved with fewer places and form an attachment to them. (p.5)

The places that children use for their play within their territorial range all seem to be connected by a special network of pathways (Moore 1986). These hold a special value to children and at times coincide with other, adult, pathway networks (such as pavements and streets) throughout the neighbourhood. Children, according to Parkinson (1987), take great pleasure in discovering short cuts within the pathway system. As stated before, the pathways that children use overlap with adult pathways, but are mainly formed by children cutting through private properties and using small openings. Furthermore, children use these pathways to "bypass traffic hazards, to escape from adult domination and to find places where they can engage in daring exploits and build secret hide-outs and dens." (Parkinson 1987, p.5) Hence, these pathways for the child are more than routes connecting spaces and places together.

Thus range behaviour covers more than territory. It could be viewed as Moore (1986) suggests as having three main components.

i) Territorial range: which is the distance that a child ventures away from home in terms of distance and spatial quantity. This territory could be divided into three main ranges, Habitual, Frequented, and Occasional ranges discussed above.

ii) Place: which is the degree of knowledge and involvement a child has of a given space within the territory he has access to in his territorial range.

iii) Pathways: which are the routes the child may use to get from one place to the next in the territory. It is important not to think of these pathways as passageways.

Having discussed the range behaviour of children as a pattern, it is important at this time to



point out some of the factors that limit the range behaviour of children. Perhaps the most important factor of these is that of parental control over the child which determines how far he is permitted to range (Hart 1978, 1979, Perez and Hart 1980). Although parental control over the child's range may be due to the personality of the parent(s), for the most part parental control is due to environmental reasons and components. As Hart (1979) and Perez and Hart (1980) point out, parents mainly restrict their children for two reasons. Firstly, concern about dangers posed by environmental factors such as roads (in urban settings) and river and natural elements (in rural settings). Secondly, concern about the influence that other children or adults may have on their children in terms of bad habits and crime and delinquency. These apprehensions tend to be the strongest and play the largest role in determining range limits for children. The general perception is that whilst the child can learn with time to cope with the streets and rivers, when dealing with the social aspects of the environment, parents tend to be much more careful. As Perez and Hart (1980) put it,

..... parents have social fears for children, leading to restrictions which are less subject to gradual erosion through experience and learning..... these fears of bad influences on their children usually arise from their fear of drug abuse, petty crime, bad language and sexual permissiveness. (p.260)

The culture of parents also seems to play an important part in limiting the child's range (Lynch 1977, Parkinson 1987). Cultural differences in child-rearing methods and cultural norms all play a major role in determining the extent to which a child is allowed to venture into the environment.

Range behaviour also seems to be affected by some of the traits of the child himself. As Perez and Hart (1980) point out, the desire showed by the child to explore the environment plays a major role in determining the child's range. Children are very much affected by fears, so that if the child fears an area or place he may be less willing to use this space. As Perez and Hart (1980) state,

Operating as something of a deterrent to children's explorations of their environment are their fears for certain kinds of places. A certain degree of fear of the unknown is perhaps a component of much of children's experience of new places. (p.259)

This element of fear may be a child-specific phenomenon (i.e. a child hearing noises coming from near a certain place) or may apply to a larger group. Whichever this fear, as Perez and Hart (1980) go on to explain, plays an important part in range extension.

A most interesting feature of the relationship of children to these places is that, while they express fear of them, they also commonly express an attraction to them..... knowledge may have not only a growing-forward function but also an anxiety-reducing function, a protective, homeostatic function..... This conforms with the general notion that children have an urge to know the physical world in order to feel comfortable in it. (p.260)



The gender of the child is also a crucial factor in determining the range *extent* of the child. Girls in general tend to be much more restricted in their ranges than are boys (Parkinson 1987, 1987a). These restrictions are basically due to the parents. Parkinson (1987) gives two reasons that affect the parents' choice for limiting their girls' ranges. One is the fear parents have of molestation, and the other is the expectations of parents and society for girls to remain near the home and help with household chores. Another reason for the girls' limited ranges when compared with boys' seems to be that boys tend to venture more into the environment (Moore 1986, Parkinson 1987). However, this may not be an inborn quality, but a socially imposed one. As Saegert and Hart (1977) report,

We have seen that girls tend to be restricted by parents, teachers and peers in their environmental exploration and manipulation because such activities are considered masculine. Thus, not only is a possible area of competence and adventure denied them, but the attendant restrictions could be expected to undermine their self-confidence in these areas. Both lack of experience and lack of confidence would in turn tend to diminish girls' spatial abilities and perhaps generalise to other types of problem solving. (p.173)

However, girls tend to *develop* ranges (i.e. become involved with and experience places) much more than boys (Parkinson 1987). The reasons for this gender difference could be explained by the fact that girls, as was established above, tend to remain closer to the home. As such they are exposed to fewer places and would frequently visit these known spaces and *develop* their ranges, whereas boys tend to have more exposure to more spaces and places (Parkinson 1987, Saegert and Hart 1977).

As was mentioned earlier children's range behaviour is affected by social and environmental factors. Some of these have been pointed out already. However there is an added point that must be articulated for the purpose of the this review. The urban environment poses a major block to the development and extension of the ranges of children. Many research projects have found that there tends to be a significant difference in the range behaviour of children residing in urban, suburban, and rural areas (Hart 1978, 1979, Perez and Hart 1980, Holborn and Heseltine 1987). Urban children are much more restricted in their ranges than are those living in the suburbs and rural areas. Roads and traffic seem to be the main culprit in the limitations of children (Parkinson 1987a). Another disadvantage the city child has to live with is the fact that the spaces and environments that are offered to him are of poor quality and fail to provide the possibility of the necessary interaction with the environment which is a vital component of good play. The urban child is, therefore, offered very little diversity in the environment, and the environment on the whole is not very humane in terms of the child's desire for manipulation. As Parkinson (1987) points out,

.....they [children] like to manipulate and modify the environment as much as possible. It is their way of exerting some control over the environment. Their urban counterparts may have to fall back on more artificial tools,..... in their manipulations.....



It is quite possible that there is also a relationship between opportunities to manipulate the environment and the development of other skills, such as tool-making, tool use, co-ordination and manual dexterity. (p.12)

The implications are significant in that if the environment does not assist the child in the development and extension of his range behaviour some major developmental needs are retarded. Developmental skills such as cognitive mapping and association of self to novel environments are but a few of these skills.

However, the city child has an advantage over the rural and suburban child in that the city child is exposed to more activities, events, and culturally significant sites than the suburban and rural child (Parr 1967, Parkinson 1987). Hence, one is faced with a dilemma: on the one hand the urban child has the opportunity of exposure to different and significant events, historical and cultural treasures which will benefit him greatly; on the other hand, rural and suburban children have a much better chance to expose themselves to the environment, manipulate it and come to understand it and thereafter themselves. The answer is not a definite one, however a combination of, or a middle ground between urbanity and suburbanity must be the solution that would most benefit the child.

To conclude this brief review regarding the range behaviour of children, it is important to note some of the benefits that accessibility to the environment has on the child's development and personality. There have been numerous suggestions that the child requires exposure to many types of environments and/or situations for mental, cognitive and social development (Saegert and Hart 1978, Proshansky and Fabian 1987, Blades 1989). In addition to all these developmental gains, there is the gain of self identity for the child. As Proshansky and Fabian (1987) so clearly illustrate below, a person gains a sense of self by understanding the relationships that exist between oneself, other people, objects and spaces.

If a child acquires the knowledge and understanding of who it is by virtue of its dependent and continuing relationships to significant other people, then we must assume that such identity determinations are also rooted in the child's experience with rooms, clothes, playthings, and an entire range of objects and spaces that also support its existence..... In effect, children learn to view themselves as distinct from the physical environment as well as from other people and do so by learning their relationships to various objects, spaces, and places including ownership, exclusion, limited access, and so on. (p.22)

There are many developmental advantages a child can gain if the environment is safe and supportive for the child's natural tendencies of exploration and information gathering. Among these developmental benefits is the child's cognitive abilities, spatial visualisation and competence, problem solving and a range of valuable gains. The role of planners and designers is as Hart (1978) suggests, to ensure a safe and accessible environment for

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children to explore and learn from.

### **III.B.ii. The Physical Environment**

Having discussed the range behaviour of children and some of the issues that are connected with it, the task that this section aims to accomplish is to identify some of the issues and factors of the physical or built urban environment that limit (or aid in limiting) the access of children to the outdoor environments. Each of the issues and factors that will be discussed will be considered separately, although many issues (if not all) are connected and are intertwined, of this fact the reader is reminded.

#### **III.B.ii.a. Residential Unit Types**

From the literature, it appears that perhaps the urban physical feature with the most significant effect on the outdoor play of children is the residential unit type. Coupled with the layout pattern of the neighbourhood or the immediate surroundings of the home, the residential unit type has a substantial role in limiting the child's access to the outdoors, either directly (i.e. the features make it very difficult for the child to find places to play) or indirectly (i.e. the features play a major role in making parents reluctant to permit their children access to the outdoors). There are two major groups of housing types that will be discussed. The first are multi-storey housing units or units in tall buildings. The second, are detached housing units. These two housing types represent the two extremes of housing types in the urban area. Other housing types, and the possible problems they may pose in limiting the access of children to the outdoor environment, lie in between these two points. Furthermore, most of the research done in this field has been concentrated on high-rise buildings and their effects on children's activities (Cooper-Marcus and Moore 1976). Still, there is a respectable amount of research that has concentrated on detached housing units and their effects on the child's play behaviour.

To the young child (younger than 10 years old), high rise buildings have been proven to be the most limiting factor to their outdoor play (D.o.E. 1971, 1972, Hole 1966, Coleman 1985). Families living "in the sky" endure great difficulties when it comes to their children's outdoor play. Tall buildings do not offer the young child the desired or necessary access to the outdoors and limit the access needed for developmental purposes. The limiting factors found in high-rise living, and their effects on the child's access to the outdoors can be summed up in the table below (Table III.B.ii.a.1).



<b>Feature</b>	<b>Remarks/Notes</b>	<b>Some References dealing with Issue</b>
i) Height of building	Families residing in upper levels of high-rise blocks tend to limit their children, especially younger ones (i.e. less than 10 years old) from ground level play for parents have no direct and speedy access to their children in the case of an emergency and/or need.	Coleman (1985) Dattner (1969) D.o.E. (1971) D.o.E. (1972) Hole (1966) Holme and Massie (1970) M.o.H.L.G. (1970) Nilsson (1975)
ii) Danger posed by lifts	Parents fear that children could get trapped in the lifts of the blocks because they do not or cannot operate them.	D.o.E. (1970) D.o.E. (1979) Littlewood and Tinker (1981)
iii) Lack of supervision	Being in higher levels in the block or building, parents do not and/or cannot supervise their children at ground level play from their units.	Bengtsson (1974) Hole (1966) Pollowy (1977) D.o.E. (1979)
iv) Lack of social cohesion	Neighbours in most of the blocks in the world tend not to be very close. As such, parents do not rely on any of the neighbours to "keep an eye" on their children while they are at play.	Coleman (1985) D.o.E. (1979) Jacobs (1961) Pollowy (1977)
v) Community tension	Parents fear, or do not want neighbours to complain about, the noise and damage that their children may cause while at play. To prevent this from happening they restrict their children from the outdoors.	D.o.E. (1971) D.o.E. (1972) D.o.E. (1979) Holme and Massie (1970) Cooper-Marcus and Sarkissian (1986)

**Table III.B.ii.a.1. Summary of Factors Limiting the Outdoor Play of Children Living in Flats in High-Rise Buildings.**

From the above mentioned restrictions to play caused by high-rise living, it could be supported that there is only one possible conclusion; high-rise living is not compatible with children and their access to the outdoors. Furthermore, there are many unfavourable features of high-rise buildings and blocks that means that on the whole they do not offer a humane living environment for anyone (Coleman 1985). Perhaps one of the more important restrictions on the outdoor play of children living in high-rise buildings is the fact that unless a parent accompanies the young child to the playground, there is very little chance of supervising or keeping an eye on the child. It is this feature that led to the establishment of Adventure Playgrounds in high density areas and/or near high-rise blocks in the 1960s and 1970s (Shier 1984, Bengtsson 1974, Ward 1990). Such playgrounds in addition to offering the child some of the experiences he is rarely exposed to in the city can be used to develop the diverse nature of the playground. Such play requires the constant supervision by a trained adult (See Appendix III).

While all the evidence from the above studies points to the fact that high-rise living for families with children, especially younger ones, should be avoided, many researchers have concentrated on developing suggestions to alleviate some of the problems for the families that already live in such accommodations. The most notable of these suggestions have been the establishment of above ground level play areas, to serve every 3-5 levels. These

are often located in one of the dwelling units. While the suggestion and its advocates have very good intentions the suggestion does not really solve the problem. Children will still have a difficulty in reaching the unit, unless they live on the same level. Noise and the increased tension that is likely to occur between the residences is of course another issue. The fact that the experience a child is likely to get from these above ground level play areas is in many ways not very different from playing in his own home all make this suggestion a poor one. However, one can understand that the suggestion is aiming at making the best of a very bad situation (Pollowy 1977).

The lower residential densities have received less attention than that of the middle and higher residential densities, and if one considers the potential that children in lower residential density areas have to venture into the outdoors, it is not surprising. This is not to say that children living in low density areas have no problems affecting them and their play, however the nature of the problem is very different, in that children in the lower density areas face less of an access to the outdoors problem than their counterparts in higher density areas. The availability of space either in the form of a private garden or in the form of a nearby space provide the children in these areas with the potential to venture into the outdoors more often, especially the younger children (D.o.E. 1979). The main problems that children in this type of urban environment face, in terms of play and play areas, are ones of diversity and distribution which will be discussed in future sections.

Perhaps the one common thing that children in all parts of the city have to contend with and has threatened their natural play behaviour is the automobile. In terms of access to spaces, streets and crossing the streets have become a major obstacle for children of all ages (Moore 1974a). The problem of the automobile and the pedestrian has existed for some time, and is now becoming a major issue in urban planning world wide (Hall 1988). In the coming few pages the street and its relationship to the play of children will be discussed and reviewed.

### **III.B.ii.b. The Street**

Children playing on streets is one of the most common images one has of residential streets, or is it? This may have been the case five decades ago, however in today's city this image has been tarnished. The number of cars on the road and the increasing speed they are driven with by careless and sometimes reckless drivers have contributed a great deal to dissolve the image from the minds of many. Planners and environmental designers that have been concerned with the increasing conflict between pedestrians and the automobile have put forth many suggestions and plans to make their coexistence in the modern city a possibility. This section will aim to review some of the suggestions that have been put forth, as well as look at the many issues involved in reclaiming the street for the



pedestrian and the child.

To begin the discussion concerning the conflict between children and traffic, a review of the dangers that face the child on the street is necessary. The child faces many dangers on the street. While these dangers include social dangers in the form of effects on his behaviour and attitudes, for the purposes of this thesis, the concentration will be placed on the physical dangers that face the child. Especially the dangers posed by the automobile while the child is at play on the street. For the adult, the street, especially neighbourhood streets where there is a very limited amount of traffic volume, does not pose many dangers. When there is a car passing by, the adult would be more careful and hence avoid any possible hazards. However for the child even a street with very low traffic volumes can lead to a life threatening situation. The reason for this is due to many physical and cognitive differences between the adult and the child which make it so much more difficult for the child to accurately judge distances and traffic speed.

Sandels (1970) points out some of these difficulties that the child faces when dealing with traffic. Perhaps the most important difficulty that a child faces in dealing with traffic is the fact that he can not assess the speed of moving objects correctly. For the child this cognitive ability, especially in terms of time and space (i.e. to determine an object's movement relative to space) has yet to completely develop, and the younger the child is the more likely speed assessment skills are to be less developed. Sandels (1978) gives an example of this inability by saying,

As the child of 8 or 9 years of age cannot yet assess speed correctly or relate it to time and distance, the fact that a car which is overtaking - although it is further away - has more speed and will reach him sooner than the car which is overtaken, is not yet understood. (p.386)

Furthermore, the child's peripheral vision is more limited than that of the adult. This is to say that children are unable to react to movement and/or objects that one assumes they will see from the corner of their eye. These facts on their own explain why children face a greater danger on the streets than teenagers and adults. Unfortunately, there are many other difficulties that children face on streets. According to Sandels (1978), children have a cognitive problem with making images "stick" in their mind. As Sandels (1978) explains,

His [the child's] impressions of what he sees make place quickly for new ones - they do not yet "stick" in his mind. (p.386)

One can imagine how dangerous that could be in crossing streets and/or if a car is passing while the child is at play. To increase the problem even more, Sandels (1978) points out that while adults can locate a source of a sound fairly accurately (within 2 degrees), the child has a difficulty in establishing correctly the source of a sound. If one combines these facts with the fact that most children cannot see the street by looking over parked cars due

to their physical size and the fact that children by nature are impulsive and will rush into streets if, for example, a ball runs onto the street, then one can truly understand the seriousness of the conflict that exists between the child and the automobile.

One could argue that with proper education on street crossing and the posting of signs, the problem will be reduced. However, besides being very expensive and time consuming, there are suggestions that it may not work. Children have a problem with reading and understanding traffic signs. Sandels (1970) points out that children have difficulty in understanding what the traffic signs actually mean and in many instances rely on the meaning from the graphics that accompany the signs. Unfortunately, very often this leads to the child interpreting the sign to mean the complete opposite for which it was placed. As Sandels (1970) points out,

Our traffic environment is created by adults for adults.....

Some children believed that the "Pedestrian Crossing" sign (man walking) meant that "Only adults may cross here" and the warning sign "School or Playground" (children running) meant "Here children must run quickly across the road so as not get run over". The latter traffic sign entices children out into the roadway and thus militates against its own purpose. (p.114-115)

The many accidents that have occurred in residential areas involving pedestrians and young children have prompted planning and design experts to make the neighbourhood a safer place. The solutions that have been employed to this effect have been numerous and varied. The separation of the two systems as in the Radburn plan has made neighbourhoods safer for the pedestrian and the child (See Diagram III.B.ii.b.1). However, the employment of such a solution has many issues to be considered if it is to work as it was intended to. For example, with the use of culs-de-sacs and loops in access roads, the issue of density becomes crucial. As Tolley (1989) points out,

In general, though, it was not so much that the Radburn approach was questioned, but more perhaps that the densities at which it was increasingly being applied were inappropriate. The original seven dwellings to the acre had been raised in Britain to around seventeen, at which densities culs-de-sac and walkways, cars and garages did not merge into the landscape so happily. (p.15)



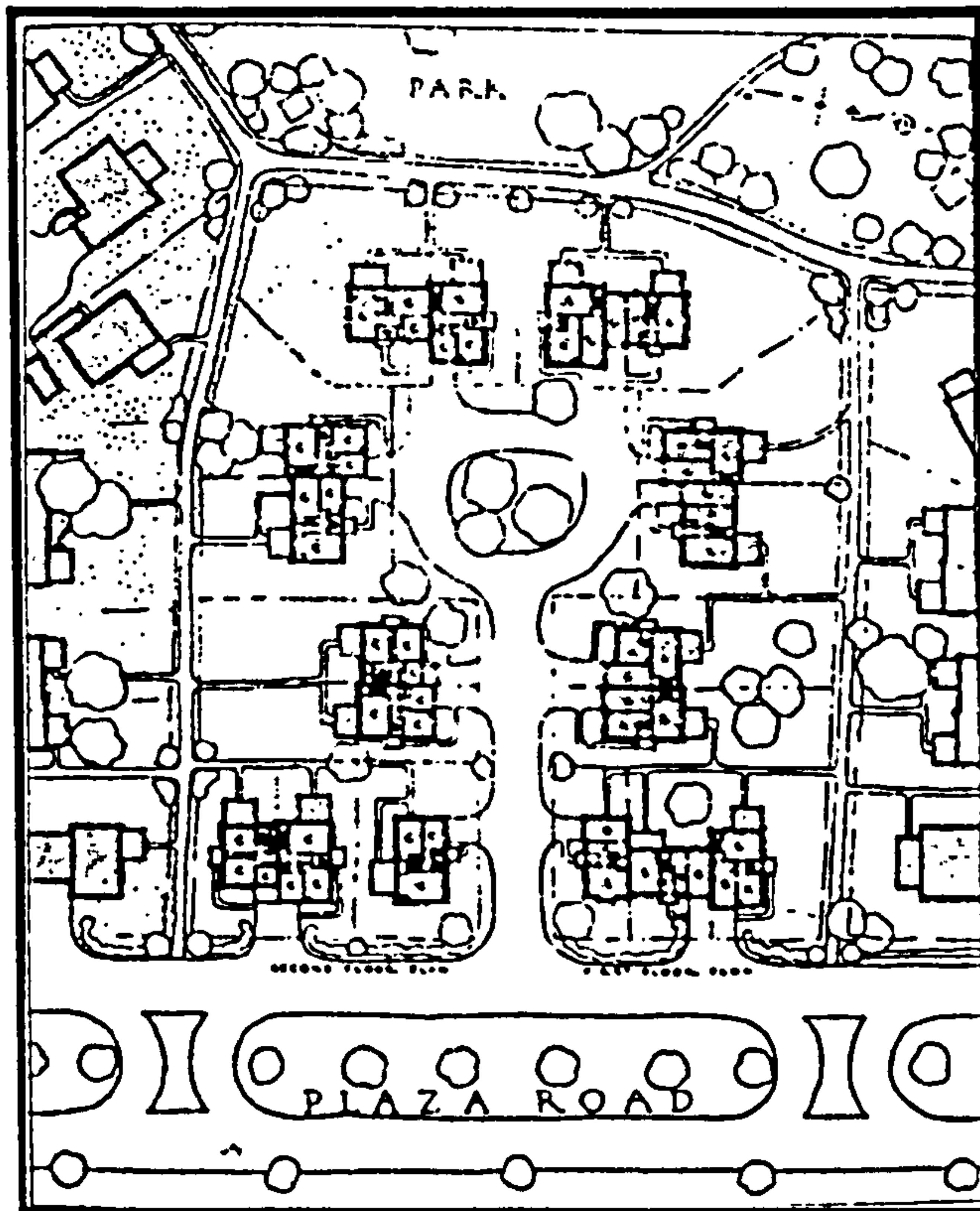


Diagram III.B.ii.b.1: The Radburn Plan: Separation of Pedestrian and Vehicular Systems.  
[Taken from Lynch (1981)]

In terms of children and their play, the Radburn approach in lower densities make it much safer for children to access the immediate outdoor environment and both expand and develop their ranges. However, on closer scrutiny, the Radburn approach does not provide for a very suitable play environment. Generally, it does not provide the child with the kinds of features and amenities that have been identified by researchers as being important in a play environment (Jacobs and Jacobs 1980). While segregating the pedestrians and spaces from vehicular movement networks on the surface would seem to be very beneficial to children's play, some evidence seem to suggest otherwise. Researchers that have observed and studied children at play in residential environments based on the Radburn approach have found interesting points that need to be considered and addressed. The most notable observation found by researchers is that while there were many open spaces and equipment found throughout the estate or plan, children were still drawn to the street for their play, thus defeating the initial concept of segregation between the pedestrian and traffic (D.o.E. 1979, Jacobs and Jacobs 1980, Coffin 1989, Moore 1974a). The researchers point out many advantages that a street has over the open spaces that have been provided. Excitement, centre of action in social terms, proximity to home, presence of hard surfaces for games and wheeled activities (e.g. cycling, roller-skating), the presence of children from the neighbourhood, and the relative humane size of areas have all been established as being the reasons making the street a favoured play area by children than the open spaces, parks and playgrounds built for the purpose without a full understanding of the factors involved.

Street play in the Radburn system is not, however, ideal. Supervision can be a problem, particularly for young children and their parents. While the children are drawn to the street which in many instances is located at the front of the dwelling, the rooms that overlook the street (and thus children at play) are mainly the living rooms and reception areas which, for the majority of the day, remains unoccupied by the mother (D.o.E. 1979, Tolley 1989). The kitchen, where the mother spends the majority of her daytime is located to the back of the dwelling, and as a consequence the mother cannot continually keep an eye on the child at play, thus the natural association between child and caretaker is being negatively affected (Tolley 1989). The situation may be very different in other cultures and societies, unfortunately the literature available at the moment is limited to western (i.e. European and American) situations. In the case of Saudi Arabia, the Radburn approach, even though it has been advocated for many years by academics, has not been tried on a scale that would make an impact nor a reasonable deduction on its suitability for that society.

Another alternative to the Radburn approach in controlling the effects of the automobile on children and pedestrians is the attempt to make the two coexist peacefully. Many professionals and people concerned with providing liveable environments have argued that the conflict that exists between the pedestrian and the automobile, is the notion that the street primarily belongs to the automobile and the pedestrian is a secondary user (Hass-Klau 1990, Tolley 1989, Moudon 1987). Furthermore, the streets in the city as Jacobs and Jacobs (1980) and Moore (1974a) point out, offer a great resource in terms of open space that is distributed throughout the city. If one was to make the pedestrian and people the primary users of access streets (their rightful place) and the automobile a secondary user of this space, then the situation would be alleviated. The Dutch "Woonerf" is an attempt at realising this theory and from the evidence available at the moment, this approach seems to be satisfactory in reclaiming residential streets back to children and pedestrians. In the "Woonerf" system, by redesigning the space the street is transformed into an open space where the car may pass and park, but the pedestrian has the right of way. The features of a Woonerf will be discussed to clarify some things to the reader (See Diagram III.B.ii.b.2.).

The specific features of the Woonerf according to Verwer (1980) and Tolley (1989) can be summarised as follows:

- i) There is no through traffic in a Woonerf.
- ii) Woonerfs are in residential areas, and the buildings that overlook the Woonerf are residential.
- iii) Children's play and the provision for it is a major component of the Woonerf.
- iv) Other functions of the Woonerf is to provide residents with a place to live, relax, and meet one another.
- v) Within a Woonerf, traffic is constricted and controlled as much as possible to



ensure that the pedestrian and his activities have priority in the space. This may be accomplished by the employment of several design components and features such as "sleeping policemen", narrowing the space available for traffic, the introduction of several obstacles in the form of trees, bollards, fences and the bending of the traffic lane.

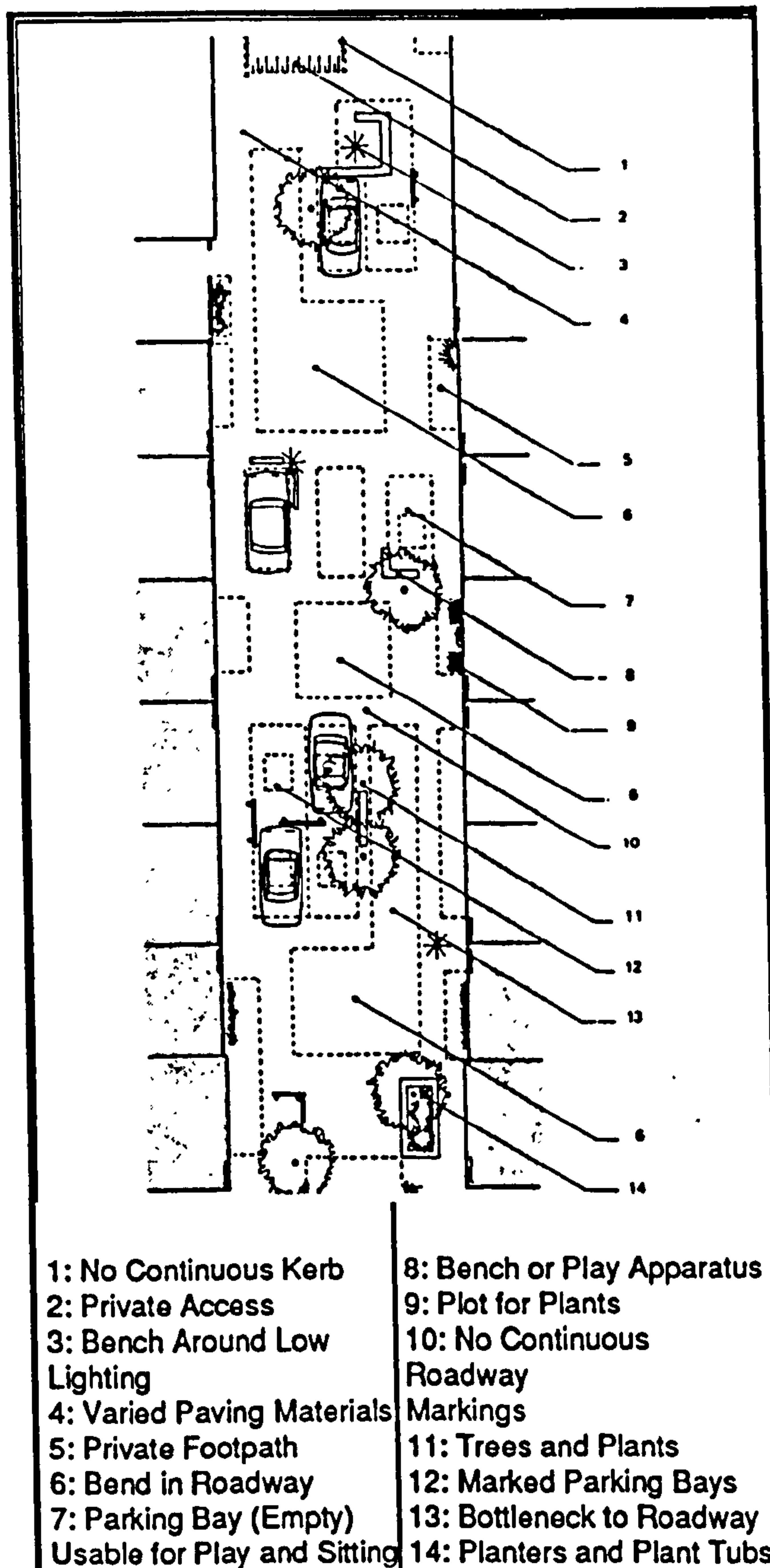
vi) All parking in the Woonerf is to occur in designated parking spaces. Random parking is forbidden.

vii) Continuous curbing is to be avoided and the use of many and varied paving materials is to be encouraged.

viii) There is to be no continuous roadway markings on the pavement.

ix) Street furniture is to be of a pedestrian scale (i.e. low-level lamp posts, planter boxes no higher than 0.5 meters, etc.)

x) There is to be clear signs indicating the beginning and the end of the Woonerf.



**Diagram III.B.ii.b.2: Schematic Diagram of a Woonerf.[Taken from Tolley (1989)]**

Hence the impression one gets when in a Woonerf is that this space is primarily for the pedestrian and pedestrian activities and the automobile and driver must be very careful in this space. The street outside the home is for the people that live there and not for their cars. Play can occur anywhere on the street and the fear of the automobile, if not completely eliminated, pushes the odds in favour of the child and the pedestrian. The only vehicular favouring issue a designer has to keep in mind in the design of a Woonerf is to make sure corners with a radii suitable for emergency and service vehicles as well as allowing enough space for these vehicles to manoeuvre once in the Woonerf.

The Radburn approach to decreasing the effects of the automobile on pedestrians and



their activities conceptually was good, however there were some particular problems with the approach upon closer examination. The Woonerf, seems to be a very good approach to the effect of reclaiming the street for the primary purpose of pedestrian use, however one must ask the question of whether the Woonerf in reality measures up to the concept. In her study of two residential streets that were turned into Woonerfs, Eubank-Ahrens (1987) found out that indeed the Woonerf seems to be in reality as good as the concept made it about to be. Eubank-Ahrens' research concentrated on comparing the behaviour, activities, time spent on street, and the users of the street before the Woonerf was constructed and then after. Some of the more important findings will be briefly reviewed here.

To begin with, the time spent by residents and pedestrians on the Woonerf after completion increased dramatically, especially by children. The activities that Eubank-Ahrens (1987) observed after the completion of the Woonerf brings back a most desirable image of community and street life. Children playing, social interactions between neighbours, socialisation between different age groups (i.e. children with adults, children with older children), people washing and maintaining their cars, as well as elderly people sitting and observing the activities and reflecting. A very significant finding in Eubank-Ahrens' (1987) research is that children's play was the most observed activity in the Woonerf, which emphasises the point that if given a reasonable chance, children find the street an ideal place to play. In addition, the experience that the child gets from this type of free play is very different. Eubank-Ahrens (1987) argues that in playgrounds and other specialised play areas the child is not truly exposed to the social environment, meaning that the child only interacts with children of his own age and not, for example, older children and adults. Furthermore, Eubank-Ahrens (1987) observed that when the children used the Woonerf, they interacted with the environment more freely than before and were very comfortable in expanding their range behaviour.

Having illustrated the possibilities that the Woonerf has in providing the urban child access to the outdoor environment, there still remains one issue which might make the Woonerf a much more appealing proposition than the Radburn approach. The fact that the Radburn approach works best in low density situations and on new developments makes the Woonerf approach a better approach to follow in alleviating the effects of traffic on the pedestrian throughout the city. The Woonerf's applicability in access streets throughout existing areas of the city, especially those where space for play area provision is very limited and land values are high, is substantial. However, applying the concept of Woonerf on its own will not solve the effects of traffic on the pedestrian throughout the city. A more complete plan that "calms" traffic in all parts of the city is required (Tolley 1989). The "traffic calming" plan in Germany and the Netherlands is perhaps a starting point for all other nations and cities to follow and improve upon. The basis of these plans is to provide a

choice in the modes of transport and to make it difficult for the automobile to have access to areas where other transportation modes (i.e. cycling and pedestrian) are available. Furthermore, public awareness of the effects of traffic on the environment as a whole and on children in particular was highlighted as to make the changes more accepted and understood (Tolley 1989, Hass-Klau 1990).

The implementation or the acceptance of either approach requires careful study and understanding. While it might prove beneficial to employ both approaches to calm the traffic in a given city, there must be other issues besides traffic that need to be addressed whenever considering a change in the environment and/or system of planning. The most crucial issue that requires thought and analysis is that of the possible effect any change in the environment might have on the society. The two approaches discussed here basically work for western societies. If one is to apply the concepts to other situations and/or societies, one must understand that possible alterations to the original concept might be required. In the case of Jeddah, the situation of traffic attacking the pedestrian and streets besieging residents has come to a very dangerous and unhealthy point, especially for the young of the society. Measures to ensure the right of the pedestrian and the child to their immediate outdoor environments must be taken quickly, before the pedestrian completely surrenders the street to the automobile.

### **III.C. Diversity**

Another issue that requires consideration and analysis in the provision of play areas/facilities in the urban environment is that of diversity. Many people have argued that current provision of play areas and facilities does not give the child the opportunity to play in various ways or forms (Hole 1966, Friedberg 1970, Dattner 1969). The argument also stresses that unless children in the urban environments are provided with facilities and areas that cater for the natural tendencies that a child has (adventure, exploration, etc.), the result will be children deserting the play areas that are being provided and opting for more challenging and interesting adventures and play in areas that are not specifically designed nor planned for play, thus causing a conflict with adults (Holme and Massie 1970, D.o.E. 1979). Furthermore, the child might opt for more passive activities such as computer games and television. While these activities might be beneficial to the child and enjoyable, they do not benefit the child's development in the same way as play (See Appendix III and Chapter II). The reason for the lack of diversity in play areas can perhaps be attributed to two very significant factors. The first is concerned with the lack of diversity in the types of play areas available for children in Urban settings. This is largely due to the development of planning standards for open space provision (Walker and Duffield 1983, Chadwick 1966). The standardisation of open space provision in many ways has given developers a "green light" to provide open spaces in large areas which are not easily



accessible for the majority of the people and children in the development (See Chapter I). The second is concerned with the lack of diversity in facility provision within individual play areas in the urban environment. There are a number of reasons for this:

- i) Planning officials' unwillingness to test and try different (unconventional) play environments (Wilkinson 1980, Cooper-Marcus and Sarkissian 1986).
- ii) The overemphasis on the maintenance cost of play areas, hence not allowing for facilities that have more diversity within them (Dattner 1969, D.o.E.. 1979, Friedberg 1970).
- iii) The lack of a true understanding of what children like or enjoy on the part of the designers of play areas which stems from the lack of involvement of children in the design process (Pollowy and Toliver 1980, Baldassari et.al. 1980). This issue is discussed further in section III.D. of this chapter.
- iv) The overemphasis by parents (especially fathers) on competitive play, thus priority is given to the provision of facilities that cater for these activities (e.g. football, basketball, volleyball courts) (Jensen and Scott 1980).

The aim of this section is to illustrate to the reader some of the issues that are involved in providing a diverse play environment. To simplify the review, the discussion will be broken down into two sub-sections. The first of these sections will address the issue of quantitative provision of play environments throughout the urban fabric. The second section will address the issue of the quality of play environments in the city. By addressing the two issues separately, the reader may be deceived in thinking that these issues are different or separate. However, the author would like to point out that the two must be thought of as one issue. They are separated here only for simplification purposes. Furthermore, only by thinking of these issues in combination will one come to realise how they are attached as well as realising the difficulty of play environment provision in urban areas.

### **III.C.I. Distribution of Play Areas in The City**

The issue of space allocation for play is in many ways connected to the issue of access to play spaces and the range behaviour of the child. While planning standards for the allocation of play areas in the city have attempted to allocate enough space for play in terms of density, bed space, and number of children in a given area, many of the standards have not been successful at this. The mere allocation of space in a given area with little or no understanding of the many issues involved in making that space "usable" is in reality not aiding the provision of play environments in the city. Holme and Massie (1970) have identified some issues that need careful consideration whenever providing or planning to provide play areas, these issues are as follows.

- i) Distance a child has to travel from home to reach a play area.

- ii) The size and density of the child population within a given area.
- iii) Accessibility of the facility.
- iv) Size of the facility.
- v) Characteristics of the area, i.e. the amount, type and location of open spaces within the area.
- vi) The requirements of providing a diverse play environment.

The first five points and/or issues will be the subject matter of this section, the sixth point is the subject matter of the next section. It is important to think of these points as one, for each one has a direct effect on the other.

The first point dealing with the distance a child has to travel to get to the play area is a very important issue indeed. What good is a play area if the children that are meant to use it and enjoy it cannot get to it because the distance is too great for them? Furthermore, one must realise that the child's range behaviour and the attachment to familiar people (e.g. mother or caretaker) and environments (e.g. the immediate home environment) have a great deal of influence on the location of facilities in a neighbourhood (Weiser 1980). The younger the child, the more he is likely to want to remain near the home environment and thus travel less to play areas (See Diagram III.B.I.1. in Section III.B.i.). As the child and his range behaviour develop, the distance that he will be willing and able to travel to a play area or facility will increase. Thus when considering provision and type of provision, a planner has to contend with the ability and desire of the child to travel to the facility, as well as the child's play behaviour in a particular age.

Many people concerned with this issue have come up with some broad guidelines to be followed in terms of the distance a child has to travel to a play area or facility. Before illustrating some of these guidelines the reader is reminded that while these guidelines stress the distance in terms of the child's age, it is important to recognise that the immediate home environment is perhaps the most important for all ages (Holme and Massie 1970, Hole 1966, Cooper-Marcus and Sarkissian 1986). This importance stems from the fact that children of all ages like to engage in very brief episodes of play at random times of the day (e.g. before dinner, after finishing homework), and thus, out of all the open space possibilities, the immediate home environment is the only place that can cater for this spontaneous play behaviour (Cooper-Marcus and Sarkissian 1986).

As was stated before, the distance a child will travel to a play area will largely depend on his age. Hence when providing for children one must provide for the different age groups of children. Toddlers or children under five-years old are the youngest group and the first that will be considered here. For the most part, this age group is very dependant on the accompaniment of an adult in their urban outdoor play (Dattner 1969). For this group of children, since their play behaviour is very limited (See Chapter II), they require very little



space. However, the spaces need to be numerous and very well distributed. Heseltine and Holborn (1987) suggest that each of these small spaces should serve every 100 residents. Cooper-Marcus and Sarkissian (1986) suggest that in a medium density situation, for every 20-100 residential units there should be a play area for the toddlers. While the number of play spaces for this group may seem to be too much in terms of area, the fact is these play areas can be very small and amount to no more than perhaps a sand pit and very small pieces of equipment and scattered toys (Holme and Massie 1970, D.o.E. 1979). However, these spaces must consider the parent or the adult that accompanies the child if they are to succeed in terms of use. Dattner (1969) and Holme and Massie (1970) point out that the ultimate success of these types of spaces lies in making them more than a play area for the toddlers. They suggest that unless these spaces cater for the meeting of mothers and their socialising they may not be successful. Hence, besides catering for the play of the toddlers these spaces must provide a pleasant environment (perhaps in the form of comfortable and pleasant sitting areas) for the adults that accompany their children.

As the child develops and grows, the attachment to a caretaker slowly dissolves, and the child becomes more independent and starts venturing into the outdoor environment on his own. This change in his attachment and play behaviour require new play experience opportunity more complex play spaces and facilities. Children of school age (6-12 years-old) are very difficult to deal with in terms of play areas and facility provision due to the natural exuberance and liveliness of this group of children (Hole 1966, Heseltine and Holborn 1987, Holme and Massie 1970, C.M.H.C. 1979). At this age, physical and social development tends to be the most important benefit of play. Children in this age group become more social in that their play involves others (i.e. associative and co-operative play). Furthermore, the children of this age group will play in different outdoor areas and will engage in different play activities ranging from the conventional playground equipment to organised ball games. As was illustrated in Chapter II, at this age the child becomes interested in the environment around him. The desire to understand and analyse the different components that make up the social and physical environment is one of the main characteristics of the play in this age. In addition, the growth of their physical being make the children very active in an attempt to better come to terms with the changes occurring to their bodies.

The play spaces that this age group need to cater for many play activities. While it has been suggested that this age group will travel a maximum of 400 meters (5 minutes walk) to a play area and/or facility within a neighbourhood (Heseltine and Holborn 1987, C.M.H.C. 1979, Cooper-Marcus and Sarkissian 1986), it must be realised that variety in play spaces/facilities must be the basis for a successful policy of provision. Mini parks or vest pocket parks, traditional areas of play with equipment, kick about areas, adventure

playgrounds and other types of play area alternatives are all possibilities to consider when providing a diverse and integrated play environment for children of school age (Dattner 1969, Cooper-Marcus and Sarkissian 1986, Clay 1972). While public parks provide space and various activities for the children of this age group, it must be realised that parks in cities for much of the time are not very easily accessible to these children. Major roads as was illustrated in Section III.B.ii.b., present the developing child of this age with many dangers and act as a major physical obstacle to children's access. Furthermore, parks tend to be located at a distance from urban communities which makes them difficult to access as a whole. These points are eloquently explained by Jacobs and Jacobs (1980) when they state,

The lack of open space throughout the inner city and the spiralling cost of land within the commercial sector has necessitated the designation of a large single area as the sole park of each inner-city community. In many cases, this makes the park inaccessible to the population living at the periphery of the community which it is intended to serve.....

Frequently, if the park is not within the immediate home territory, children have to cross "dangerous and/or hostile turf" to reach the park and do not consider the park worth the risk they have to take. (p.244)

Heseltine and Holborn (1987) suggest, as a general guideline, that for every 1000 residents an equipped play area should be provided and for every 500 residents, a kick-about area. However, these figures and the conception that a space of a certain size must be provided is exactly the type of standard that has made children's play areas and their provisions a problem for the urban child. While formulas for play "opportunities" are important to ensure a reasonable quantity of play areas are provided, one must not think of these play opportunities in terms of space in its formal sense. Play is a spontaneous activity and the provision for it should reflect this. Play opportunities could, for example, take the form of a small niche off the main pedestrian route with one or two pieces of play equipment. In addition, pavement patterns on pedestrian routes (especially those that lead from and to schools) could have certain games such as hopscotch drawn or engraved in them (C.M.H.C. 1979, Coffin 1989, Cooper-Marcus and Sarkissian 1986). This does not mean that play spaces, in the formal sense, should be neglected or omitted from a comprehensive play provision policy, however these spaces should not be the only ones being offered to the child. As Cooper-Marcus (1974) points out, children (when given the chance) are the primary users of outdoor environments and as such,

Children will tend to play anywhere and everywhere, and not just in designated play spaces.

The whole site should be designed with this in mind. The total environment must be thought of as an environment primarily for children,..... (p.373)

Perhaps a change in the understanding and planning of play space is required. The present approach of providing large areas in the form of parks and playgrounds that are



meant to serve the population, and the demand made by the residents and general population for more of these spaces, is not the solution to the problem of providing accessible play areas within easy reach of the school age child. Many people have argued that smaller, well distributed, spaces will serve the population much better, and one has to agree (Hole 1966, Holme and Massie 1970, Cooper-Marcus and Sarkissian 1986, Gold 1972). Another point that is worth mentioning is the involvement of landscape architects in open space and play space allocation from the initial planning stages. Holme and Massie (1970) point out that planning is a very complex process, and indeed it is. The interdisciplinary approach to planning in our time has become a necessity rather than a luxury. The involvement of a landscape architect from the initial planning stages can offer insight into open space allocation, location and quality that might otherwise be neglected or overlooked in the process. Calling in the landscape architect to tidy up mistakes and dress the environment up with plants and trees will do nothing to affect or alter the original mishaps, however it will make the mishaps look better!

While provision for the play of the two age groups of children thus far mentioned have many problems associated with it, these problems are somewhat minor to the problems facing the provision for the urban teenager. Perhaps the most significant of these lies in a misunderstanding or misconception of this age group's requirements and desires. The play behaviour of teenagers is also often misunderstood or not catered for (Cooper-Marcus et.al. 1990). As Cooper-Marcus and Sarkissian (1986) point out, there is a noticeable shift in the behaviour of this age group. Teenagers tend to become more interested in social gatherings "hanging out" in a place where they can talk and are away from the dominating adults . As well as socialising, teenagers and especially teenage boys, still engage in play behaviour that is more physical in the form of ball games.

Spaces for the activities of these young adults and their location within a neighbourhood are of primary concern to the ultimate success of provision. If the area that is being provided is boring and does not serve their natural needs, vandalism could be the result. As Cooper-Marcus et.al. (1990) put it,

..... many of the places that teenagers take over do not offer constructive activities; they become bored; and the stage is set for vandalism. Indeed, for many teenagers, vandalism may be nothing more than a way to relieve boredom. (p.81)

Mobility for the teenager does not pose a great problem, cycling, walking longer distances and the use of public transport give this age group the possibility of using spaces that lie beyond the reach of the younger age groups (Cooper-Marcus et.al. 1990). Furthermore, at this age attachment to a caretaker or a parent has all but completely disappeared. Public parks are used by this age group more often than other age groups due to the fact they possess the means by which they may gain access to them. Hence, the amount of space

this age group has access to is numerous, the problem is one of quality. On the whole, public parks do not offer teenagers the type of spaces they need and desire. Cooper-Marcus et.al. (1990) suggest some guidelines in an effort to improve the quality of space that this age group is likely to use frequently. The "hang out" is a space used by this age group to gather, talk, show off and flirt with one another. Although the activities that occur in "hang outs" are enjoyed by the teenagers, adults consider them as a waste of time and are embarrassed or threatened by such activities (Cooper-Marcus and Sarkissian 1986). Hence, areas that are meant to be places for teenage "hang outs" should be away from residences. Furthermore, they should be where the possibility of seeing and be seen by others is maximised. A busy corner where both pedestrian and vehicular traffic passes by is ideal as a location for a "hang out" (Cooper-Marcus et.al. 1990). Furthermore, teenagers require spaces that they can personalise and make their own. If teenagers are not provided with a place to socialise and carry out their interests, the possibilities of conflict with others will increase. Teenagers will inevitably take over spaces that are meant for other uses if they have no alternative. Playgrounds, bus stops and possibly cafés and bars will become their "hang outs" if their needs are neglected (Cooper-Marcus and Sarkissian 1986). In addition to "hang outs", as was previously stated, teenagers will engage in ball games and the provision for these activities must be ensured.

In the previous pages the distribution of play or activity spaces within an urban area was discussed briefly. The most important point to emerge from this, the conflict between quality and quantity, has to be restated because it is central to the successful planning and provision of play environments within the modern city. Quality versus quantity is an issue that seems to have planners and designers in a dilemma: Do we provide many spaces throughout the community and hence squander the resources on many spaces; or do we provide few large spaces where a concentration of efforts and resources will ultimately mean a space of better quality. The answer is not a simple one, however there is evidence to suggest that quantity with quality is the ideal solution. An understanding of the developing child is a must to ensure provision is adequate (quantity) and proper (quality). The possible solution perhaps lies in understanding or realising that in terms of transport, physical attributes and cognitive abilities, children are very different from the developed adult. When providing play or recreational space, an understanding of these facts is essential. Facilities and/or amenities designated to serve the child should have the child and his abilities and limitations in mind. Spaces and facilities, if well distributed in an area, will make the distance a child has to travel to gain access to a play experience easier. Furthermore, the spaces must accommodate the population of children in the area. Small spaces that are over-used will lead to the misuse of the space and the equipment that is in it, as well as being potentially hazardous in terms of possible injuries and conflict among the children (D.o.E. 1979). Hence, the issue is not just of distributing many play environments throughout a given area, nor is it the question of providing atypical play



areas. The issue is one of provision according to developmental stage. An understanding of children and their play and developmental stage characteristics will provide the planner with the most important tool in proper play environment provisions (See Chapter II). The tool of information on which decisions could be made.

While distribution plays an important role in the success of play environments in any given area, the features and attributes of each of the play areas is just as important. Diversity in the play area is vital in providing the child a good and beneficial play experience. In the following section, the issue of diversity within a play area will be briefly highlighted as a significant issue in the proper and adequate provision of play environments in urban areas.

### **III.C.ii. Diversity in Play Areas**

Conventional playgrounds have failed to provide the urban child with a play experience that is beneficial over a meaningful time span (Dattner 1969). Creating an environment that sustains interest in the child is indeed a very difficult task for the planner and/or designer. As Carr and Lynch (1968) point out,

Most environments,..... no matter how stimulating initially, become dull and even "invisible" with repeated experience. Either the environment must continually change to maintain interest, or the individual must be motivated to search for new levels of experience and meaning in an environment that offers successive levels of complexity. (p.1288)

In the light of the two criterion put forth by Carr and Lynch (1968), most playgrounds and play environments in the urban domain fail to meet the criteria of continual change (in the form of manipulation) and the criteria of "successive levels of complexity". Some of the reasons for this massive failure is perhaps due to the reasons given previously in the chapter and specifically in Section III.C.

Diversity within a play environment is an issue that is viewed as important in the success of a given play environment as access to the play environment. In conjuncture with diversity in the distribution of play areas within the environment, diversity within a play environment provides the child with a very important play ingredient: challenge. The argument is that the failure and non-use of most of the playgrounds and/or environments in the urban areas are due to the inability of these environments to provide the required stimulus or interest in the child to enable frequent and sustained use of these environments. Perhaps this point is best stated by Allen (1968):

It is a rewarding experience for children to take and overcome risks,..... Life demands courage, endurance and strength, but we continue to underestimate the capacity of children for taking risks, enjoying the stimulation of danger and finding things out for themselves. It is often difficult to permit children to take risks, but over-concern prevents them from growing up. This is all too clearly seen in the dull, "safe" playgrounds that continue to be devised. (p.11)

Jacobs and Jacobs (1980) point out that one of the main reasons streets and areas around the home are more appealing to the child and provide for more play opportunity is due to the amount of challenge the street environment offers to children. Furthermore, Cooper-Marcus et.al. (1990), amongst many, point to the fact that not providing a challenging environment will lead to boredom and in an effort to relieve this boredom, children will find new and stimulating ways of using the materials in playgrounds. Unfortunately this is often misinterpreted by adults and officials as vandalism. The child, as was illustrated in Section II.D.iii. of Chapter II, needs stimulation and an environment that stimulates the child's senses in order for play to be initiated and maintained, as well as learning. If the child is not provided with stimulation and learning possibilities in a safe and



beneficial manner, boredom and lack of interest may lead to social problems as well. As Moore (1989) points out,

Boredom is the result of an absence of playing and learning opportunities. It extracts a high cost in missed opportunities-benefits lost forever, ..... Boredom is seldom considered a social disease; yet some of its crippling symptoms-graduation to drugs and antisocial behaviour-are issues of national concern. (p.200-1)

The question of how an environment can be made stimulating, challenging and diverse needs to be answered in order to improve on the existing policy and provisions of urban play environments and/or facilities. While the discussion here will attempt to address this very important issue, it is necessary to point out to the reader that situations, environments, cities and societies differ; as such, the arguments that will be put forth reflect general issues of concern and/or thoughts rather than absolute guidelines and suggestions. With this in mind, the goal of providing a diverse play environment perhaps can be best reached by observing the criteria put forth by Carr and Lynch (1968), these two criteria are,

- i) A continually changing environment, and
- ii) The environment providing the child with the opportunity to explore and engage in different activities and/or levels of experience.

The first criterion of a continually changing environment is worth careful consideration. Boredom or lack of interest stems from the fact that novelty in an environment, situation or thing no longer exists. In other words, continuous stimulation is a prerequisite to maintaining a child's interest in any thing (See Chapter II). However, how does one provide an environment that is continually changing in a city? It is important to recognise that a complete change in the environment is not what is meant by a continually changing environment. On the contrary, a complete change in the environment is not desirable, and might cause confusion and fear in the child (See Section II.D.iii. Chapter II). As Moore et.al. (1987) point out,

To meet their wide-ranging, ever changing needs, children need access to a diversity of play settings. To stimulate curiosity and exploration, environments can be novel and complex. Some aspects could change continually. Other aspects should be predictable to foster feelings of security. (p.11)

Many have advocated this principle of mixing fixed features with continually changing features in a play environment. The use of what is referred to as "loose parts" or "play props" is described in many publications concerned with children's play environments. "Loose parts" simply means play equipment or features that are not fixed and therefore can be manipulated by children. The principle underlying the inclusion of props and loose material is perhaps best summarised by Nicholson (1971) when he states,

In any environment, both the degree of inventiveness and creativity, and the

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possibility of discovery, are directly proportional to the number and kind of variables in it. (p.30)

Hence, the inclusion of loose parts and play props is perhaps a necessary ingredient in providing a play environment that promotes interest, stimulation and developmental gains for the child. To provide the reader with a clearer picture of the idea of loose parts and play props, some general identification categories will be discussed.

Moore et.al. (1987) identify six main categories of loose parts and props that could be used in playgrounds. These categories are as follows,

a) Found items: The found items category includes all the items that are found by the child in the play area. These include some natural materials such as stones, leaves and sticks; as well as other items such as boxes and containers that might be swept away during the cleaning of the play area.

b) Purpose-made props: Purpose-made props are those items that are specifically designed and offered to the child to encourage certain types of play, such as dramatic play. They include costumes and dress-up clothes, inflatable items and foam mattresses.

c) Modular systems: Modular systems are manufactured play props that are easily put together and taken apart by the child, for example, a large "Lego" set. Their use promotes the child's creativity as well as co-operation between children. These systems come in many existing forms, ranging from simple blocks to large plastic pipe modular systems.

d) Wheeled vehicles: Props that have wheels are included in this category. For example: Roller skates, bicycles, roller blades, wheeled carts and other wheeled vehicles. In addition, this category could include wheeled vehicles that offer disabled children means of exploring the play area (i.e. hand propelled tricycles and battery operated vehicles).

e) Adventure play: This is a very specialised type of category of play props. In general they include means of allowing the child to actually build and create environments with tools and building materials (See Appendix III.)

f) Natural materials and settings: This category of loose parts and props includes natural materials such as sand, water, trees and shrubs. Moore et.al. (1987) point out that settings within a play environment with a rich supply of natural materials will assist the child in manipulating and interacting with the environment.

While the categories of loose parts identified here are significant contributors to the maintenance of children's interest in the play environment and subsequently more use of the facility and/or area, there are some practical considerations that make the use of some of these play props and their provisions difficult. With the exception of "natural materials"



and "found items" categories, most of these props and play things require management in the form of storage as well as adult supervision (Moore et.al. 1987). Thus it might prove impossible to provide all play spaces in the city with such props and play items. However, this should not be used as an excuse for their complete exclusion from all play environments by officials and play environment providers. The possibility of providing a play environment that includes supervision and hence props and loose parts within every district of a city or within every planned urban unit is very realistic and is suggested. Having pointed out the drawbacks concerning the provision or inclusion of play props and loose parts in play environments throughout the city, it is important to point out that some loose parts can indeed be provided in all play environments in the city.

The inclusion of natural materials in play areas and facilities has many advantages both to the child and the environment as a whole. Many have argued that natural materials and human exposure to these materials seems to be a human need rather than a desire (Kaplan and Kaplan 1989, Booth 1983). In terms of benefits to the child, the evidence is continually mounting to support previously held notions that natural materials provide the child with the best possible toy. Natural materials such as sand and water provide the child with an understanding of the basic materials that make up this world. In addition, natural settings provide children of all ages with many possible play experiences and play types. Socialising between children, which is a very important and often neglected activity, is a very important component in the child's social development. Unfortunately in many play areas and environments that exist in the modern city, this activity is all but completely neglected. Natural settings provide, and are indeed preferred by children, for socialising purposes within a play setting (Moore et.al. 1987). They provide the child with a quiet place to talk and engage in activities that require talking and socialising. In addition, the presence of dramatic and imaginative play in a play environment seems to increase with the presence of natural settings, as Moore (1989) points out,

..... natural settings supported a great variety of imaginative and dramatic play, primarily because of their great diversity and ease of manipulation. (p.192)

There are many other advantages to the inclusion of natural materials and settings in a play environment. Plants in their many shapes, sizes and forms offer the urban child with the rare opportunity of coming close to nature. In themselves, plants and other natural materials offer this, in addition to the fact that they support other living creatures which the child will slowly discover through the manipulation of the natural settings. In certain games, such as "hide and seek", "cops and robbers" and war games; shrubs and large rocks can play a significant supporting role. Perhaps one of the more important advantages of supplying play areas with natural settings, trees and plants is their contribution to a more pleasant micro-climate in play areas. This fact takes on considerable significance in urban areas and cities in hotter climates. In addition to plants and natural materials, land forms

and changes in topography can assist in a more controlled micro-climate (Moore et.al. 1987). Land forms are a very significant feature that promotes a play experience that children seem to enjoy greatly (NPFA 1978).

Having illustrated some of the advantages natural materials and natural settings have in promoting a better play experience and thus a better play environment, it is a mystery as to why their inclusion in play environments throughout the urban fabric is not a regular occurrence. This fact is more shocking when one realises that landscape architects are the professionals most concerned with playground or play area design. As Moore (1989) points out,

Disregard for natural resources is one of the principle faults of contemporary environmental design for children, the more surprising when one considers the many playgrounds designed by landscape architects. (p.211)

Perhaps the pressures exerted on the landscape architects by city officials to make play areas very easy to maintain is to blame for this sad fact. However, maintenance should not dictate the provision of a very important environment such as children's play areas and facilities. As Dattner (1969) argues, the playgrounds that are being provided in the modern city are no more than an agglomeration of concrete and steel for the sake of maintenance.

The most admirable feature of these playgrounds is that they have been built to withstand the abuses of children and the ravages of time, and so may provide future historians with a wealth of archaeological material concerning that age in the development of our cities when ease of maintenance was an idea worshipped with near-religious fervour. (Dattner 1969, p.34)

While it is true that natural materials and loose parts pose a maintenance problem due to the possible heavy and unpredictable use by children, these facts do not justify the complete abandonment of one of the most precious play features an environment could have. Instead of reaching hasty conclusions concerning loose materials and natural settings, perhaps it might prove beneficial for all if designers and officials spent more time in thinking about, and taking precautions against, the possible misuse or maintenance problems that are likely to arise. Some suggestions, that include simple design treatment such as providing pathways within planted surfaces and providing plant boxes in heavily used areas, already exist on how to protect plants and natural settings from possible overuse or misuse by children (Moore et.al. 1987, Cooper-Marcus and Sarkissian 1986). However a greater effort is perhaps called for to convince officials and designers alike that running away from a problem only creates a larger one.

It might seem to the reader that providing a play area which includes some loose parts and natural settings is all that is needed to provide a diverse play environment. Unfortunately providing a diverse play environment is not quite as simple as that. Many other



considerations and features must be carefully examined by designers and others involved in the provision of these environments. While a review of all the elements and/or features that make a truly diverse environment will be beneficial and worthwhile, the sheer number of these features and the detail that is involved in them makes it almost impossible to review them properly in this thesis. Therefore, some of the more significant elements and/or features that contribute to the formation of a diverse play environment will be highlighted.

Shaw (1987) points out some issues that a designer of a play environment should address very carefully when designing a play area or facility. These are as follows,

**I) Sense of place:** A play environment should offer the child a sense of security as well as a sense of ownership. In addition, a play environment and its design should take into consideration many aspects that relate to the space, such as adjoining buildings, spatial configuration and other characteristics of the physical context in which the play environment is located. Furthermore, the importance of establishing a sense of place in a play environment is to establish a cognitive image of the play environment in the child's mind. The purpose of this image varies from assisting in cognitive mapping to setting a tone or spirit for the space which will transmit the use of this space.

**II) Unified environment:** There are suggestions that play environments that are unified spatially and physically as opposed to those that are a sum of parts and spaces are used and enjoyed much more by children (Moore et.al. 1987, Shaw 1987). As Shaw (1987) put it,

..... the notion that the whole, when it can be perceived (and hence used) as a whole, is much more stimulating (and more used) than isolated parts. (p.191)

Hence the objective of unifying a space in simple terms is to offer the child an overall view of the many play possibilities that the play area has to offer. This, however, does not mean that the entire play environment should be visible from any point within it, for while a unified environment is important to the child's use and perception of the environment the hint of surprise and mystery is also an important ingredient to providing a stimulating and well used play area.

**III) Variety of spaces:** Different spaces promote different play behaviour in children. Hence a play environment that is meant to offer variety and stimulation to the child must ensure that there are many and variable types of spaces available to the child. As Shaw (1987) suggests,

The design team must think in terms of space. In designing environments for children's play, the total area can be divided into many spaces that vary in size and closure. This will create a range of spaces from small, well-enclosed places highly defined by walls and a ceiling to large open places

that lack clear spatial definition. Conversely, there should be large, very well-defined spaces and small areas that lack spatial definition. Variety is the key word. (p.193-4)

While defining space could employ many possibilities, the use of earth mounds and topography is recommended by many (Moore et.al. 1987, NPFA. 1978) for the reasons that, besides offering definition of space, they also offer a play feature on their own. Children enjoy climbing these mounds and if they are grassed mounds, enjoy tumbling down them.

**iv) Key areas and spaces:** In attempting to provide order and a unified environment, key places where major play elements, pathway meetings and other features of the play environment are located should be included. Key places provide the child with landmarks by which his navigation within the play area is made easier and a stronger sense of security is ensured. Shaw (1987) suggests that key places should incorporate more than a single activity,

..... a key place in a unified play environment will be complex enough to embrace a variety of activities. For example, in a key slide piece several different pathways and platforms will be clustered around a large sliding surface, with a group-size gathering space at the top. The user is provided with choices. Slides like this, as well as climbing towers, falling pads, multiple tunnels, complex platform stages, and sand and water areas are potential key places that can anchor the play environment. (p.196)

Key places need not be an area where only one major activity or piece of equipment lies. Combining different activities and equipment (while providing enough space for each activity and/or piece of equipment) can serve as a key place in a play area. As Shaw (1987) says, "..... design teams can develop many others by focusing on combinations of major activities and developing complex support structures into key places." (p.197)

**v) System of pathways:** Pathways connect the many spaces and parts of a play area to one another. However, diversity within this system of pathways is recommended. Pathways should, according to Shaw (1987), vary in size and shape which in turn will provide the child with more choice and play opportunity. Pathways by their nature suggest movement and, when children are involved, play. Pathways can offer play opportunities if the designer considers the possibilities they offer such as incorporating bridges and tunnels. In addition, some pathways can end with an activity such as a challenge course. Furthermore, some pathways could be designed to develop certain physical skills, for example, the incorporation of balance beams along paths, tyre courses and monkey bars can assist the child in the development of his physical skills. The important factor is for the designer to integrate pathways in a play environment into the overall play experience. It is true that some pathways must remain clear and act as true pathways, however the



majority of the pathway system in a play environment can be utilised to provide the child with a more diverse and stimulating play environment.

**vi) Three dimensional juxtaposition of play features and parts:** It is recommended that playground designs introduce some vertical circulation and platforms. The addition of the third dimension to the play experience will introduce more challenge and excitement to the child. In addition, as Shaw (1987) points out:

Some individual pieces of play equipment may allow the child to get above ground, but interconnected, multilevel, complex play with overall playground interaction cannot be achieved. A truly three-dimensional play environment is a matrix of defined spaces, platforms, and pathways juxtaposed to maximise the potential for user interaction-physical, verbal, and visual. It is very important to overlap spaces and paths. This will allow play to overlap. (p.202)

The problem of safety may, however, make designers and officials a little reluctant to incorporate multi-level play and three-dimensional circulation. While it is true that the addition of the third-dimension in the play of children is perhaps not as safe as ground-level play, the issue is one of variety and ensuring that the environment provides as many play opportunities as possible. Play equipment can provide challenge which is a vital component in ensuring the child remains interested, and thus use the play environment. Safety and challenge need not, however, be mutually exclusive. Simple design measures can be employed to ensure that a three dimensional play experience is not dangerous to the child. The most important of these measures is perhaps to ensure that there are intermediate levels along a three dimensional play facility or pathway where the child can safely retreat from the experience safely if he feels threatened or his natural sense of danger tells him to retreat. In addition, the surfaces where a child might fall need to be treated with impact absorbing materials. A variety of treatments are available to the designer ranging from sand, wood chips to rubber tiles. The crucial issue when determining the treatment is the height of the possible fall (Watson and Tipp 1987).

Having illustrated some of the more crucial items and issues involved in providing a very pleasant and variable play environment, it is appropriate at this point to highlight another issue which plays a vital role in determining the use and success of a play environment: The existence of support facilities (Dattner 1969). These support facilities include: Toilets, first aid points, drinking water supply and areas where parents can sit and recreate. If the play environment is to offer a complete play experience the provision of such facilities must be addressed.

Furthermore, the designer has to make sure that a play environment offers interest to

many age groups of children (Moore et.al. 1987). While the different activities for each age group should be separated either spatially or visually, they must not be treated as different spaces, for that would defeat the unity of the environment.

In illustrating some of the elements and features that are appealing to children and provide a better play experience than that being offered at the moment in the city, the designer must always understand that children with different backgrounds and in different situations require different environments and play experiences. Hence while there are broad guidelines as to what children desire and enjoy, the fact is that each situation and each play environment will have to be different. The question of how to fully understand and thus plan and design for the many different possibilities that exist in the urban environment arises. It is very difficult to ensure the success and effectiveness of a play environment. However, the participation of children in the planning and design process will increase the odds towards this assurance.



### **III.D. Children's Participation in Planning and Design**

A city agency can spend millions of pounds and hundreds of hours in effort and work building a play environment only to find to its surprise and displeasure that the environment or facility is not attracting children or children are not using the play area as the agency envisioned. This scenario is almost typical of public play area and facility provision today. The response of city officials to this is to provide more of these playgrounds in the hope that quantity and distribution are the main issues that need to be addressed. However, the result in most cases is more playgrounds that are not utilised by children nor the communities (Wilkinson 1980). The officials in these agencies have good intentions and want to help the communities and the children within these communities, of that there is no doubt. The problem lies in the planning and design attitudes or practices. The notion that the professional planner and/or designer knows best what children want and enjoy is a fallacy. Furthermore, planners, architects and landscape architects do not know every thing that there is to be known concerning the built environment. As Nicholson (1971) highlights, while advocating children and community involvement in the planning and design process,

Creativity is for the gifted few: the rest of us are compelled to live in environments constructed by the gifted few,.....

What has happened is that adults in the form of professional artists, architects, landscape architects, and planners have had all the fun playing with their own materials, concepts and planning-alternatives,..... and thus all the fun and creativity been stolen: children and adults and the community have been grossly cheated and the educational-culture system makes sure that they hold the belief that this is right. (p.30)

Children and the community at large need to be involved in the planning and design process not only because planners and architects are becoming powerful and threaten to remove all identity from any given city or locale, but also for a more humane environment that is supportive of human existence and activities. In addition, and perhaps more important to the subject matter of this work, is the fact that participatory planning and design will help provide a better end product. As Baldassari et.al. (1980) point out,

It is impossible for a designer or planner to take into account all of the important details of a project without some participation by the clients, Nowhere is this more obvious than in the design of play environments.

Participation can result in a better finished product not only because the ideas of individuals have been recognised, but also because of the results of collective creativity. (p.14)

The issue of children's participation in the planning and design process covers many sub-issues that need addressing. Hence, in the few coming pages, the elements and/or topics that address the issue of children's participation in the planning and design of play environments will be concisely reviewed.

Participation by children in the planning and design process can only become an effective tool in producing better play environments if children can actually have a degree of power in the process. What is meant by power is that children need to be assured of contribution and are allowed to provide effective input to the decision making process. Many so called participatory programs and projects do not allow children to have an effective input. As Baldassari et.al.(1980) point out,

It is very common for adults to involve children in a subtly condescending way. Classic examples of this involve sitting young children on conference panels, ..... The result, no matter what the children say, is a large amount of applause by the adults, a lot of photographs taken, many comments regarding cuteness, a big press response but no recognition of what the children said as having any serious contribution to the issues. (p.7)

Perhaps the problem lies in adult attitudes regarding children and their capabilities to make decisions. Although children are not as fully developed mentally and physically as adults, their contribution to the planning and design process can still be significant. Participation means communicating ideas between the different participants. Adults do this best by communicating verbally, however limited verbal skills means that children have trouble with this media of communication (Baldassari et.al. 1980). There are many skills and methods that can be employed in participatory planning and design involving children to overcome these developmental issues. These methods and skills are beyond the scope of this work and will not be reviewed in detail. However, depending on the age of children involved in the process, different mediums besides verbal communication can be used to communicate ideas. The use of drawings, models, videos and other techniques have proven beneficial in participatory design projects involving children (Hart and Moore 1982, 1983).

As a consequence of children participating in the planning and design process, the cost and time spent on a given project will increase. Many planners and designers have used this fact to advocate the inefficiency of participatory planning and design (Baldassari et.al. 1980). If one considers efficiency as a means of a project finishing in the least amount of time, then participatory design is indeed inefficient. However, if one considers the efficiency of a given project in terms of the finished product and how this product provides the community with the intended purpose it was undertaken for, then the case of participatory planning and design is a very efficient one. Furthermore, the cost of maintenance will be reduced due to the fact that misuse, over-use and abuse by the children will decrease. Children can be involved in planning and design at different levels of intensity, ranging from simple questioning to full participation in the planning, design and maintenance of a project (Baldassari et.al. 1980). The level of involvement will ultimately depend on the scale and purpose a given play environment is to serve. Having said that, it must be emphasised that some degree of participation is always helpful to the planner/designer, the community



and the environment as a whole. As Baldassari et.al. (1980) state,

Hopefully, with time, some degree of participation will be mandated for all projects, as it has been already for large-scale Federal environmental projects. (p.14) [Quote refers to the United States' system]

Thus far the discussion concerning children's participation in planning and design has emphasised the role participatory planning and design has to play in providing a better play environment and the problems that designers and planners face with this suggestion. However, the theory of involving children and the community in planning and design decisions offers many advantages besides a humane and better environment. The benefits that a child gains from being involved in decision making are numerous and substantial. In addition to the gains of understanding what is involved in planning and design, the child will become more aware of the needs of others in the community and their desires. Furthermore, the child will achieve a very important developmental gain, that of self esteem. His contribution and involvement in an important event such as planning, designing, building and maintaining an environment that the entire community uses and enjoys will almost definitely provide the child with a sense of worth (Baldassari et.al. 1980). If one considers the many problems that the youth of urban areas seem to gradually get into, and the reasons for their deviation, one will find that lack of self esteem has a role to play in it (Ward 1990). Perhaps one of the most important gains in involving children in planning and design and decision making is developing a sense of responsibility in the child. There is evidence to suggest that environments built with children participating in all the stages of planning and design were very well looked after by the children themselves (Moore 1989). Furthermore, vandalism and/or misuse of equipment and play areas also seems to be inversely related to the degree of participation a child has in planning, design and maintenance of an environment (Moore 1989). Perhaps the confessions of an urban child and the change in his attitude after participating in a project will convince the reader of how important it is to involve children in making decisions, sharing responsibility and giving them a sense of worth.

I was good in blowing up mailboxes. I just felt that there was no place to be. There was no place that would give me the responsibilities that I thought I had to get and because of that I created a lot of negative energy and then I finally grew up. (Baldassari et.al. 1980; p.13)

Hence children's participation in planning and design will not only provide a better environment for children and their play, but may also contribute to a better urban child.

Participation in the planning and design process is not a magic cure to the urban illnesses that exist today. Creating play environments that are well used and enjoyed by children are not the only answer to the many problems that exist and threaten the urban child today. However, providing play environments that are supportive of children's interests and

developmental needs will perhaps alleviate from these problems. An effort is required by all involved: Parents, teachers, planners, designers, business-people and other members of society must realise and become more aware of some of the issues facing the play of the urban child. They must realise that children want to have some control over their environments just as adults have control over theirs. The time has come to end the neglect of the urban child.



### **III.E. Conclusion**

In this chapter an attempt was made to highlight some of the more important issues involved in the planning and design of play environments in the city. While the scope of this work is more focused on the provision of play environments, it is important for the reader to realise that play environments are very much affected by other environments and elements of urban areas. This fact makes the subject matter a complex and at times a tricky one. The issues brought forth here are a good starting point from which further studies and guidelines for play environment provision can develop. The issues highlighted in this chapter were intended to illustrate concerns facing children and their play in any environment regardless of cultural and environmental effects. In doing so, the issues can be developed and addressed differently, depending on the culture and physical environment that might arise. Diagram III.E.1. summarises some of these issues and provides reference points to the reader on each of the issues dealt with.

Perhaps the main problem that play environments and children suffer from in the urban environment is that of access to the outdoor environment. Roads, traffic and the general attitudes of drivers have affected the outdoor play of children more than any other issue. Traffic in today's cities has become unmanageable. Children are not the only ones facing the problem of uncontrollable traffic, the pedestrian in the city has become a second class citizen. The results of this are not completely realised, however there are suggestions that the increase of violence, crime and drug abuse could be attributed to the influences of television and general lack of things to do (See Appendix III). The over-use of television as a recreational substitute for play has been suggested and if it is true, urgent measures are needed to provide the urban child and teenager access to more advantageous pursuits. Traffic must be calmed in the city, and the outdoor environment reclaimed for pedestrians' and children's activities and use. It is the responsibility of planners and officials to take steps towards this goal before the time pedestrians completely surrender the outdoor environment to cars, crime, hooligans and other misgivings of uncontrollable traffic.

Another problem associated with the design of play areas in cities is the designers' (and planners') inability to cope with the very difficult task of making environments that are humane. The designer's obsession with form and standards is perhaps the most serious problem facing the built environment in general and environments that are specifically designed for children in particular. The child is a very small human being, yet even in areas where the child is the primary user of the environment, adult standards and scales are applied. For example, in schools door knobs are at a height that is very convenient for the few adult teachers but not for the hundreds of children. While children's play areas are designed a little more to the scale of children, some features still remain to the scale or to the adult perception of use. Designers must take the child's perspective if the play

environments they design are to work effectively. The involvement of children in the planning and design process will work towards this effect. The planner/designer is to gain incredible insight into the true needs and desires of children when effective participatory design is used. This insight will provide for a better immediate result as well as providing the planners and designers with basis for proper play provisions in cases where it might prove impossible to involve children.



**THE IDEAL PLAY  
ENVIRONMENT**

**ISSUES TO BE ADDRESSED**

FURTHER DISCUSSIONS CONCERNING ISSUE IN:	Concerns and Issues to be Dealt with and Addressed	Manipulation and Stimulation of Senses
Chapter II. Section II.D.iii. Chapter III. Section III.C.ii.	Provide "Loose Parts" and natural material. Furthermore, use as many building materials as possible. If possible, allow areas for children to create their own projects and structures in the play area.	Accessibility
Chapter III. Section III.B.	Ensure that children are within a safe walking distance from play areas. Avoid housing families with children (especially toddlers) above the first floor of a multi-family building. Ensure that play spaces are provided for different age group children, taking into consideration the distance each age group can extend from the home.	Diversity
Chapter III. Section III.C.	Each neighbourhood should cater for many play experiences that appeal to different age groups. These play environments should seriously take into consideration the distance a child of a particular age is likely to travel (Range Behaviour). The size of the different play areas should reflect the amount of activities they have as well as the age and number of children that they aim to satisfy.	Participation of Children In The Planning and Design Process
Chapter III. Section III.D.	When possible, the participation of children of all ages should be sought out in one of many ways ranging from questioning the children to full participation in the planning, design and maintenance. Effective participation of children will require the use of a medium that easy for the child to comprehend.	Flexibility
Chapter III. Section III.C. Appendix III.	A play environment should allow the users some flexibility in rearranging some of the features of the play environment whenever possible. The use of modular systems is to be encouraged when feasible. Furthermore, the use of natural materials (such as water and sand) is to be encouraged in all play areas. Permanent features in the environment should be minimised so as to allow children a maximum of flexibility in the play experience.	Social Interactions
Chapter II. Section II.D.ii.b.4 Chapter III.C. Appendix III.	A significant part of play is children socialising together, especially so for older children. The design of play spaces should ensure that there are areas within the play environment that offer the children a quiet place in which they may socialise.	Micro-Climate
Chapter III. Section III.C.ii.	Play environments should be protected against undesirable climatic and weather conditions. The use of soft landscape materials (i.e. plants and water) will provide for a more pleasant micro-climate in the play environment. When possible, indoor play areas are recommended for children's play to ensure play in extreme weather conditions.	Graduated Challenge
Chapter II. Section II.D.iii. Chapter III. Section III.C.ii	Within a play environment, special attention should be paid to the progression from one activity to the next and/or different levels of one activity and/or apparatus. Retreat points, where the child can retreat from an activity and/or level of a challenge (i.e. a multi-level play apparatus) should always be provided. Furthermore, these points should be strategically placed so as to allow a minimum of embarrassment to the child sensing uncertainty.	Supervision, Visibility and Defensible Space
Chapter III. Section III.B.ii. Chapter III. Section III.C. Appendix III.	When possible, supervised play areas should be provided. Play environments in general should be located so as to allow neighbouring houses sight of the play area during all hours.	

Diagram III.E.1: Issue Reference Table.



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## **Chapter IV : The Context of Play in Jeddah**



#### **IV.A. Introduction**

In the previous two chapters the discussion of children's play and play environments was limited to the contexts of psychology and urban planning in the West. In this chapter, emphasis will be placed on children's play and play environments in the city of Jeddah, Saudi Arabia. The topics that will be covered in this chapter will at times diverge from the main issue of children's play and urban play environments in Jeddah. This divergence is not an attempt to confuse the reader, on the contrary, the majority of the topics that will be discussed aim at providing a better background to the situation in Jeddah so as to allow for an understanding of the issues involved in the topic of children's play and play environments.

To simplify the discussion, the chapter has been divided into three main sections. The first section will provide the reader with some background information concerning Saudi Arabia and Saudi society. The second section will hopefully assist the reader in grasping the concerns and issues facing development in Jeddah as well as providing some facts regarding the society of Jeddah. The third section in this chapter is designed to provide a brief account of the existing play facilities in Jeddah.

#### **IV.B. The Development of Saudi Arabia**

Saudi Arabia is perhaps most known in the world for the significant role it has to play in the petroleum market. However, long before there was oil in the deserts of Saudi Arabia, people lived and established settlements in the many regions of the country. The early settlements in Saudi Arabia reflected, to a large degree, the nature of the environment in which they were created. They were dispersed throughout the land, small in size and in some way isolated from one another, as though they were oases in the desert. These characteristics of the early settlements ensured that development was slow and checked by the settlers themselves. Furthermore, development was proportional to the resources available in the harsh desert environment. As such, the physical development of settlements prior to the discovery and contribution of oil revenues was very simple and humble.

The society of Saudi Arabia was, and to a large extent still is, very much governed by the teachings of Islam. The interpretation of the religion varies from one settlement to another, however the overall attitudes, beliefs and practices are very similar in the country (Gazali 1989). In the early settlements of the Kingdom, Islam and Islamic Law (Shariá) played a very significant part in the nature of development that occurred (Samuel 1980). While Islam and Islamic teachings have affected almost every aspect of development in the early settlements of Saudi Arabia and indeed in the Islamic world as a whole, for the purposes



of this work, only the aspects that are thought to have a direct bearing on the subject of this thesis will be reviewed.

The family is the nucleus of society, this fact is stressed in Islam and is one of the key elements in Moslem and Saudi societies. The nature of the family in the early settlement in Saudi Arabia is very different from the existing understanding. In the early settlements, the extended family was a common feature in society, indeed it was the norm. The implications are many and significant. One of the more important implications with regard to the subject of this work, is that children received instructions and standards of behaviour from many family members. The emphasis of childrearing was geared towards conformity to the social and religious codes of conduct and behaviour. While the childrearing practices of those generations were strict, in comparison to the more "modern" methods, children were not treated cruelly as one might deduce from what has been said thus far. On the contrary, children in Islamic Law have to be treated as kindly as possible, and the early society of Saudi Arabia was very keen on obeying the instructions of Islam. However, many factors and conditions that existed in that period created conditions that gave rise to a method of childrearing which combined the teachings of Islam with local conditions and expectations.

Before the oil and the revenues obtained by its exportation, the conditions of the society were very simple and in many instances poor. Sustaining a family required the efforts of many of its members. However, as is the case with the stricter Islamic societies, females were restricted to domestic duties and could not be a money earning force in the family (Kay 1982). As such, boys were expected to be money earners and as soon as they reached an age where they could perform certain duties and tasks they were forced into the wheel of the local economy, whether in the form of aiding their fathers in a family business, farming or as an apprentice to a local trade. Therefore, childhood in its present definition (i.e. till the age of eighteen) was not to be found. As for the girls, by the age of eighteen, many were married and had given birth to their own children. Thus, childhood in that generation was very limited in many aspects. However, while the period of childhood lasted, many of the activities (i.e. play and games) that children engaged in were tolerated by the society. For example, if the children were up to some mischievous activities, the society did not punish them too severely. Perhaps it was recognised that their childhood was short and it was the only time in their lives that they would have the opportunity to misbehave, for as soon as puberty was reached, the responsibilities that will be placed on them would be great and the expectations of the very closely knit society would not allow or indeed tolerate any wrong doings and/or dissent.

The environment for the children of that time, in many ways provided an ideal play environment. While little luxuries could be afforded by the society in terms of play



equipment and facilities, the environment was in many cases very supportive of children's play behaviour. To begin with, children in those days had full and equal access to the outdoor environment. There were no dangers from cars, strangers and many of the fears that exist in today's environments. In addition, parents did not mind if they did not accompany their children because they knew that the other members of society would look after them as if they were their own. Simplicity and complexity was always present in the environment. Simplicity in that there were not many things to distract the child's play, and complexity in that the child had to employ a great deal of imagination in making toys and playing with them. Furthermore, there were many places within the environment or near the settlements that offered the child contact with nature and adventure: In Jeddah, the Red Sea coast, in Mekkah, the mountains and hills, in Riyadh, the oasis and wadis (valleys), in Taif, the farms and the mountain ranges. In all these environments the child had the power and the ability to alter and manipulate the environment without any fear or worry that he would get punished for fulfilling the innate drive to do so.

Those early settlements and environments also had many valuable historical and cultural experiences to offer the child. The mobility that the child had meant that he could travel within the settlement freely and with no fear. This, as Parr (1967) suggests, allowed the child to observe and learn from things and people he came in contact with. A trip to the local Souq (commercial precinct of the settlement) would have probably taught the child how to deal with people, the many crafts and trades would have possibly triggered an interest and the spatial experience would have possibly provided, in addition to many cognitive gains, an understanding of heritage and architectural tradition.

However, with the discovery of oil and the vast revenues gained from its exportation and production, settlements and traditional life in Saudi Arabia changed. With these new resources available to the government, many projects and developments occurred that have changed the social and physical environment of the Kingdom forever. To begin with, the majority of the projects and developments have been concentrated in urban areas (Abu-Lughod 1983). With this sudden wealth and development in the urban areas of the country, many rural settlers rushed to these urban areas with the promise of a better way of living and greater financial gains. Furthermore, due to the relative lack of knowledge that was available in the country at that time and the lack of know how, many foreigners were imported into the country both as a work force and as technical and consultancy staff to undertake the ambitious projects and developments that have been planned.

The populations in cities exploded and many of the services and facilities could not cope with the large influx of people (See Diagram IV.B.1). Water, housing and electricity were all in very short supply and the cities of the kingdom were faced with a considerable number of planning and design problems. The solutions to these problems were again imported in

the form of planning consultants from Egypt, Great Britain and the United States (M.o.M.R.A. 1981). The solutions that were proposed were quickly implemented (in the form of five year plans) with little or no studies into their social impacts and what the correct implementation procedure should be. The results at first were very satisfactory and many praises were directed to the planning officials of the cities. Housing, by the time most of the plans were implemented, was in abundance, power shortages a thing of the past and a constant supply of water was taken for granted. The major problems in the cities appeared to have been solved in record time.

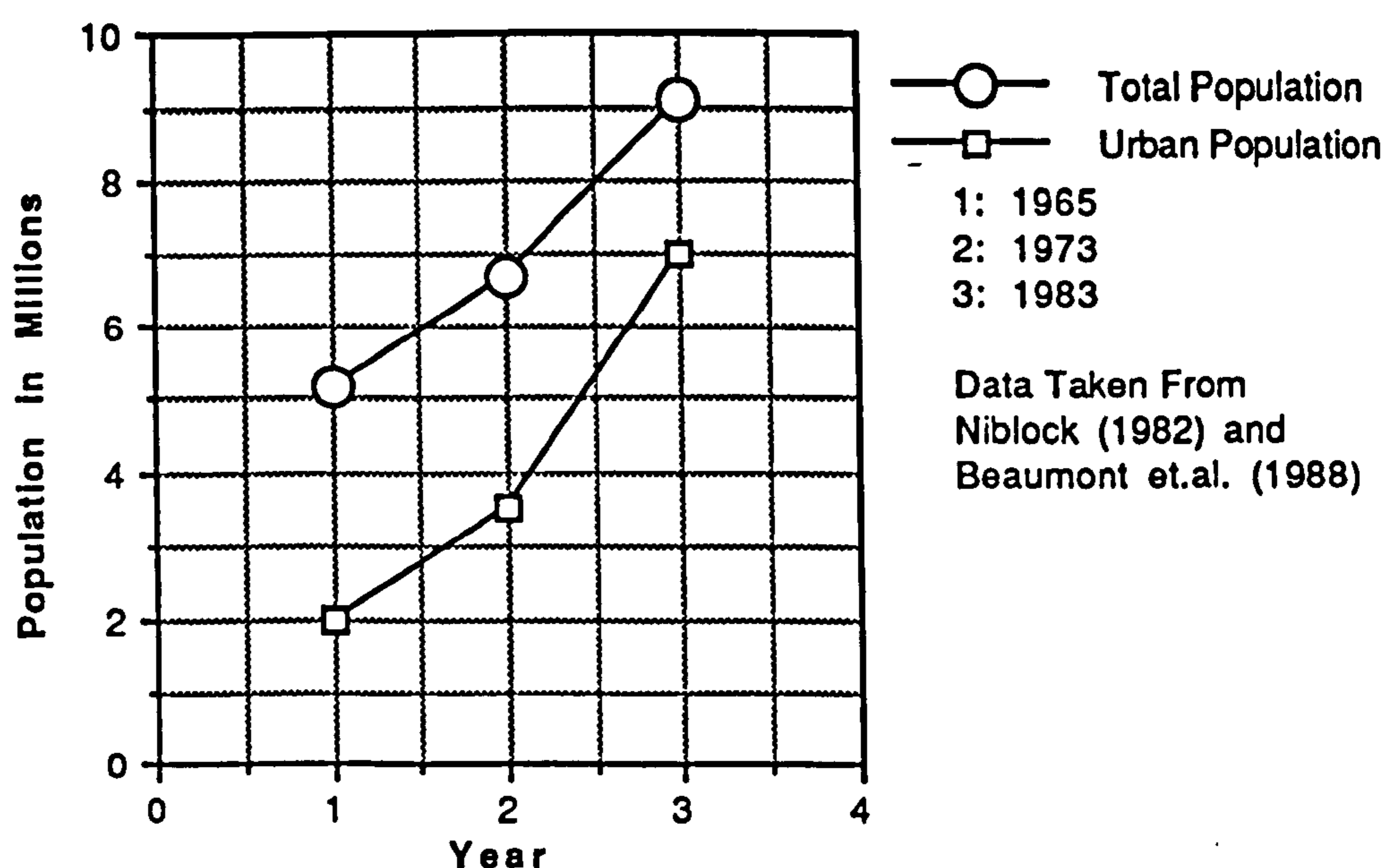


Diagram IV.B.1. The Growth of the Urban Population in Relation to Overall Growth in the Population of Saudi Arabia

Improvements in Saudi Arabia were not only limited to the development of its cities, many other advances occurred throughout the society and the environment. Education, health care and many other services and agencies were improved by the government with the increase in revenues.

All the implications of all these changes are not fully recognised. However, some of these with regard to children and their play can be briefly reviewed. The growth of the cities and the increased levels of car ownership has meant that children's mobility and access to the outdoor environments has been severely limited. Furthermore, the spread of the urban fabric over the landscape has meant that more and more children live a considerable distance away from the original settlements which are the cultural and historical significant areas. The restrictions on the urban child's access to and mobility in the outdoors today are very similar to that of European and American children. Parr (1967) stresses the point of children's mobility and access to the environment,



Mobility of the adult is greatly increased, but one never sees any mention of the corollary fact that the child's mobility has simultaneously been greatly reduced, largely as a result of the hazards introduced by the new means of adult locomotion..... Urban growth is pushing residential precincts and school districts farther and farther away from the centres of history and of current affairs. A child's exposure to the life of the city two to four times daily has become a thing of the past.

For a child, with his reduced autonomous mobility, the opportunity for frequent and independent visits to cultural treasures and centres of education are virtually eliminated by the urban spread. While electronic surrogates have valuable uses of their own, they are in no sense adequate substitutes for self-directed experience of the real thing. (p.4-5)

Another implication of the sudden growth and the many changes that have occurred in Saudi Arabia during the previous decades is the increase in the period of childhood and the delay in shouldering responsibility. With the improvement in the educational systems and the need for Saudis to be well educated for them to obtain a good job, the period of childhood has been greatly extended. A child is no longer considered to be a fully grown adult until a certain degree of schooling has been completed. This is also evident in the average age for marriage within the society. As Kay (1982) points out, the age of marriage is very much linked to the male's acquisition of a first degree (i.e. bachelor's degree). In addition, the family structure in modern Saudi society has changed markedly. The existence of the extended family is a rarity today. Perhaps the planning policy of offering very few large plots of land on which people may construct houses and/or complexes had something to do with the fading of the extended family. Furthermore, the unchecked rise in land and property values may have contributed to the unfeasibility of having an extended family sharing one property.

In contrast to the old settlements where, in most cases, the first residence of a marriage (usually the house of the husband's family) is the only house a couple will know, the new Saudi society is much more mobile. Nucleus families move residence within a city over and over, depending on their changing needs. This continuous movement of households within the city does not allow for communities to develop in the sense of social cohesion and neighbourly relations. The effects have been in some cases dramatic with people rarely recognising and/or knowing their neighbours. Consequently, isolation of households within a neighbourhood is becoming a norm. In addition, fear and apprehension towards the outdoor environment is sensed throughout the city. The mobility of the Saudi household, with the present economic situation, has extended to an inter-city phase; with people travelling to where their careers and prosperity might lead within the Kingdom. The children of the Kingdom have in many ways paid the price of this continuous movement by not having the opportunity to become familiar to people and environment. The implications of this lack of familiarity is not really known, however, one can speculate on several points. The range behaviour of the child (See Chapter III., Section III.B.i.) is surely to be negatively

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affected. Furthermore, the social development of the child is likely to be delayed for the reason of having to *start over* every time a move is made.

The economic situation of the Kingdom today is very different from that during the "boom" of the seventies and early eighties. With the decline in revenues gained from oil over the past seven to eight years, more and more pressure has been exerted on the nucleus family's money earning capabilities. These pressures have led to the fact that more and more females are now joining the work force in the Kingdom (Kay 1982). For the children of the Kingdom, this has meant that for most of the time they are overlooked by foreign nannies and help. This fact has many social and possibly political implications, however they all lay outside the scope of this work. The combination of the above facts and changes (and other factors) has played a major part in changing the society's understanding and conceptualisation of childhood and children's play in a very short period of time.

Children in the modern Saudi city have very little opportunity to venture into the outdoor environment for reasons that have already been touched upon and will be later discussed in more detail. Assuming that a Saudi child did have adequate access the outdoors, he would then find that the opportunity to play was very limited. While Saudi cities have provided the necessities of sustaining urban living (e.g. shelter, transport, major services and facilities), many of the "luxuries" of urban living (such as open spaces, pedestrian paths and children's play environments) are far from being adequately provided for and their importance truly understood. Furthermore, with decreasing revenues from oil, the likelihood of public expenditure on such "luxuries" is decreasing. As Diagram IV.B.2. shows, from 1987 overall public expenditure in Saudi Arabia has been falling.



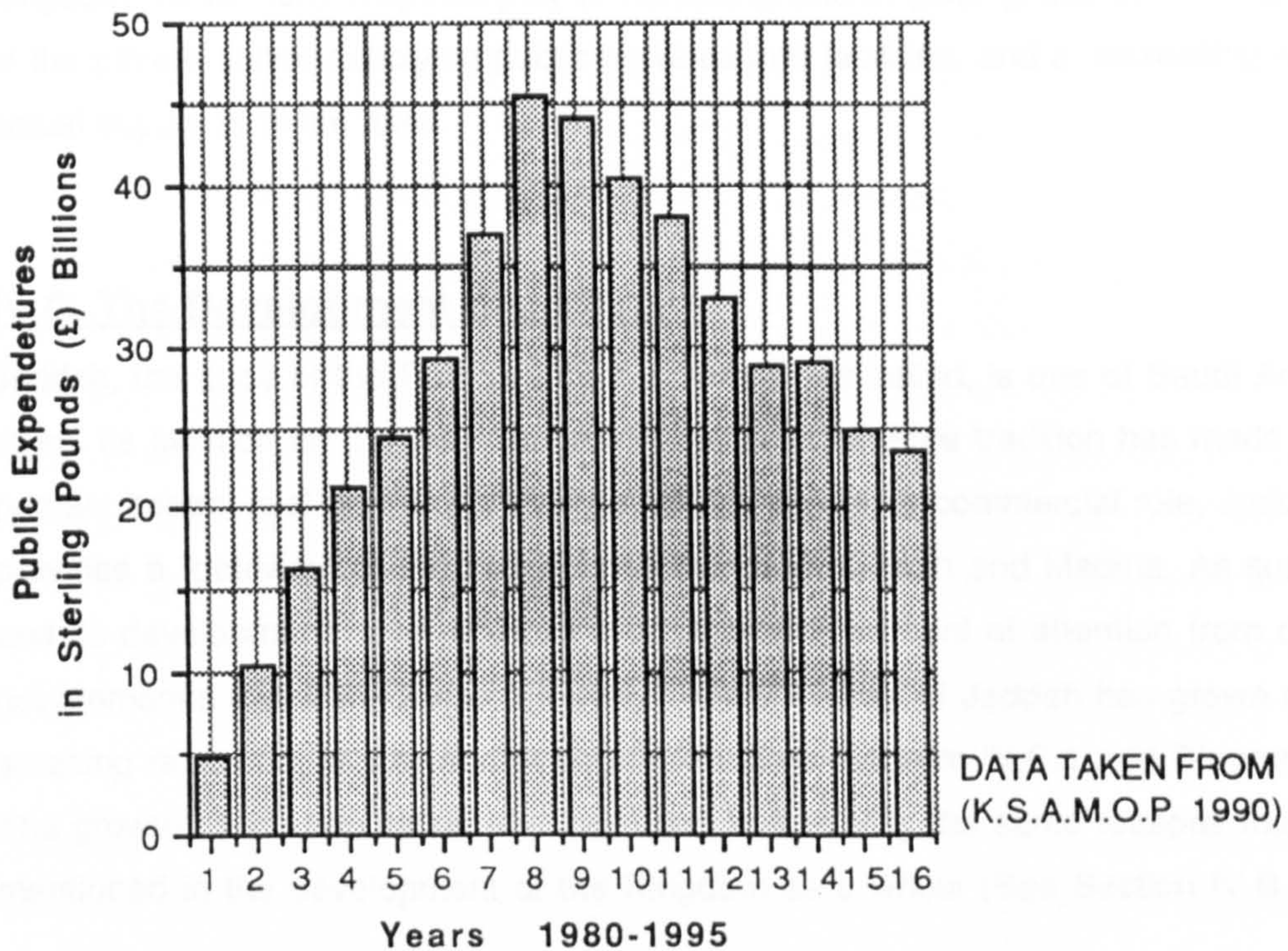


Diagram IV.B.2. Public Expenditures of the Saudi Government from 1980-1995.

The implications of this decreasing public expenditure are many, however, with respect to the issue of children's play provision in urban environments, the most serious implication is that city officials and agencies will have a shrinking budget every year and as such will not have the resources they once had to provide for the young of the society. The government policy for the fifth five year development plan (1990-1995) and presumably for the sixth five year development plan (1995-2000) is an increasing reliance on the private sector (in the form of large corporations) for the provision of services and facilities. This is clearly indicated by the statements that outline the principal directions and strategies of development in the Kingdom.

A necessary condition for achieving a fully developed economy is a much broader private sector participation in the economy. The private sector has already begun to pursue a wide range of business opportunities unrelated to the level of government expenditures. This process will accelerate as private sector management, production and marketing capabilities strengthen and the competitive environment improves. The government will induce the private sector to play an increasing role in some areas where the government has thus far taken the lead, such as utilities, transportation, and some government services. Crucial institutional support for private sector-led growth and diversification will be provided by the government, through rapid development of the Kingdom's banking and finance sector and financial markets, as well as a widening range of business services. (K.S.A.M.O.P 1990, p.12)

A more detailed discussion of the implications of this policy in terms of children's play provision will be discussed in Chapter VIII. However, for the time being one can say that this policy is basically aimed at decreasing the dependence of the public on public agencies for their services and some facilities. Thus in the future, public agencies in the



Kingdom will in many respects play an increasing role in guiding and controlling the activities of the private sector supplying public services and facilities, and a decreasing role in the actual supply of these itself.

### IV.C. The Development of Jeddah

Jeddah, the bride of the Red Sea as it is sometimes called, is one of Saudi Arabia's largest cities. Its location on the Red Sea coast and its commerce tradition has made it the primary commercial port of the country. In addition to its commercial role, Jeddah also provides a "gateway" to the two Holy Mosques in Mekkah and Madina. As such, Jeddah and its development have received a considerable amount of attention from different governmental agencies. Since the early 1960's the city of Jeddah has grown at an amazing rate, both in size and in population (See Diagram IV.C.1 and Diagram IV.C.3). The growth of the population has been due to basically the same reasons that were mentioned in the development of the Kingdom as a whole (See Section IV.B.).

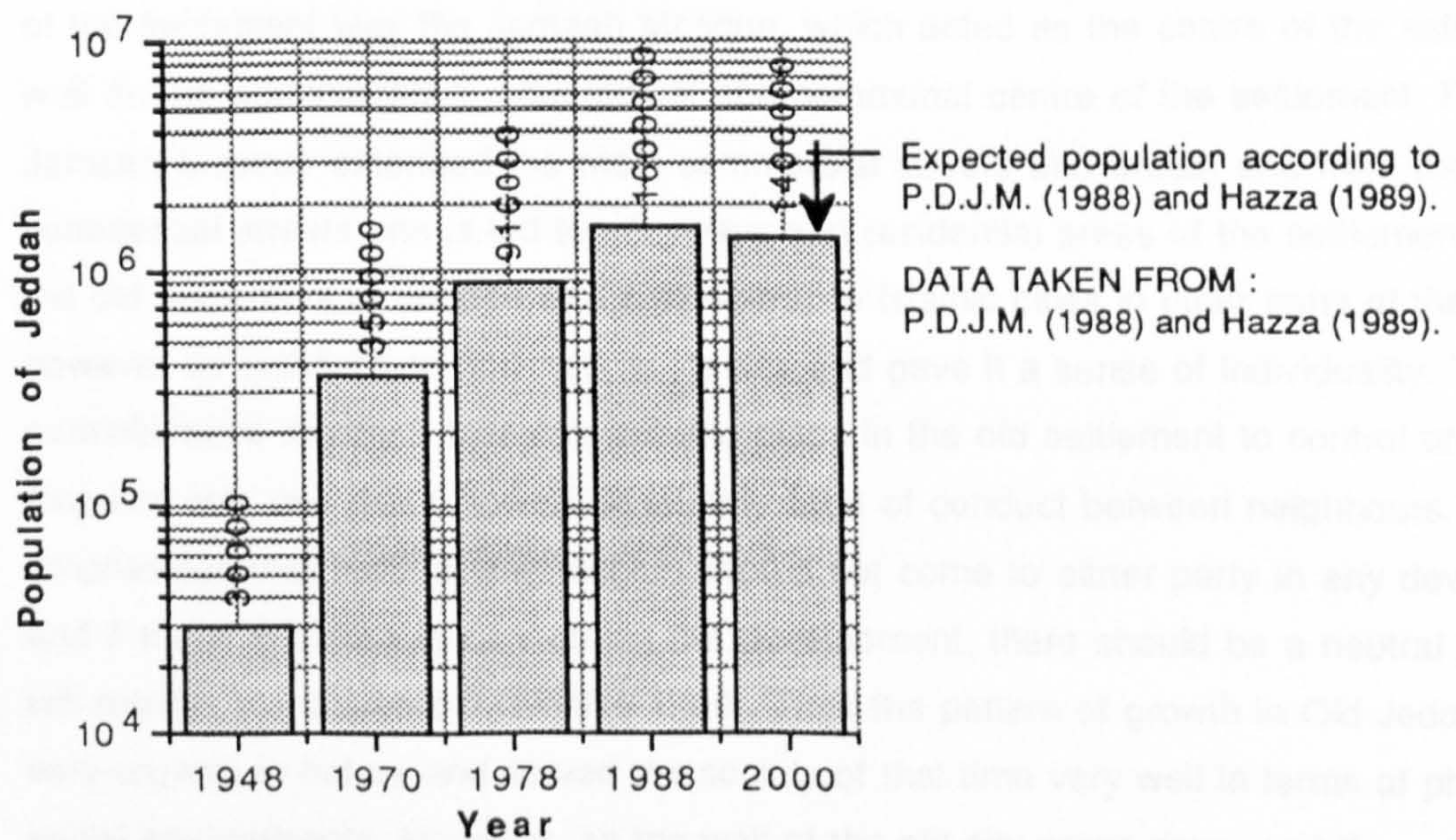


Diagram IV.C.1. The Population Growth in Jeddah.

As for the growth of Jeddah's area, the principal reason is that the planning agencies of Jeddah opted to follow a low density growth pattern, with the majority of the city falling below a density of 50 people per. hectare (or 0.005 person/meter) (M.o.M.R.A. 1981). This policy, coupled with the need to provide housing due to the explosion in population, contributed to the growth of Jeddah from just over 0.5 square kilometres in 1948 to an area of over 500 square kilometres today (P.D.J.M. 1988, Hazza 1989) (See Diagram IV.C.4).

The environmental features surrounding the city have had a significant role to play in the



form and direction of the city's growth. Jeddah lies in the Tihama plains of the western region of the Kingdom. To the west lies the Red Sea, and to the east, the foot hills of the Tihama Mountains. Therefore the direction of growth had to be either to the south or to the north. The prevailing wind direction of north west meant that the majority of the industrial sites in the city had to be located to the south of the residential areas of the city. Thus the direction of growth in Jeddah in terms of housing and non-industrial land uses, has been consistent towards the north of the original settlement. As a result, the city of Jeddah has taken a more linear form in development and its northwards growth has not ceased. It has been argued in the past that Obhur Creek might pose a natural barrier to the city's northern growth. However, the new studies under way in the municipality and in the offices of land developers stress the continued growth towards the north, beyond Obhur Creek which if not checked, will soon encroach on the northern villages and rural areas.

The pattern of development in the city of Jeddah is varied and is a mixture of many different patterns. The original settlement, in many ways, followed the traditional Islamic development pattern of growth (See Diagram IV.C.2). That is to say, the main component of the settlement was the Jamaáh Mosque, which acted as the centre of the settlement as well as the administrative, educational and communal centre of the settlement. From the Jamaáh Mosque extended the main commercial streets and areas, and from these commercial streets one is led to alleyways and residential areas of the settlement. Thus, the old settlement of Jeddah was very similar to Islamic cities in other parts of the world, however its architecture reflected its identity and gave it a sense of individuality. The administrative structure that was put into place in the old settlement to control and settle disputes was one that followed an Islamic code of conduct between neighbours. This code emphasises that harm in any fashion should not come to either party in any development, and if there is a dispute concerning the development, there should be a neutral party that will resolve the disputes (Llewellyn 1980). Thus the pattern of growth in Old Jeddah was very organic in nature and served the society of that time very well in terms of physical and social environments. However, as the wall of the old city came down and the central Saudi government provided security and stability, the city of Jeddah began to grow. The growth of the city in the period from the early 50s to the early 70s was haphazard both in pattern and in other features of planning (i.e. densities and residential unit types).



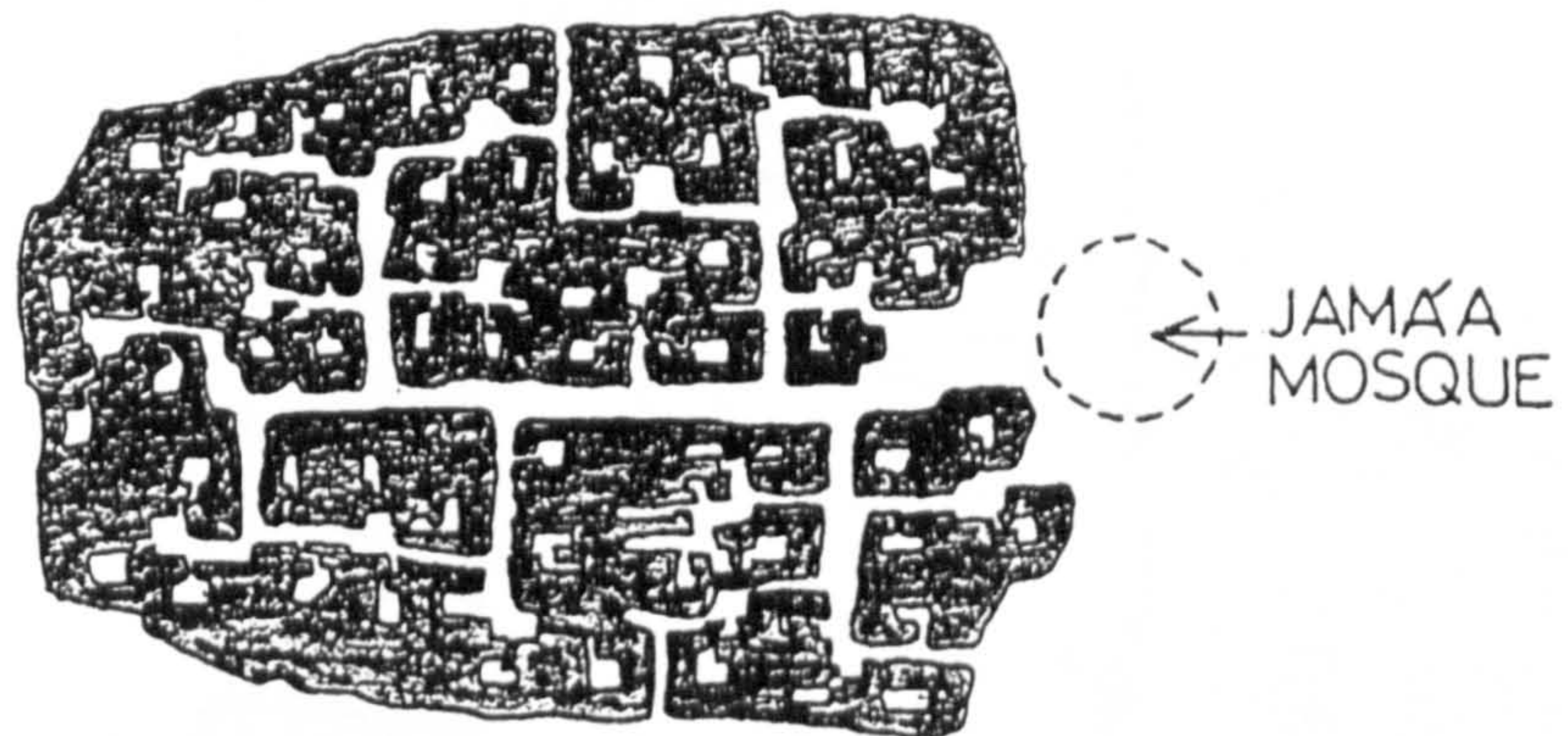


Diagram IV.C.2. Schematic Representation of The Traditional Urban Pattern in an Islamic City.[Taken from Abu-Lughod (1980)]

For the population, this transition involved coming to terms with a new, municipality-based, administrative system which governed all aspects of the built environment. For the new administrative system, this transition involved the development of an efficient organisation structure and reconciling traditional attitudes and approaches to planning with the need for modern methods to accommodate the rapidly expanding population. The result was a growth pattern consisting of a mixture between the traditional organic patterns and modern grid layout patterns. By the mid 70s the population had come to terms with the municipality and the municipality itself had become a much better organised agency and the result was the planned city of today.



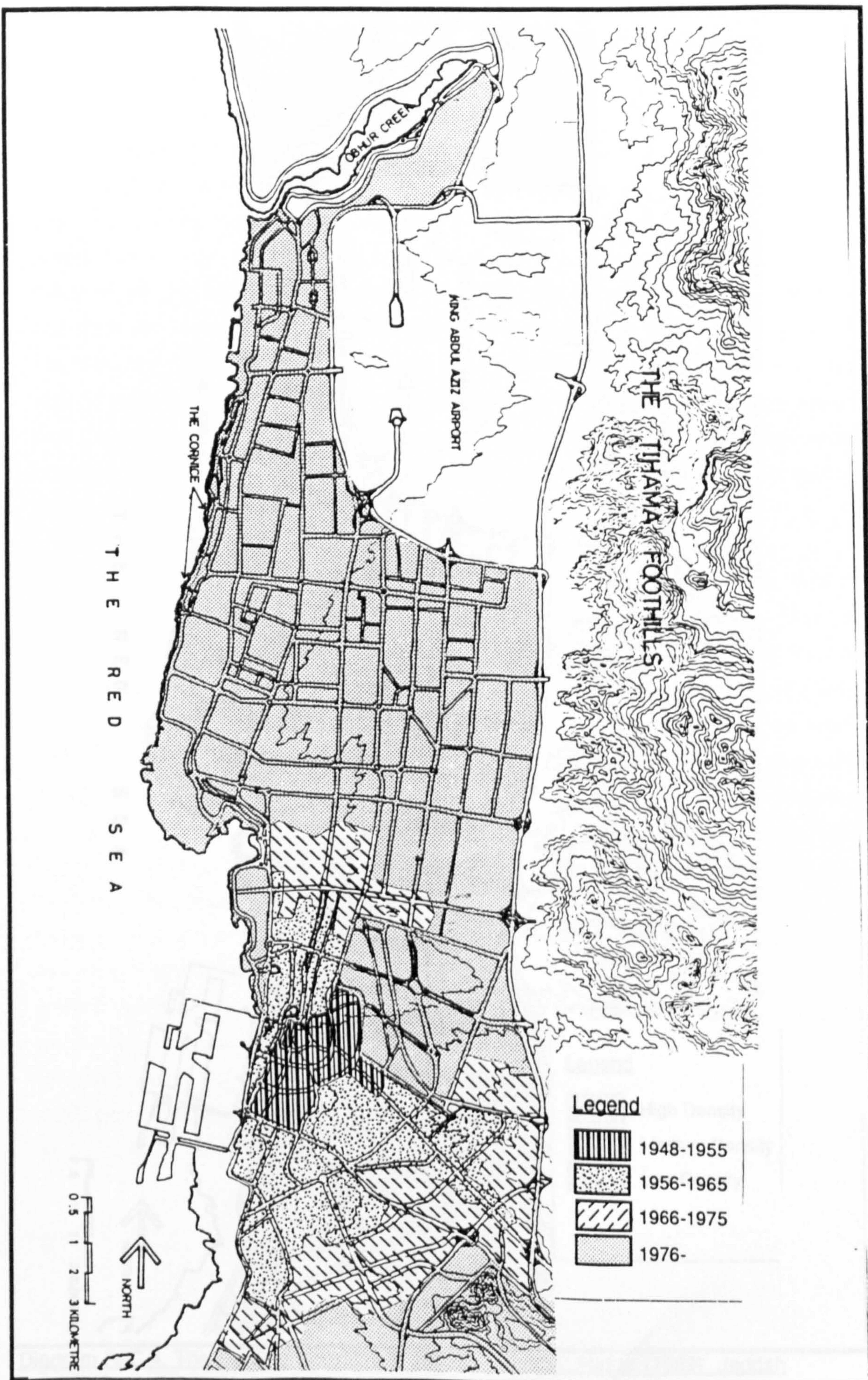


Diagram IV.C.3. The Growth of Jeddah's Area [Source : M.o.J. (1973), M.o.M.R.A. (1981)]



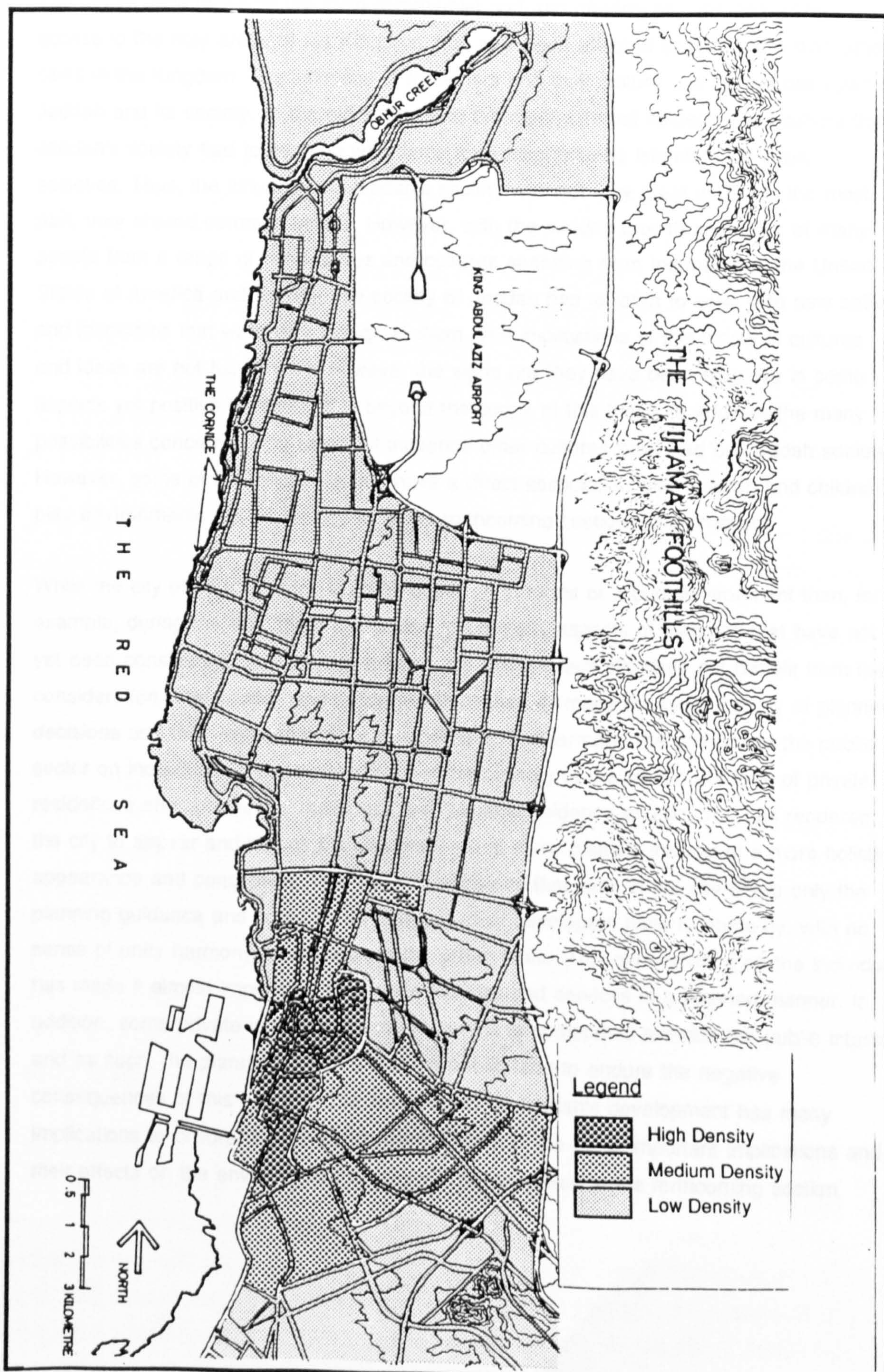


Diagram IV.C.4. The Existing Densities in Jeddah [Source : Hazza (1989), Jeddah Municipality (1988)]



The city of Jeddah, being the main commercial port and offering pilgrims and visitors access to the holy areas of the Kingdom, has also been affected socially more than other cities in the Kingdom. The influence of foreigners and their culture has always been part of Jeddah and its society. In the old settlement, the most external influence and culture that Jeddah's society had to contend with came from neighbouring Islamic and Arabic societies. Thus, the influence on Jeddah's society was not very great as, for in the most part, they shared common beliefs. However, with the sudden growth and influx of many people from a range of nationalities and cultures spanning from Indonesia to the United States of America and Europe, the society of Jeddah had to learn to cope with new beliefs and ideologies that were very foreign to them. The implications of this inflow of cultures and ideas are not fully known, however the signs are they have been negative in some aspects yet positive in others. It is beyond the scope of this thesis to address the many possibilities concerning the extent of influence other cultures have had on Jeddah society. However, some of the influences that have a direct association with children and children's play environments will be discussed in the forthcoming sections and chapters.

While the city of Jeddah today is much better off in terms of a built environment than, for example, during the 60s, there still seems to be many aspects of planning that have not yet been considered, or if they have been, the environment still does not benefit from their consideration. The sudden and quick growth of the city made the careful study of planning decisions and their implication almost impossible. Furthermore, the reliance of the public sector on individuals in the development of the majority of the city (in the form of private residences and commercial buildings), with minimal guidance and control, has rendered the city to appear and feel as if it was made up of many districts instead of a more holistic appearance and conception. The many subdivisions that exist in the city share only the planning guidance and control laws that individual developers have to abide by, with no sense of unity harmony or cohesion to the urban fabric. This over-reliance on the individual has made it almost impossible to provide facilities and services in a planned manner. In addition, some private interests in Jeddah seems to sometimes override the public interest and as such, the planning process and the public tend to endure the negative consequences of this practice. The brief review of Jeddah's development has many implications to children's play environment. Some of the more important implications and their effects on the environments of play will be discussed in the forthcoming section.



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#### **IV.D. Children's Play Environments in Jeddah**

The fast development that has occurred in Jeddah over the past decades and the implications it has in terms of children's play environments are now becoming somewhat clear, however there still remain many items and issues that are not. Children's play, from observations, has decreased markedly over the past decade. With the exception of children playing in facilities that are specifically planned and designed for play, children in Jeddah are rarely noticed in the environment, even though they (children under the age of fourteen) make up approximately 40% of the one million plus population (Hazza 1989). This situation is very different from the situation that had existed in the city before, according to many elderly people the author has spoken to concerning this issue. Perhaps the changes that have occurred in the city both physically, socially and to some degree administratively have a direct influence on the existing situation of children's play environments.

If one had to identify the main problems facing children and provision for children's play in the city of Jeddah, one could develop the following list. While the list points out some of the greater issues and problems, it is by no means conclusive.

- a) The pattern and nature of the city's expansion and growth (also discussed in Section IV.C.).
- b) The problems of quality open space provision, especially in residential areas.
- c) The lack of a clear plan and policy by agencies concerned with children play environment provision.
- d) The lack of co-operation and co-ordination between the private and public sectors in children's play area/facility provision.
- e) Extremely high land values in the city.

A discussion into the above mentioned problems and issues could span many volumes. The concern here, however, is to provide the reader a concise image for each of the listed points so as to allow for a better understanding of the context of children's play in Jeddah, Saudi Arabia.

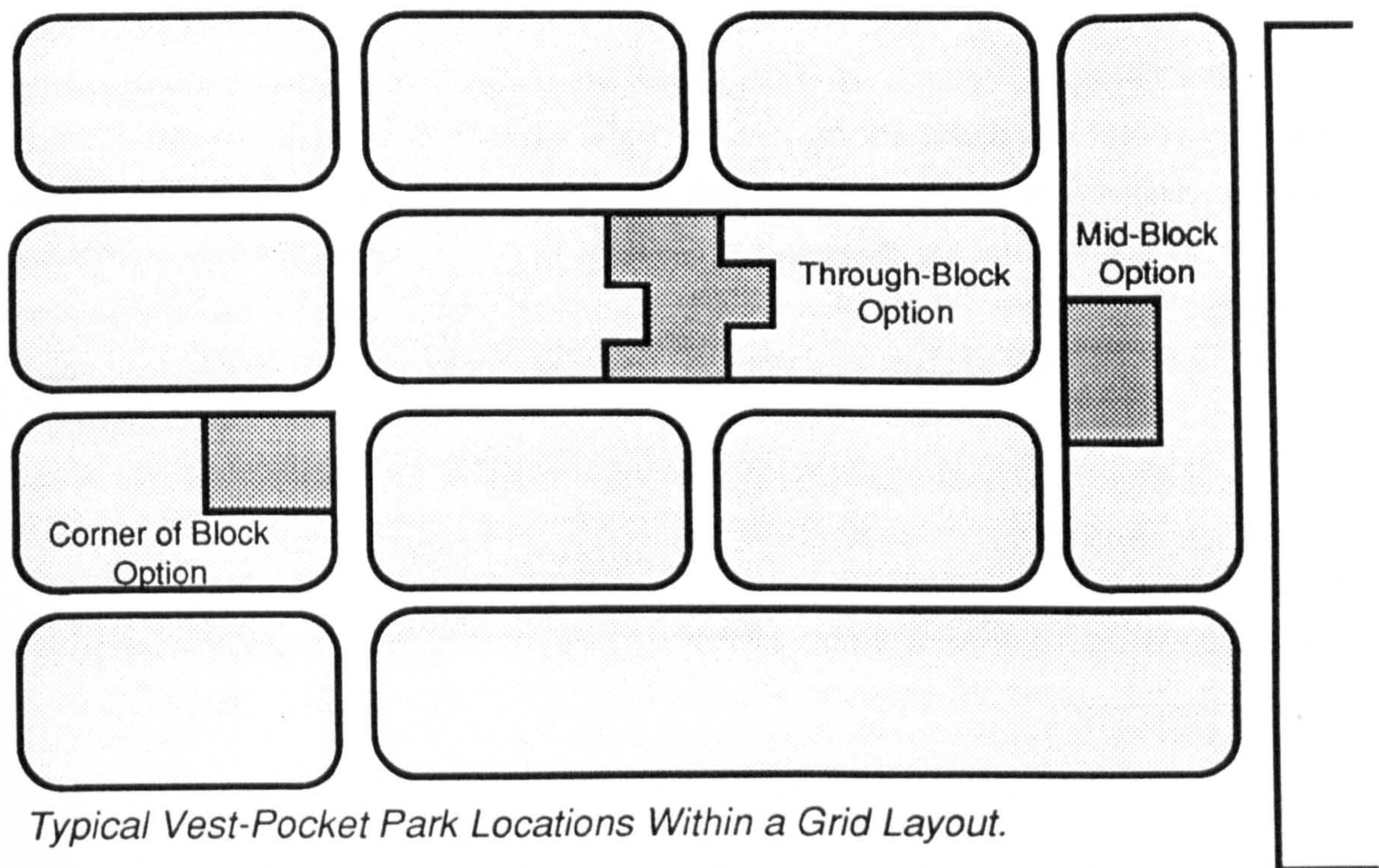
##### **a) The Pattern and Nature of Jeddah's Expansion and Growth.**

The planning policy in Jeddah has always promoted the use of the grid pattern layout throughout the city. The promise that it offered in the relative ease of providing infrastructure, services and facilities in such a pattern made it more favourable to the planning officials than other patterns of development. Furthermore, the urgency of providing quick results in terms of housing that the planning officials had to deal with, added to the conviction that the grid pattern of development was the pattern that will be followed in Jeddah. However, precautions to limit the negative affects from the

employment of such a layout pattern were never considered nor were there any mechanisms established to monitor the affects this pattern had on the population and the environment. As such, growth in Jeddah followed the grid pattern unchecked and the problems noticed today in Jeddah follow the predictions and observations made by many who have studied this planning pattern in the west (Jacobs 1961, Tolley 1989, Holme and Massie 1970, Moudon 1987). One of the most important of these problems concerning children's play is that access to the outdoor environment has been taken away from the child. The segregation between the open spaces (play areas) and residences by streets has made the open spaces less accessible and dangerous for the young (See Diagram IV.D.2). This, in turn, signifies that children and their play have been greatly affected by the planning layout of residential areas throughout the city. In addition, the over reliance of the population on the automobile has all but completely surrendered the streets to the vehicles. In the United States, where the problem is very similar in terms of the grid layout and the relationship between open spaces and residences, vest-pocket parks have been receiving a great deal of attention as a possible and viable solution to areas most affected (Cooper-Marcus and Greene 1990) (See Diagram IV.D.3).

The problems that are created by the layout of subdivisions in Jeddah are further amplified by the open space policy of the city's master-plan (M.o.M.R.A. 1981) and measures within the subdivisions. The policy states that 33% of the sub-divided land should be allocated to the provision of open spaces. This is a considerable percentage, however the fact that streets and the area they occupy are included in this percentage shows the policy's inadequacy. In addition, the open spaces that are being provided at the neighbourhood scale amount to nothing but spaces that are a result of the division of land, i.e. S.L.O.A.P.(Space Left Over After Planning). These spaces tend to be isolated islands in a sea of asphalted streets and are rarely designed for use (See Diagram IV.D.1).





*Typical Vest-Pocket Park Locations Within a Grid Layout.*

Diagram IV.D.3. Vest-Pocket Parks in Grid Layout.

#### **b) Quality of Open Space Provision in Jeddah.**

In addition to the fact that past planning policy in Jeddah has resulted in a lack of open spaces, what open space that is available is of a very poor quality with respect to public use and, in particular, children's play. Most of the open spaces that exist in the city are not specifically designed for use, but rather they follow the concept of making Jeddah a "city with a million trees": a city which is beautiful.

As a result of the improper provision of designed open spaces throughout the city, many of the open spaces that exist in Jeddah are not used and as a result are not maintained. Thus, the open spaces that do exist are planted areas that are run down and rotting. There are many design faults with all the public spaces that are being offered to the population of Jeddah. One very important, and basic problem, is the fact that the heat and extreme weather conditions that exist in the city of Jeddah for the majority of the year are still not being adequately considered. Play areas in particular are often exposed to the extreme heat and sun which makes these spaces unusable during the day. Furthermore, these areas are not provided with proper lighting which makes them unusable in the evenings. The result is that these play areas remain empty pieces of land with play equipment scattered about in them (See Diagram IV.D.4-Diagram IV.D.9).

The problems with the open space provision are considerable in the city of Jeddah. The beaches of the Cornice in Jeddah are one of the few public open spaces designed



specifically for public use and children's play in particular. While the public play environments that are in the Cornice are well used by the children of Jeddah and the public in general, one has to consider why? The truth is, the public play facilities that are on offer in the Cornice amount to nothing more than scattered pieces of conventional play equipment on the beaches. The only reason that one could put forth for the Cornice's popularity with the public is that the Cornice is a place where the entire family can go and enjoy themselves. The lure of the shoreline probably also adds to the Cornice's attractiveness.





Diagram IV.D.4. Typical Open Space in Jeddah. Poorly Designed and Frequently Empty.



Diagram IV.D.5. The Lack of Consideration for Climatic Factors in Play Areas and Open Spaces.





Diagram IV.D.6. Example of Poor Open Space Design in Jeddah. Designed for Appearance not for Use.

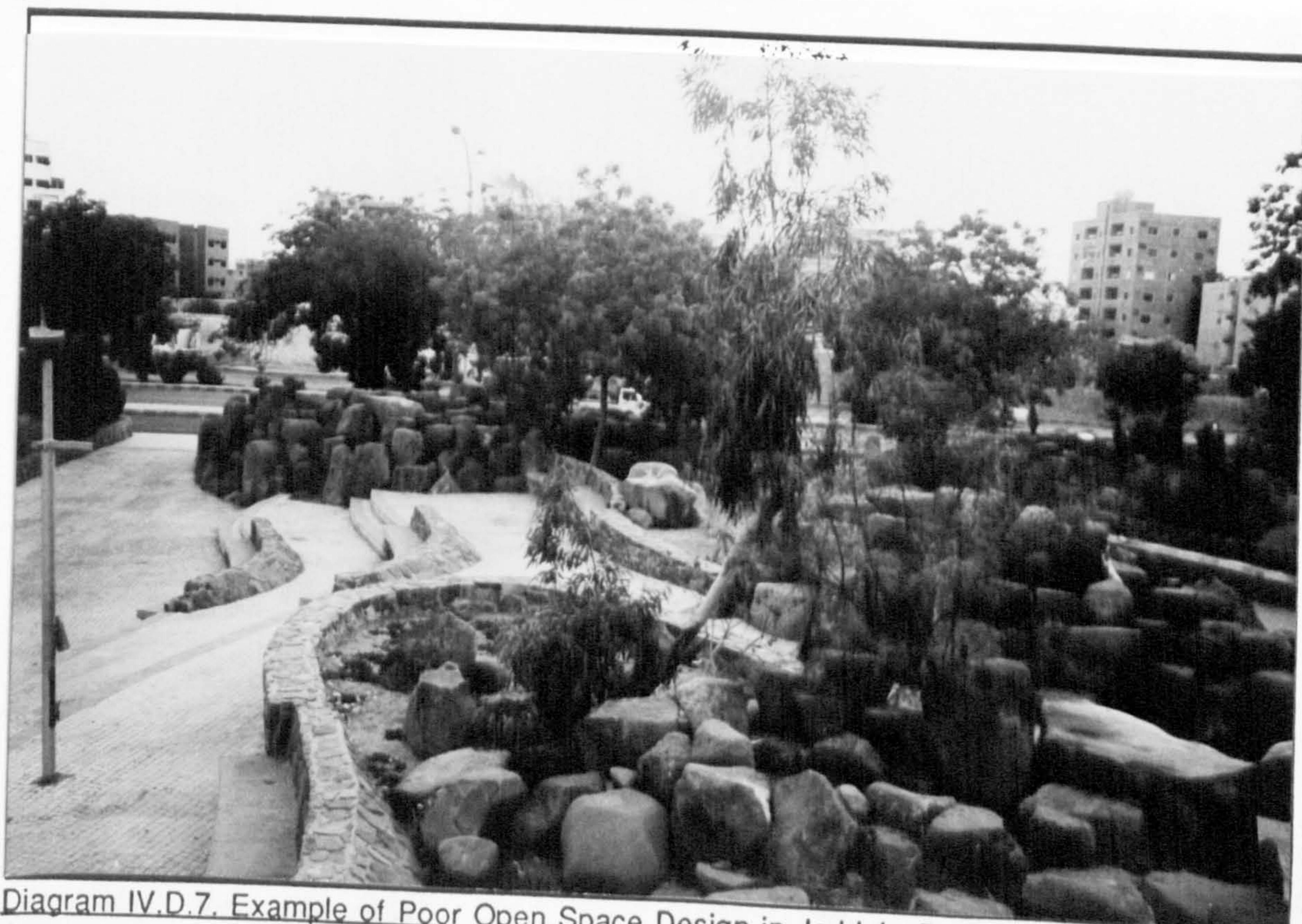


Diagram IV.D.7. Example of Poor Open Space Design in Jeddah. Designed for Appearance not for Use.





Diagram IV.D.8. The Lack of Use of Open Spaces Rendering Maintenance Unnecessary.



Diagram IV.D.9. The Lack of Use of Play Areas in Jeddah due to Many Reasons Renders Maintenance Work Unfeasible.



During the day, the Cornice is practically empty of users due to the lack of consideration of the climatic conditions mentioned earlier. Likewise as previously explained, in the evenings when the majority of the users are present, the areas designated for activities are poorly lit which severely limits the recreational activities available, both in terms of quantity and diversity. Thus, the Cornice, which offers one of the very few opportunities for the population to enjoy public recreational facilities, exemplifies the overall lack of quality in recreation and play provision in the open spaces of Jeddah (See Diagram IV.D.10-Diagram IV.D.13).

### **c) Lack of a Clear Policy**

The truly unfortunate thing about the situation outlined above concerning the provision of play areas by the public sector is the fact that the public sector seems to be content with the situation. This is clearly hinted at when the Central Landscaping Organisation of Jeddah Municipality (1988) states,

The Central Landscaping Organisation of the City Council of Jeddah has created playgrounds for children of all ages in public gardens, parks, and beaches as to provide relaxing games and toys for children. As well as 193 swings, the children can play on fifty slides, twenty-seven toy aeroplanes, fifteen ladder-frames, fourteen climbing-frames, nine toy tanks and four flying-frames. (C.L.O.J.M. 1988; p.446)

For a city of over a million, where it is approximated children under the age of fourteen make up 600,000 (Hazza 1989), the statement and the figures within the statement are unsatisfactory to put it mildly. The lack of a comprehensive plan that deals with the issue of children's play in Jeddah has meant provision and accomplishment amount to a set of figures which in the end amount to empty gestures put forth to the public as an indication of accomplishments and concern.

Another problem that the municipality of Jeddah faces is that of organisation. While the municipality has departments responsible for the different activities it is concerned with, these departments lack co-ordination and organisation amongst themselves. The lack of input from the various departments in the municipality has meant that many issues and concerns are overlooked in developments and as such, quality of developments is minimal. The issue of organisation in the municipality will be examined in greater detail in chapter VIII.

### **d) Lack of Co-Ordination and Co-Operation**

The private sector in Jeddah has in many instances attempted to fill the void created by the public sector in play area provision. However the lack of co-ordination between the two sectors and the lack of supervision and guidance by the public sector has not benefited the public nor the private investor in their attempts to cater for children's play and



recreation in general. The lack of a policy that takes into consideration the proper distribution and the diversity of recreational facilities provision throughout the city has led to identical facilities located within walking distance from another. Furthermore, the efforts of the private sector have been limited to just two areas within the city: the Cornice and the chalets overlooking Obhur Creek.





Diagram IV.D.10. Example of the Play Areas on the Cornice. Equipment Scattered on Sand.



Diagram IV.D.11. Example of the Play Areas on The Cornice. Protection from Climatic Conditions are Non-Existent.





Diagram IV.D.12. Play Area on The Cornice. Equipment Scattered on the Sand, no Design Concept Evident.



Diagram IV.D.13. Play Area on The Cornice. What is it?!



Of the two areas where private investors have concentrated their investments, the Cornice seems to be the place in Jeddah where the majority of private play areas/facilities have developed. While the sum of developments is considerable, the experiences they offer to the children of Jeddah are almost identical. These developments can be broken into two main categories. One is the fun fair with many pieces of automated and mechanical equipment, and the other is restaurants and cafés with mechanical equipment and games. Besides the fact that these facilities only cater for a small portion of children (e.g. children aged 8-14), they truly are so identical in nature that it is very easy to confuse one with another (See Diagram IV.D.14-Diagram IV.D.17). One might ask why did the public planning agencies did not prevent this from happening? One reason is, as mentioned before, the lack of a comprehensive plan for the provision of children's play environments. A second reason is the attitude that the public sector has towards private sector developments. This attitude seems to be one of consent to all proposals that private developers might have, even if the proposals are in some instances not in the best interest of the public. Furthermore, once a development is established, there are no mechanisms for the planning agencies to control any minor additions to the development (i.e. another piece of play equipment). In addition, the public agencies have no guidelines as to what a play area or facility should include, neither on a single site nor on an area scale. Thus, the situation that exists on the Cornice today.

As for the chalets that exist on Obhur Creek, the majority of them offer various activities to a very wide age range of children and young adults. However, due to their location and the exclusive use of these facilities by the occupiers of the chalets, these facilities and play areas do not serve a large part of the population. In addition, the large expense to rent a chalet (ranging from (Saudi Riyals) S.R.500-S.R.1500/day [£90-£270/day] on normal days and from S.R.1000-S.R.3000/day [£180-£545/day] during holidays and weekends) all but puts them and the facilities they offer beyond the reach of the lower income groups in the society. For those that can afford the luxury of renting a chalet, the problem of their location means that they do not have access to the chalets and their facilities within a usual working day. Thus, the chalets have become for middle or upper class people to enjoy only on weekends or during holidays, which, when considering the provision of play areas and/or facilities for the entire city throughout the year, amounts to a ripple in a pond (See Diagram IV.D.18-Diagram IV.D.23).

The contribution of the private sector in terms of play environments and facilities is not, however, entirely limited to the Cornice or Obhur Creek areas. More and more commercial areas and shopping centres are providing children's play areas within their grounds. These commercial centres have become a very important part of the play of children in Jeddah. Reasons for their popularity can be attributed to very basic reasons. One is the distribution



of the commercial areas within the city which means that almost every district in the city has play facilities. This ensures that within a relatively close distance, families have a play facility to take their children to. Another reason is that the commercial centres cater for some interests of the parents as well. Hence, the parents themselves would not object to going to these centres where all members of the family may pursue their interests. In addition, there is the fact that most of the shopping centres that offer play facilities for children provide the facilities indoors in air conditioned areas where the extremes of the weather conditions do not pose a hindrance to the play of the children. There is also the fact that the commercial areas offer facilities for toddlers and their families who otherwise have a very limited choice in Jeddah. The success that the commercial areas have had in increasing their own incomes by attracting clients with the play facilities they offer has led other businesses to consider and provide their own play facilities to increase the number of visitors. Most notably, the dining and fast foods businesses of Jeddah have adopted the policy of providing children's play areas as a means of increasing the numbers of their customers.

While the commercial areas and businesses of Jeddah are providing a relief valve for the accumulating pressure of the lack of play areas and facilities in the city, there are many issues that need to be discussed. To begin with, one has to view the type of experience these play facilities offer to the child. The truth is, the experience the child gets from the majority of these areas is not much different from the experiences gained from the fairgrounds along the Cornice. The dependence on mechanised equipment for children's play is the main reason for the lack of diversity in terms of play experience. In addition, children of the younger age groups and toddlers still do not have enough play opportunities in the commercial areas. Whilst it is true that these types of play areas offer the younger children more opportunity to play than other play facilities in the city, they still do not offer more than a couple of play experiences each for this age group (See Diagram IV.D.24-Diagram IV.D.27). Finally, the guidance that the planning agencies should practice towards these types of play facilities does not exist. The reason is again due to the lack of an overall plan which deals with the subject of children play environments and facilities in the city.

In addition to the lack of co-ordination between the public and private sectors, the lack of co-ordination and co-operation between different public agencies is evident in Jeddah and the Kingdom. For example, the Youth Welfare Commission in Saudi Arabia is the agency responsible for providing facilities in cities that aim at developing sports and an active life-style to the young. Yet the municipality of Jeddah have never presented any projects for the young of the city to the Commission. The role that the Youth Welfare Commission can play in providing public facilities and play environments is significant. However, this contribution must be parallel to studies and observations that each city has concerning

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children's play. The role that the Commission can play is considered in some detail in chapter VIII.





Diagram IV.D.14. Fairground Facility on The Cornice. Mechanical Equipment and Very Little Else.



Diagram IV.D.15. Fairground Facility on The Cornice. One of Many Identical Fairgrounds on The Cornice.





Diagram IV.D.16. Restaurant on The Cornice With Play Facilities.



Diagram IV.D.17. Café on The Cornice with Play Facilities. More Mechanical Equipment.





Diagram IV.D.18. Play Facilities in The Chalet Area of Obhur Creek. Facilities for Older Children and Young Adults.



Diagram IV.D.19. Play Facilities in The Chalet Area of Obhur Creek. Indoor Facilities.





Diagram IV.D.20. Play Facilities in The Chalet Area of Obhur Creek. Various Activities for All Who can Afford it.



Diagram IV.D.21. Play Facilities in The Chalet Area of Obhur Creek. Water Play?





Diagram IV.D.22. Play Facilities in The Chalet Area of Obhur Creek. Sheltered Areas for Young Children.



Diagram VI.D.23. Play Facilities in The Chalet Area of Obhur Creek. Variety in Play Equipment.





Diagram IV.D.24. Play Facilities in Commercial Areas. Mechanised Equipment and Lack of Diversity in Experiences.



Diagram IV.D.25. Play Facilities in Commercial Areas.





Diagram IV.D.26. Play Facilities in a Fast Food Restaurant. Play Facilities for the Younger Children.



Diagram IV.D.27. Play Facilities in a Fast Food Restaurant. More Mechanical Equipment.



**e) High Land Values**

The price of land in Jeddah have not aided in alleviating the problems in the provision of open spaces and play areas. The few landlords in the city, that then subdivide large areas and sell the resultant plots of land to the public, have controlled the prices of land in Jeddah to a large degree. With land prices in Jeddah now ranging from S.R.400/Meter [£72/Meter] to approximately S.R.1300/Meter [£235/Meter] and a minimum plot size of roughly 625 square meters (i.e. a plot of land ranging from S.R.250,000 [£45,450] to S.R.812,500 [£147,720]) it is not surprising that land prices are a major problem in open space provision. With this phenomenal profit to be made, landlords control the supply end of the property market in a way that will ensure maximum prices. Furthermore, what open space is provided in a subdivision is usually provided in the worst possible (non desirable) area of the subdivision so as to maximise the profits to be made by selling the divided land.

The planning agencies have very little control over this situation. Their main interest is ensuring that the policy of providing 33% of subdivided land to open spaces is adhered to. While landlords have a great deal to do with controlling land prices in Jeddah (and Saudi Arabia in general), there are other reasons contributing to the high prices. Amongst the more important is the fact that services and the city's infra-structure (e.g. electricity, water supply and telecommunications) cannot keep pace with the continuing growth of the city. Hence, land which can be developed (i.e. land with services) is very high in price. However, with the slow down in the growth of Jeddah, the possibility of a decline in land prices is a possibility. This fact will hopefully be used by the planning agencies to provide more and better quality open spaces and play areas within subdivisions throughout the city.

Having briefly illustrated some of the problems facing the play of children in Jeddah it is important to highlight some final points. While there are many play facilities in the city of Jeddah, their distribution and the experiences they offer to the growing child leave a great deal more to be desired. The prevalent practice of making children and their parents travel large distances to almost all of the play facilities in the city is unacceptable. While it is true that some facilities should require a family to travel to it, the majority of the play areas and/or facilities should be available to the child where they can be most utilised, i.e. near their residence within their neighbourhoods. At the moment, the only play areas that are available to the children of Jeddah within their neighbourhoods are empty lots of land that are used as kick-about areas by older children (See Diagram IV.D.28 and Diagram IV.D.29). The young child in Jeddah has very little choice or opportunity to engage in the most child specific activity of all: play. Toddlers are the group of children that are perhaps most affected in Jeddah from the bad situation that exists. Toddlers cannot voice their



dissatisfaction loudly and as such have been neglected by both public and private sectors of provisions. Toddlers as well as all ages of the developing child need many experiences and encounters to develop their bodies, minds and emotions. Proper play facilities and areas can cater for many of these experiences and encounters if the agencies that are responsible for provisions have the child in mind and have a true grasp of the potential of play as a developmental tool.



IV.F. References



Diagram IV.D.28. Children Playing in a Neighbourhood in Jeddah. Vacant Lots of Land offering a Kick-About Area. What will Happen when the Land is Developed and no Spaces are Found?

*Research Summary - Review: The Effects of Urbanization on the Health of Children, Ed.*



Diagram IV.D.29. Children at Play in a More Developed Neighbourhood in Jeddah. There are no More Empty Lots of Land to Play in, and the Street with all its Dangers is the only Space Left to the Children.



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# **Chapter V : Research Questions**



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**V.A. Introduction**

The review of the general issues of children's play and play environments carried out in the previous chapters have clarified the more important problems facing children's play provision in the urban environment. From the review, one is better able to refine the research problem by identifying a set of research questions that will assist in better understanding the extent of the problems facing children outdoor play in the city of Jeddah.

The research questions that will be posed to Jeddah's society fall in basically in four main categories. The first will deal with people's attitudes concerning play as an activity and/or as a need for the proper and healthy development of the child. The second category's main concerns are to discover people's views on the existing situation(s) and play facilities in the city of Jeddah. The third section of questions will deal with people's expectations of and desires for the scope of play environments. Furthermore, this section will deal with the testing of some novel ideas about play provision in an effort to find out how society would react to them. Finally, the fourth part will put forth some questions concerning the previous generation's play experiences and practices.

These four areas of research have been selected in response to the major issues/problems identified in chapters I, II, III and IV. To begin with, play as a developmental need is an attitude which would indeed make proper provision much easier. If the general public, not a few specialised individuals, believed that children's play was of paramount importance to a child's healthy development, then there would be that much more pressure on public and private agencies to provide better and proper play environments. As Wilkinson (1980) points, out there is a great deal of confusion between play, leisure and recreation. Hence, for play environments to truly cater for children's developmental needs, there is a need for the general public, decision makers and planning and design professionals to truly understand play as an activity. A second issue associated with social attitudes which seems to hinder play provision is the age old dichotomy between work and play. The attitude that play is an unnecessary activity which impedes learning and other useful activities still, unfortunately, exists. These two main points will always impede proper play provision and, unless they are faced and treated, will remain as a roadblock to children's play and optimal development. In this research, an attempt was made to gather information concerning people's attitudes so as to allow for a plan of action (if action is found to be called for) in altering the people of Jeddah's perceptions and attitudes towards play.

It is clear that both the quantity and quality of children's play areas and facilities in the city of Jeddah is very poor (See Chapter IV). While the city has grown in population and size



the provision of services have lagged behind. Is the public of Jeddah aware of this? Can we assume that they are not completely satisfied with the play areas and experiences that the city offers to the young? Can we assume that families in Jeddah have very few open spaces to recreate in? To investigate these issues, a series of questions were identified for this research to find out about people's evaluation and satisfaction with the city's play environments, and where do people (especially families) recreate within the city.

The assumption that play environments have greatly suffered from the rapid and sudden change in the built environment will be tested by questioning the older members of the population about their childhood play experiences and thereafter comparing them to today's children's play. This research will aim at testing the assumption that the play of the previous generations was not as structured as today's play. In other words, that children of the previous generations had more freedom to play out of doors, more often, and did not have to plan it as might be the case with today's children. Furthermore, this research will aim at testing the assumption that some play spaces that were used frequently in the past are not being used today and in some cases cannot be used due to the sudden change in the built environment. The search into the past will hopefully shed some light on many issues. One of which is how much has the built environment changed and, subsequently, how much children's play has changed. Another issue which may be better understood is what does the society hold to be true in terms of children's play then and now. This understanding will perhaps aid in better understanding what society will accept and what remains to be beyond its tolerance. Further, this understanding will perhaps assist in discovering some of the problems that face both children and society in the city of Jeddah today.

In the forthcoming pages the actual research questions that this research dealt with will be reviewed. The discussion and review of these questions will be put forth to the reader in a form that will make the review less confusing and hopefully better understood. The first section will put forth the questions themselves and the goal they hope to achieve. In the second section some of the variables that are likely to affect the responses to the questions will be examined and reviewed. The examination of the variables will take into consideration the four groups of the public that have been chosen to answer the questions. These groups are as follows:

- a) Parents of school-age children.
- b) School children.
- c) City planning officials.
- d) Planning and design professionals and students of environmental design.

The choice of these four groups in favour of others is due to the greater likelihood of their significant contributions in understanding the issues and problems that face the subject matter of this research. The choice of these groups is also due to other factors that will be



discussed in greater detail in Chapter VI.

## **V.B. Research Questions**

In the coming pages, the research questions that are the basis on which the research will be carried out will be reviewed. The questions have been categorised into six main categories for convenience and clarity.

### **V.B.I. Attitudes Towards Play**

Knowing the attitude of the average person in Jeddah, as mentioned before, is of vital importance to this research. As such, the parents of school children were targeted for this set questions. Within this category, three main themes were identified and used to produce the specific questions used in the research.

#### **a) How does play as an activity fare against other developmental requirements and/or needs?**

- a.I) Does the respondent's age affect the rating of play against other developmental needs?
- a.II) Does the respondent's gender affect the rating of play against other developmental needs?
- a.III) Do Saudis rate play higher or lower than non-Saudis as a developmental need?
- a.IV) Does the level of education of the respondent affect their rating of play as a developmental requirement?
- a.V) Does the income level of the respondent affect the rating of play as a developmental need?

#### **b) What do people view as the function of play as an activity in the child's life?**

- b.I) Does the age of the respondent affect the function the respondent attached to play as an activity?
- b.II) Does the gender of the respondent affect the function the respondent attached to play?
- b.III) Do Saudis attach different functions to play than non-Saudis?
- b.IV) Do people of different education level attach different functions to play?
- b.V) Do people of different income levels attach different functions to play?

#### **c) How do people define play as an activity?**

- c.I) Does the age of the respondent affect the definition given?
- c.II) Does the gender of the respondent affect the definition given?
- c.III) Do Saudis give a differing definition than non-Saudis?
- c.IV) Does the education level of the respondent affect the definition given?
- c.V) Does the income level of the respondent affect the definition given?



## **V.B.II. The Evaluation of Play Areas/Facilities**

It is very important to understand people's evaluations of the existing play facilities and areas so that environmental planners and designers can judge the effectiveness of their play provision policy and practice. As always, this must come with the understanding that people who have experienced poor environments all their life may not know any different or be able to articulate their desires for change. As such, public evaluation information must be seen as indicative only. To obtain evaluative information, three respondent groups were identified: parents, school children and city planning officials and planning and design professionals and students of environmental design. For each group, a different set of questions had to be created as each group was affected by a different set of variables.

### **V.B.II.a. Evaluation of Parents**

The parents' evaluation is divided into two main sections. One being the evaluation of the city's play areas and facilities. Second is their evaluation of their respective neighbourhood play areas and facilities.

#### **a) How do parents of school children evaluate the play areas and facilities of Jeddah?**

- a.i) Does the age of the parent affect the evaluation?
- a.ii) Does the parent's gender affect their evaluation?
- a.iii) Does the district social class in which they live affect the evaluation?
- a.iv) Does the evaluation of Saudis differ from the evaluation of non-Saudis?
- a.v) Does the education level of the parent affect their evaluation?
- a.vi) Does the type of residential unit the parent lives in affect the evaluation?
- a.vii) Do parents that own their residence evaluate differently from those who are renting/leasing?
- a.viii) Does the income level of the respondent affect their evaluation?
- a.ix) Does the fact of having both parents in a household working affect the evaluation?

#### **b) How do parents of school children evaluate the play areas and facilities of their respective immediate neighbourhoods?**

- b.i) Does the age of the parent affect the evaluation?
- b.ii) Does the parent's gender affect their evaluation?
- b.iii) Does the evaluation of Saudis differ from that of non-Saudis?
- b.iv) Does the education level of the parent affect their evaluation?
- b.v) Does the income level of the respondent influence their evaluation?
- b.vi) Does the district social class influence the evaluation of the respondent?
- b.vii) Does the residential unit type affect people's evaluation?



- b.viii) Do parents that own their residence evaluate differently from those who are renting/leasing?**
- b.ix) Does the duration of stay in the district affect the evaluation made?**

In trying to further the understanding of people's evaluations of play facilities and areas in Jeddah, two questions were put forth to parents.

**c) Where do parents and children go for family outings in Jeddah?**

- c.i) Does the age of the parent(s) affect their choice for family outings?**
- c.ii) Do Saudis' choice for family outings differ from the choices of non-Saudis?**
- c.iii) Does the education level of parent(s) affect their choice for family outings?**
- c.iv) Does the income level of the family affect their choice of places of family outings?**
- c.v) Does the social class of the district the family live in affect their choice of family outings?**

**d) What do people consider to be the best play areas in Jeddah?**

- d.i) Does the age of the parent(s) affect their choices?**
- d.ii) Does gender of the parent affect their choices?**
- d.iii) Do the choices of Saudis differ from those of non-Saudis?**
- d.iv) Does the type of residential unit the parent(s) live in affect the choices made?**
- d.v) Does the education level of the parent affect their choices?**
- d.vi) Does the social class of the district the parent(s) live in affect their choices?**
- d.vii) Does the income level of the parent(s) affect the choices made?**

**V.B.ii.b. The Evaluation of School Children**

Perhaps the group that is of most concern with regard to obtaining evaluative information are the children themselves. Through such information we might come to better understand how children interact with their play environments. The following questions, while not completely answering all the questions that could be addressed in this section, do address the crucial issue of how satisfied Jeddah's children are with the existing situation of play areas.

**a) How do school children evaluate the play areas of Jeddah?**

- a.i) Does the age of the child affect the evaluation?**
- a.ii) Do boys and girls evaluate the play areas differently?**
- a.iii) Does the district social class the child lives in affect their evaluation?**
- a.iv) Does the residential unit type a child lives in affect their evaluation?**



**b) How do school children evaluate their neighbourhood play areas?**

- b.I) Does the age of the children affect their evaluation?
- b.II) Do boys evaluate their neighbourhood play areas differently from girls?
- b.III) Does the social class of the district that the child lives in affect their evaluation?
- b.IV) Does the residential unit type the child lives in affect the evaluation?

**c) What do school children consider to be the best play areas In Jeddah?**

- c.I) Does the age of the child affect their choice(s) of the best play areas?
- c.II) Does the gender of the child affect their choice(s) of the best play areas?
- c.III) Does the district social class the child lives in affect the choice(s) made?
- c.IV) Does the residential unit type the child lives in affect the choice(s) made?

**V.B.II.c. The Evaluations of City Officials, Professional Planners and Designers and Students of Environmental Design**

The evaluation of the parents and school children are very important, perhaps the most important, because they are the ultimate users of the play areas and facilities. However, the evaluation of city officials, designers, planners and other providers of play environments are equally important. It is this group of people that affect the provision of play areas in terms of their quantity and their quality. Furthermore, these groups will be the ones that act to improve the existing situation and future plans and policies. However, if these groups view the existing situation in a positive manner, improvement will be much more difficult. For this reason, it is important to find out how these groups view the existing situation of play areas in Jeddah.

**a) How do professional designers/planners and students of environmental design evaluate the existing situation of Jeddah's play areas and facilities?**

- a.I) Does the age of the individual affect their evaluation?
- a.II) Do Saudi professional evaluate the situation differently from non-Saudis?
- a.III) Does the marital status of the individual affect their evaluation?

**b) How do city officials evaluate the existing situation of Jeddah's play areas and facilities?**

- b.I) Does the age of the official affect their evaluation?
- b.II) Does the education level of the official affect their evaluation?
- b.III) Does the marital status of the official affect their evaluation?
- b.IV) Do officials with children evaluate the situation differently from those officials with no offsprings?



### **V.B.iii. The Everyday Play of Children In Jeddah**

Understanding the everyday play experiences of children in Jeddah will benefit this research in many ways. To begin with, in understanding the issues involved in the day-to-day play of children in Jeddah will provide future providers of play environments with a better basis for providing play areas. Furthermore, from an analysis of the children's play experiences one can come to better understand play as it actually occurs and as such, get an in-depth perspective on the activity of play. Information about the play experience of Jeddah's children is best gathered from those people that have a direct view of the day-to-day play experiences, namely children and parents. The questions that will be posed to these groups of the sample will deal with things that are concerned with children's informal play, that is, the type of play that does not require planning and people accompanying the child: spontaneous play if you will.

#### **V.B.iii.a. The Outdoors Play of Children : Its Frequency and Restrictions**

Both parents' and children's answers to questions about how often children played outdoors are important. One reason is that, as was mentioned before, what adults perceive as being play may differ from what children perceive as being play (See Chapter II). Therefore, to get an indication of the actual and the perceived, both groups are asked about frequency of outdoor play. For the parents, these questions are posed in two parts: one part being for males and the other for females. This distinction between the different sexes is only to provide a better understanding of the society's existing distinctions between the sexes.

##### **a) How often do parents say their male children played outdoors?**

###### **aa) How often do parents say their female children played outdoors?**

- a.i) Does the age of the parent affect the response?
- a.ii) Do Saudis allow their children play outdoors more frequently than non-Saudis?
- a.iii) Does the district social class the family live in affect the response?
- a.iv) Does the residential unit type the family live in affect the response?
- a.v) Does the fact that both parents in the family work affect the response?
- a.vi) Does the income level of the family affect the response?

##### **b) How often did children say they played outdoors?**

- b.i) Does the age of the child affect the response?
- b.ii) Does the sex of the child affect the frequency?
- b.iii) Does the district social class the child lives in affect the frequency?
- b.iv) Does the residential unit type the child lives in affect the frequency?

Answers to questions about limitations to the outdoor play of children will, in many ways,



provide insight into where people perceive the root of the problem is. Asking both parents and children will, once again, provide a more rounded picture of the problem.

**c) What do parents perceive as limiting their children's outdoor play?**

**c.I) What do parents of different age groups perceive to be the limiting factors to their children's outdoor play?**

**c.II) What do parents of different nationality perceive as limiting their children's play?**

**c.III) What do parents of different education levels view as limiting their children's outdoor play.**

**c.IV) What do parents living in different district social classes perceive as limiting their children's outdoor play?**

**c.V) What do parents living in different residential unit types see limiting their children's outdoor play?**

**c.VI) What do parents of different income levels perceive as limiting their children's outdoor play?**

**d) What do children perceive as limiting their outdoor play?**

**d.I) What do children of different age groups perceive as limiting their outdoor play?**

**d.II) What do children of the two sexes perceive as limiting their outdoor play?**

**d.III) What do children living in different district social classes perceive as limiting their outdoor play?**

**d.IV) What do children living in different residential unit types perceive as limiting their outdoor play?**

**V.B.III.b. Places Where Everyday Outdoor Play Occurred**

The places where children play usually is important in understanding not only the day-to-day play of children's play behaviour, but also in better understanding some of the limitations that may exist. Both parents and children are asked to answer this question. Further questions concerning the places where parents during their childhood usually played will be posed to the parents. The comparisons will perhaps shed some light on the change in the physical environment as well as other changes.

**a) Where do your male children play outdoors usually?**

**aa) Where do your female children play outdoors usually?**

**a.I) Does the nationality of the parent affect where their children play?**

**a.II) Does the district social class where the family live affect the places of play?**

**a.III) Does the residential unit type the family live in affect the places of play?**



a.IV) Does the duration of occupancy of the residential unit affect the places of play?

a.V) Does the income level of the family affect the places of play?

**b) Where do children say they usually played outdoors?**

b.I) Does the age of the child affect their choice of places of play?

b.II) Does the sex of the child affect their choices of play areas?

b.III) Does the district social class the child lives in affect their response?

b.IV) Does the residential unit type the child lives in affect their response?

**c) Where did parents when they were children play outdoors usually?**

c.I) Does the city the parent grew up in affect the responses?

c.II) Does the sex of the parent affect the responses?

### **V.B.III.C. Time, Duration, and Mode of Transport Used for Everyday Play**

Information regarding the time of day play usually occurred, the average duration of a spontaneous play experience and the mode of transport used at the present time and the mode of transport that would have been preferred had the environment been different in terms of safety are all questions that might assist a play provider to plan and design for future outdoor play areas. These questions were posed to the parents and the children, however, to compare between the play patterns of the previous generation and the play patterns that exist today additional questions concerning the play of the parents when they were young were posed. The aim of the comparison is to illustrate the difference that has occurred in the built environment of Jeddah over a relatively short period of time.

**a) What time of day do parents say their male children played outdoors most?**

**aa) What time of day do parents say their female children played outdoors most?**

a.I) Does the nationality of the parents affect their response?

a.II) Does the district social class the family lives in affect the response?

a.III) Does the residential unit type the family live in affect the response?

a.IV) Does the income level of the family affect the response?

**b) How long do parents say their male children played outdoors usually?**

**bb) How long do parents say their female children played outdoors usually?**

b.I) Does the nationality of the parents affect the response?

b.II) Does the district social class the family live in affect the response?

b.III) Does the residential unit type the family live in affect the response?

b.IV) Does the income level of the family affect the response?



- c) What mode of transport the parents say their male children took to the play area they played at most?**
- cc) What mode of transport the parents say their female children took to the play area they played at most?**
- c.i) Does the nationality of parents affect their response?**
  - c.ii) Does the education level of the parents affect the response?**
  - c.iii) Does the district social class the family live in affect their response?**
  - c.iv) Does the residential unit type the family live in affect the response?**
  - c.v) Does the income level of the family affect the response?**
- d) Would the response for question (c and cc) change if the parents assumed that the streets are much safer than they are now? If there is a change in the response what will the new response be?**
- e) What was the time of day children said they played outdoors most?**
- e.i) Does the age of the child affect the response?**
  - e.ii) Does the gender of the child affect the response?**
  - e.iii) Does the district social class the child lives in affect the response?**
  - e.iv) Does the residential unit type the child lives in affect their response?**
- f) How long did parents play outdoors usually when they were young?**
- f.i) Does the sex of the parent affect the response?**
  - f.ii) Does the city or town the parent grew up in affect the response?**
- g) What mode of transport did the parents take when they travelled to their play areas when they were young?**
- g.i) Does the gender of the parent affect the response?**
  - g.ii) Does the city or town the parent grew up in affect the response?**



### **V.B.iii.d. Supervision of Outdoor Play and Age Permission to Play Outdoors is Granted**

The fear factor that seems to affect Jeddah's society is an area that needs to be examined. The questions that are asked in this section attempt to address this issue. In finding out whether children today are usually accompanied by an adult one will better understand to what degree the fear in parents is and hence society. Furthermore, in comparing the age at which children are allowed to venture unaccompanied in the outdoor environment today and at what age the previous generation were allowed to do so, one will come to better understand whether there is change in the behaviour of parents or whether Jeddah's society has always been protective of their young. The questions will also aim at finding out whether or not there are differences in the age male and female children are allowed outdoors.

- a) Are male children accompanied by adults when they play outdoors usually?**
- aa) Are female children accompanied by adults when they play outdoors usually?**
  - a.i) Does the nationality of the parent affect the response?**
  - a.ii) Does the residential unit type the family live in affect the response?**
  - a.iii) Does the district social class the family live in affect the response?**
  - a.iv) Does the income level of the family affect the response?**
- b) Who accompanies the children usually in their outdoor play?**
- c) At what age do parents allow their male children to play outdoors?**
- cc) At what age do parents allow their female children to play outdoors?**
- ccc) At what age do parents no longer allow their female children to play outdoors?**
  - c.i) Does the nationality of the parent affect the responses?**
  - c.ii) Does the education level of the parent affect the response?**
  - c.iii) Does the residential unit type the family live in affect the response?**
  - c.iv) Does the district social class the family live in affect the response?**
  - c.v) Does the income level of the family affect the response?**
- d) Were parents supervised during their play when they were young?**
  - d.i) Does the gender of the parent affect the response?**
  - d.ii) Does the nationality of the parent affect the response?**
  - d.iii) Does the city the parent grew up in affect their response?**
- e) At what age were parents allowed to play outdoors when they were young?**
  - e.i) Does the gender of the parent affect the response?**
  - e.ii) Does the nationality of the parent affect the response?**



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e.III) Does the city the parent grew up in affect their response?

### **V.B.III.e. The Range Children Have In Their Outdoor Play**

- In understanding the range behaviour of children in Jeddah one, perhaps, can come to better understand some of the limitations that the children face in Jeddah and in their play behaviour. For the questions dealing with this issue the parents will be the group that will be asked. The range behaviour as discussed in chapter III is linked to many issues such as the age of the child, the environment and its constraints as well as the gender of the child. It is hoped that the majority of these issues will be covered as to provide a clearer picture of the range behaviour of children in Jeddah.

**a) How far did parents say their male children ventured away from home?**

**aa) How far did parents say their female children ventured away from home?**

**a.i) Does the age of the child affect the distance the child is allowed to venture away from home?**

**a.ii) Does the nationality of the parent affect the distance allowed to the child?**

**a.iii) Does the education level of the parent affect the distance allowed to the child?**

**a.iv) Does the income level of the family affect the distance the child is allowed?**

**a.v) Does the residential unit type the family live in affect the distance the child is allowed?**

**a.vi) Does the district social class the family live in affect the distance allowed to the child?**



### **V.B.iv. Problems Facing Children's Play in The Urban Environment and Problems of Play Area Design**

In this section some questions regarding the problems that face children and their play in the urban environment in general, and the city of Jeddah in particular, will be addressed. The aim is to better grasp the problems as perceived by the sample. In doing so, it is hoped that this would provide a more concrete basis for future conclusions regarding the subject of planning and designing play areas for children in Jeddah. Furthermore, design problems as seen by those concerned with design will help in attaining a more precise awareness of some of the design problems that exist in children's play environments. The children in this sample, due to the methodology used in this research could not voice the problems that they see (See Chapter VI. and Chapter VIII). The groups that the questions will be posed to are the adult groups in the sample i.e. parents, city planning officials, professional designers and planners and students of environmental design.

#### **V.B.iv.a. The Problems Affecting Children's Play in the Urban Environment**

The problems that face children and their play in the city differ. The problems are in many cases relative to the child's age and hence capabilities (i.e. physical, cognitive and emotional). Parents, professionals and environmental design students will perhaps provide a good understanding and insight into the different developmental stages a child passes through. These groups perhaps need to address each age group separately as to allow for a clearer picture to be painted.

**a) What do the parents view as being the problems facing the outdoor play of children aged 0-5 years-old in the city?**

**aa) What do the parents view as being the problems facing the outdoor play of children aged 6-10 years-old in the city?**

**aaa) What do the parents view as being the problems facing the outdoor play of children aged 11-15 years-old in the city?**

**a.i) Does the age of the parent affect the response?**

**a.ii) Does the gender of the parent affect the response?**

**a.iii) Does the education level of the parent affect the response?**

**a.iv) Does the district social class the parent lives in affect the response?**

**a.v) Does the residential unit type the parent lives in affect the response?**

**a.vi) Does the income level of the parent affect the response?**

**b) What do professionals and students of environmental design view as being the problems facing the outdoor play of children aged 0-5 years-old in the city?**

**bb) What do professionals and students of environmental design view as being the**



**problems facing the outdoor play of children aged 6-10 years-old in the city?**

**bbb) What do professionals and students of environmental design view as being the problems facing the outdoor play of children aged 11-15 years-old in the city?**

- b.I) Does the age of the respondent affect their response?**
- b.II) Does the education level of the respondent affect their response?**
- b.III) Does the respondent's marital status affect their response?**

#### **V.B.iv.b. The Design Problems of Outdoor Play Environments and Suggestions for Design Improvements**

Design problems facing the outdoor play environments need to be identified before they can be solved. For this reason, the professionals, students of environmental design and city officials will be asked to address two main questions. The first question dealing with the problems that the majority of play areas in Jeddah face in terms of design that have been identified in chapter IV. The second question will deal with their views on what could be done to improve or remove the design problems that exist.

**a) What do city officials view as being the design problems of the outdoor play of children in Jeddah?**

- a.I) Does the age of the official affect their responses?**
- a.II) Does the education level of the official affect their responses?**
- a.III) Does the marital status of the official affect their responses?**
- a.IV) Does the fact that an official has children affect their responses?**

**b) What do professionals and students of environmental design view as being the design problems of the outdoor play of children in Jeddah?**

- b.I) Does the age of the respondent affect their responses?**
- b.II) Does the education level of the respondent affect their responses?**
- b.III) Does the marital status of the respondents affect their responses?**

**c) What design solutions do city officials suggest to improve play areas in Jeddah?**

- c.I) Does the age of the official affect their responses?**
- c.II) Does the education level of the official affect their responses?**
- c.III) Does the marital status of the official affect their responses?**
- c.IV) Does the fact that an official has children affect their responses?**

**d) What design solutions do professional and students of environmental design suggest to improve play areas in Jeddah?**

- d.I) Does the age of the respondent affect their responses?**



d.II) Does the education level of the respondent affect their responses?

d.III) Does the marital status of the respondents affect their responses?

### **V.B.v. Some Suggestions for Improving the Situation**

The aim of this section is to sense how people in the sample react or accept some suggestions put forth to improve play areas in Jeddah. The suggestions that will be posed to the sample are all derived at by reviewing the policies and some of the issues that have been identified as affecting children's play environments (See Chapter I to Chapter IV). Not all the suggestions were posed to the entire sample. Suggestions that concern a certain group of the sample were only posed to that group as to maximise information gained and limit confusion that might be caused by asking the entire sample. The children, the most important group in the sample, unfortunately will not be able to address some of these suggestions due to the methods used to gather the information (See Chapter VI. and Chapter VIII).

### **V.B.v.a. Parent's Evaluation and Tolerance of Some Planning and Design Elements**

Although parents are not specialists on the subject of planning and design, they could contribute to the broader understanding of what the average person in Jeddah considers to be of importance in planning and design. Furthermore, their points of view will aid in grasping the many areas that need to be considered in future provisions and any improvements to the existing play areas and facilities that might occur. The questions that will be posed to the parents of children range from questions regarding policies for children play environments to design specific elements that a play area might have.

**a) What planning and design elements do parents consider as being important in play area provision?**

a.I) Does the age of the parent affect the responses?

a.II) Does the gender of the parent affect the responses?

a.III) Do Saudi parent's responses differ from the responses of non-Saudi parent's?

a.IV) Does the education level of the parent affect the responses?

a.V) Does the income level of the parent affect the responses?

a.VI) Does the district social class the parent lives in affect the responses?

a.VII) Does the residential unit type the parent lives in affect the responses?

**b) How do parents in Jeddah accept the idea of supervised play areas?**

b.I) Does the age of the parent affect their response?

b.II) Does the gender of the parent affect their response?



- b.III) Do Saudi parents respond differently from of non-Saudi parents?
- b.IV) Does the education level of the parent affect the response?
- b.V) Does the income level of the parent affect the response?
- b.VI) Does the fact that both parents work affect the response?
- b.VII) Does the district social class the parent lives in affect the response?
- b.VIII) Does the residential unit type the parent lives in affect the response?

**c) Would parents pay money towards maintaining their existing neighbourhood play areas?**

**d) Would parents pay money towards maintaining their neighbourhood play areas if they were satisfactory?**

- d.I) Would the age of the parent affect their response?
- d.II) Would the nationality of the parent affect their response?
- d.III) Would the education level of the parent affect the response?
- d.IV) Would the income level of the family affect the response?
- d.V) Would the district social class the family live in affect the response?
- d.VI) Would the residential unit type the family live in affect the response?

**e) How much money would the parents pay towards the maintenance of their neighbourhood play areas if they were satisfactory?**

- e.I) Would the income level of the family affect the amount?
- e.II) Would the district social class the family live in affect the amount?
- e.III) Would the residential unit type the family live in affect the amount?

#### **V.B.v.b. City Officials, Professionals and Students of Environmental Design Acceptance of New Ideas**

The concept of including children in the process of planning and design is seen by many as the way to improve play environments and neighbourhood cohesion (See Chapter III). However, this concept is not widely applied due to hesitancy on the part of architects, landscape architects and other professionals dealing with children's play area provision. Furthermore, city administrative officials have not backed the idea and as such, it remains a noble concept that is very seldom applied. The questions that will be put forth to the officials, professionals and the students of the environmental design in Jeddah will mainly deal with the idea of the participation of children in the process of planning and design of play areas.

**a) How do city officials accept the idea of children's participation in the planning and design of play areas in Jeddah?**



- a.i) Does the age of the official affect their response?
  - a.ii) Does the education level of the official affect their response?
  - a.iii) Does the marital status of the official affect their response?
  - a.iv) Does the fact that an official has children affect their response?
- b) How do professionals and students of environmental design accept the idea of children's participation in the planning and design of play areas in Jeddah?**
- b.i) Does the age of the respondent affect their response?
  - b.ii) Does the education level of the respondent affect their response?
  - b.iii) Does the marital status of the respondents affect their response?
- c) What do all groups view as being the advantages and disadvantages of such an idea?**

#### **V.B.vi. Desired Features and Activities**

The specific facilities and features in an environment are the topic of concern in this section of the research questions. To understand this topic is to come one step closer to understanding the overall desires of the people of Jeddah in terms of play experiences. To gather information on this topic two main questions will be posed to parents and school children. The first will deal with the activities that children participate in at the present time and the activities parents would like to see their children involved in. Furthermore, the children will be allowed to voice their desires for activities that they would like to be involved in. The second question will deal with features of the environment that make a place desirable or pleasant. This question is an extension of the question dealing with the best play areas in Jeddah and the places parents used to play in when they were young (See Sections V.B.ii.b. and V.B.iii.b).

- a) What activities do parents say their male children participate in at the present time?**
- aa) What activities do parents say their female children participate in at the present time?**
- b) What activities do parents desire their male children to participate in in the future?**
- bb) What activities do parents desire their female children to participate in in the future?**

The variables that might influence the responses to the above questions are as follows:

- I) The age of the parent.
- II) The nationality of the parent.



- III) The education level of the parent.
- IV) The income level of the family.
- v) The district social class the family live in.
- VI) The residential unit type the family live in.

- c) What activities do children say they engage in at the present time?
- d) What activities do children say they would like to engage in in the future?

The variables that might affect the responses are as follows:

- I) The age of the child.
  - II) The gender of the child?
  - III) The district social class the child lives in?
  - IV) The residential unit type the child lives in?
- 
- e) What features of the play environment do parents remember as being pleasant and/or made the play area desirable and nice?
  - f) What features of the play environment do children say make the best play environment in Jeddah pleasant or appealing?



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## **V.C. Discussion of The Questions and The Variables That Might Affect Them.**

In this section of the chapter some of the more important variables that might affect the responses to the questions outlined in the previous section will be reviewed. Furthermore, in the discussion and examination of the variables and the questions in this section, one might get more insight of Jeddah's society. In addition to the variables that are discussed in this section, some of the questions which warrant further explanation and understanding will be briefly looked at.

### **V.C.I. The Variable of Age**

In most research projects dealing with social issues the variable of respondent age is of significant importance. In this research, the importance is even greater due to reasons discussed in chapter IV. The rapid growth and change that the city of Jeddah and its society had to endure in a relatively short period of time has been significant. With these changes one can only speculate on the differences that respondents of different age groups will respond to questions posed to them. In this respect, the variable of age becomes one of the more important variables to the majority of the questions of this research. In Jeddah, age as a variable will act as a measuring stick to measure the extent of social and ideological change that has occurred in the city during the period of growth.

The variable of age and the way in which it might affect the responses to the question of people's attitudes towards play is significant in many ways. First, there is the matter of understanding the present attitudes towards children's play. Second, by comparing the attitudes of the younger and the older age groups' attitudes towards play, one may get an idea of whether there has been a change of attitudes during the period of growth in Jeddah. In establishing whether changes in attitudes have occurred or not, one therefore can offer a reasonable account of what the society holds to be as an absolute truth regarding attitudes towards children's play.

In addition to the affects that a respondents' age might have on their attitudes, the variable might also play an important part in affecting respondents' evaluations of the play environments in Jeddah. While age might affect the responses, the variables that are likely to affect them most will be discussed later. Age, however, is expected to play a role in the evaluation in that it is expected that the older generation will evaluate the city's play areas and facilities more favourably than the younger generation. This difference is due to the changes that have occurred in the play areas of Jeddah with growth (See Chapter IV). The older generation will probably compare the play facilities and areas that exist today with the play areas and facilities that existed in their childhood. In such a comparison, the play areas and facilities of today's Jeddah will be favourable. However, the younger generation



will not have the reference to what was, for them, the comparison will probably be with other cities they have seen directly or indirectly (through the media) and in such a comparison the play areas and facilities of Jeddah will most definitely be unsatisfactory.

The problems that face children's play and play environments is another area where the age of respondents could be a factor. The problems that the older generation might provide could in fact be more accurate for the reason of them having seen the change to the environment as a whole occurring. On the other hand, the younger generation might give an insight into the more unobserved or often neglected problems that play environments face in Jeddah. Furthermore, the older generation might maintain that major problems facing the play environments of Jeddah are those that are more of the quantitative nature (i.e. lack of play areas), whereas the younger generation might put forth problems dealing with the qualitative nature of provision.

The younger generation of Jeddah compared to the older one might suggest some radical and adventurous solutions to some of the planning and design problems that face children's play areas and facilities. Furthermore, this younger generation might put forth some suggestions that go beyond simple design elements and features that are observed in play areas in Jeddah today. As for the older generation, the expectations are that they would concentrate their suggestions on more basic solutions (which might have been in short supply or absent in their childhood) such as more play areas, more conventional play equipment and more support services to play areas (i.e. toilets and drinking water points). The differences between the younger and older generation is also expected to play a major role in determining a families' choice for recreational types and areas. Younger families are expected to pursue more active and vigorous activities with their families and as such will choose different areas for family recreation than their older counterparts.

### V.C.II. The Variable of Gender

The differences that exist the genders exists and must be taken into serious consideration in social research. The seriousness of the consideration must be increased greatly when dealing Saudi society. The unique situation of complete segregation between the sexes in Saudi Arabia requires of a researcher to pay special attention to the variable of gender. While the divide is not very great in Jeddah compared to other areas and regions of the Kingdom, it still remains and as such must be dealt with carefully.

As was the case in discussing the variable of respondents' age, gender is likely to affect the attitudes held towards children's play. While it is expected that the females of the sample will hold a more positive attitude towards play, the difference is not expected to be very great. Male respondents will probably view play favourably, however, respondents with male children might view it less favourably due to the desire they might have towards their



sons in achieving. In assessing which gender views play more favourably, one then might be able to better understand the type of people attitude change if called for needs to target.

The evaluation of Jeddah's play environments will probably differ between the sexes. These differences are probably due to many reasons, amongst the most important is the segregation between males and females. Another could very much be the lack of authority and action that females have in the society. As such, it is expected that the males of the society might give a better evaluation, due only to the amount of knowledge and exposure they have to the environment as a whole. It is for these reasons that male respondents will probably provide a better account of the problems facing children's play environments in Jeddah as well as major problems of the planning and design of play environments. However, the female respondents might provide very valuable information concerning the problems that children face while using or in play areas, for the females in Saudi society are always very close to the children. Furthermore, the female respondents might provide some very intelligent advice on the subject of solving some of the design problems of play areas in Jeddah. In addition, the female respondents will perhaps pay special attention to design suggestions that address issues of safety. The female respondents might be a little more sensitive towards hazards from the physical and social environments.

Gender will perhaps affect the play experiences of children most in Jeddah. It is recognised that boys will have a more varied and perhaps better play experience in Jeddah. The social constraints placed on girls will in many ways limit their play to indoor areas. Hence, range behaviour, the amount of time as well as the time of day children play outdoors will in effect only affect the male children of the sample. Furthermore, it is unlikely for girls to play outdoors without some kind of supervision due to the social acceptance of such a thing.

### **V.C.iii. The Variable of Nationality**

In chapter IV it was illustrated that Saudi Arabia, to undertake some of the developments in the country, has imported the technical know how and labour from all over the world. While these expatriates have no intention of settling in Saudi Arabia, their numbers are significant and some measures have to be taken to accommodate for these people in the planning and design of settlements. Furthermore, the variable of nationality could shed some light on differences between Saudis and people of a different nationality. The differences that may arise because of nationality will then has to be considered very carefully in the planning and design of children's play environments. For example, does planning for children's play environments take into consideration some of the desires of non-Saudis? or is their opinion not of significance since it is their intent to leave the country when their business and work is completed? These are but some of the questions that must be addressed in the case of variance to responses due to nationality.



One of the areas where they are likely to fluctuate due to the nationality of the respondents is the attitude of the respondent towards play. Saudis are perhaps a little more conservative in their attitudes due to the strong ties the society has to the religion of Islam. Hence, this conservative attitude might be reflected in their attitudes towards play. However, the differences between Saudis and nationals of other Islamic states (e.g. Egypt, Syria and Yemen) will perhaps not be that great because of the common factor that influences them all: Islam. Differences in the attitudes of the sample is likely to arise from comparing the Saudis and non-Saudi non-Islamic nationals.

Another area where differences due to nationality may arise is in the sample's evaluation of the play areas and facilities of Jeddah. On this issue, it is expected that Saudis would be more critical and negative in their evaluation than non-Saudis. Perhaps the most significant reason for this variance would be the amount of interest Saudis have in seeing their settlement improve. While some non-Saudis might desire improvements to Jeddah's play areas, it is more likely their evaluation would not be as negative as Saudis. The degree of critique of Jeddah's play facilities will also differ from one group of the sample to another. For example, Saudi professionals might be very critical to the play areas and facilities in Jeddah than Saudi parents. This might stem from another reason than that of nationality. The fact that professionals are better equipped to understand, analyse and hence criticise aspects of the built environment could be the reason. However, city officials who are in the most part Saudi nationals will not be as critical as professional, students of environmental design and maybe even parents. If the planning and city officials are as negative as other groups, then it would be self incrimination in that they are the ones responsible for the provision of play areas and facilities in the city and no matter how honest this group is it is still a very difficult thing to admit.

In terms of places of family recreation, again nationality might be a variable. Saudis might prefer areas for family recreation that suits their conservative attitudes. For example, Saudi families might prefer to go to areas on the outskirts of the city where their privacy remains intact during their recreational time. Whereas non-Saudi families might prefer areas within the city that offer privacy to a much lesser extent. Furthermore, Saudi families might engage in more social pursuits (i.e. visiting families and friends) than non-Saudi families. This is almost a certainty considering the wider social ties Saudi families have in their own city.

Differences between nationalities in Jeddah is also likely to affect the play of children. It is expected that the play experiences offered to children of Saudi parents and those offered to children of non-Saudi parents to be different. While Saudis do desire the best for their children (as is the case with all parents), their protective nature will limit their children's play



experience and therefore the gains from play. The child of today's Jeddah is continuously being watched by an adult. Whether this has always been so or not is one of the issues this research will hope to uncover. In comparing the older generation's play experiences and the amount of supervision they had when young, one will become better equipped in understanding whether this protective nature stems from the new urban fears or whether this is a cultural aspect to child-rearing. In addition, it is likely that Saudi parents would like for their children (especially boys) to engage in active and organised activities. However, this may hold true to only younger parents of the sample, for it is this group that have been educated and realise the importance of an active life-style. The older parents may favour their children pursuing activities of a refined nature, such as poetry, arts and reading.

The problems that are facing children and their play in Jeddah is another area where Saudi nationals might provide a better evaluation. Their perceptions and understanding of the environment, both physically and socially, would better arm them in tackling these questions. In understanding the environment more, the Saudi parents would perhaps give a truer account of the problems their children's outdoor play is facing in Jeddah.

Furthermore, the Saudi professionals, students of environmental design and city officials will also be more precise in their account of the problems than non-Saudi professionals and parents due to the reason mentioned earlier concerning their knowledge about the built environment. Hence, in suggesting some solutions and areas of improvement to children's play in Jeddah, Saudi nationals would perhaps provide more precise and accurate suggestions due to their greater knowledge of the problems, the society and the city.

In accepting some of the suggestions that are put to the sample, Saudis may not be acceptable to some of them. In particular, the idea of supervised play areas by employees that they have no knowledge of is likely to be refused by Saudis. This refusal again may stem from the over protective nature of Saudis. However, the Saudis in the sample may accept the idea of paying a small amount of money monthly towards the maintenance of play areas in the neighbourhood if these areas were improved and enjoyed by the community. While this idea may be acceptable to a large degree by Saudis, the variable that will determine this most is that of income level.

#### **V.C.iv. The Variable of Education Level**

Another of the variables that is likely to affect the responses to the questions outlined in this chapter is that of the sample's education level. The importance of this variable in planning for children's play environments is that education levels in the Kingdom are rapidly increasing as more and more students are enrolled in institutions. This will, therefore, make the newly educated society more demanding and would probably expect more and better provision not only in children's play areas but in all aspects of modern



living.

One of the more evident areas in which the education level of the respondent is likely to affect the response is that of attitudes towards play. While the education level of the individual is not the only variable that might affect the attitude of a person, it is a very important variable in establishing the attitude. It is one of the expectations that the higher educated groups in the sample the more likely they would hold play to be of importance. In addition, the higher educated groups might be more liberal in their views and attitudes towards the many forms of play.

The evaluation of the different education level groups in the sample is also likely to vary from one group to another. The higher education groups will probably be more demanding and as such, will be less satisfied and very critical of the existing situation of children's play environments and facilities in Jeddah. Furthermore, professionals and city officials with higher education levels than their colleagues (i.e. holding a degree higher than a Bachelor's degree) will most definitely be more critical and less satisfied with the situation of children's play areas.

The places of family recreation will perhaps not be greatly affected by this variable. However, there might be differences in that less educated parents might prefer to recreate with their families in areas where a great deal of privacy and a minimal of spending are the main features of the areas. While the education level is a factor, there are other factors which contribute to family choices of recreation such as income level and religious strictness. The education level, therefore, is indirectly affecting the response because of the relationship between income level and the education level of the individual. In addition, the lower education level groups may not have access to some of the recreational facilities in Jeddah such as the chalets on Obhur Creek due to their expense (See Chapter IV).

In accordance to the discussion concerning the relationship between income levels and education levels, there are expected variations of children's play of each education level. As mentioned before, the lower education level families (lower income) will have less of a choice for their children's play. In addition, the lower education level groups will probably be more conservative in their views and hence constrict their children more, whereas the higher education level groups will possibly put their children's experiences in a play situation first and hence be less constrictive. However, the attitude of the parents is of vital importance in understanding the parental control towards their children's play. One is likely to get a better understanding of the amount of constraint a certain group is likely to place on their children by examining the activities that their children participate in at the moment and what the parents would like their children to participate in in the future (See Section vi). Furthermore, by comparing the responses of the children to their parents, one can better



understand the effects of education as well as the effects of generational differences in children's play experiences.

The education level of respondents will perhaps affect the sections dealing with problems and limitations to children's play in Jeddah most. The different education levels will probably provide some insight into the problems that each group is facing with respect to children's play in Jeddah. It is likely that the higher educated groups of the sample will provide significant insight into the problems of the qualitative nature, such as the variety of play areas and the experiences they offer to the child, while the lower education group might provide the research with the quantitative problems of play areas provision (e.g. distribution of play areas and their size). The professionals and city officials in the sample might provide insight that is precise and aims at targets the cause of the problems. The pin-point accuracy of these group's account of the problem will probably increase with an increase in the education level of the individual. Accordingly, some of the suggestions of the sample towards improving the existing situation of the outdoor play areas and facilities in Jeddah, will depend on the education level and their views concerning the problems these areas face. The higher educated groups are expected to be more adventurous in their suggestions than their less educated counterparts. In addition, the higher education level respondents will perhaps be more accommodating towards suggestions of supervised play areas and the payment of some fees towards maintaining neighbourhood play areas. Furthermore, the higher educated professionals and city officials may be more acceptable of the idea of children participating in the planning and design process.

### **V.C.v. The Variable of Income Level**

The situation of play areas and facilities that are available to the public in Jeddah, as was illustrated in chapter IV, is linked in some cases to the income level of a family. While the differences between the different income groups in the Kingdom is not great at the moment, the divide is beginning to increase as public sector employees get less and less and private sector employees get more and more: one of the bad effects of capitalism. Businesses providing for children's play, unfortunately, have to a large degree catered for the people that can pay and not so much for families with a limited income. To further aggravate this fact, the public sector cannot provide for the families with a limited income because of the decline in oil revenues (See Chapter IV). As such, the income level of families will in many ways determine the play experience a child is offered in the city and because of this fact, the income level of a family becomes a very important variable to the research questions.

The attitudes of the sample is likely to vary according to the income level of the family. It is expected that the higher the income of the family the more likely it is for the respondent to have a healthy and favourable attitude towards play. This argument is in many ways linked



indirectly to the income level of the respondent in that the higher the income of the respondent, the more likely it is for the respondent to have travelled and hence exposed to different points of view and attitudes. Furthermore, the higher income groups of the sample the more likely it is that they are very critical and dissatisfied with the existing play facilities and environments in Jeddah because of the possibility of them being directly exposed to other play facilities and environments in more developed nations. However, the evaluation of the lower income groups may also reflect dissatisfaction but it is not expected to be as great as the higher income groups. The dissatisfaction of the lower income groups may stem from being indirectly exposed to other play environments and facilities in the form of television and the media. Hence, their dissatisfaction will reflect this somewhat minor exposure to play facilities and environments in more developed nations.

The higher income groups of Jeddah are more likely to live in housing types (i.e. villas) with their own private open spaces, hence offering their children the possibility of playing outdoors regularly. In contrast, the low and middle income groups are likely to reside in flats and, therefore, their children's outdoor play is very constricted. In addition to the daily play of children, the higher income group is likely to have a greater set of alternatives in family outings and recreation as discussed earlier. Differences between the income groups in the type of recreation that families engage in is also likely to differ. Higher income groups will perhaps pursue more adventurous recreational areas and activities (e.g. swimming, diving, equestrian activities), and may also desire their children to participate in such activities. On the other hand the lower and middle income groups may prefer more conventional recreational pursuits. However, the lower and middle income groups may desire for their children in the future to pursue activities that are adventurous in nature. Whether this might be due to their true desires or due to the likelihood of parents desiring to offer their children to the best of their abilities is an area that requires thought and study.

As previously mentioned, the lower income group of the sample might provide this research with valuable information regarding the problems and limitations facing play environments and facilities in Jeddah. While the higher, and to some degree the middle income, groups will provide the research with information, the information that the lower income group is likely to provide is slightly more important. This is not to say that the higher income groups do not understand what the problems are, however, their relative wealth can afford to alleviate some of the problems that other less fortunate groups have to contend with. Thus, even the suggestions for improving play areas in Jeddah, the lower income group will provide some that deal with the problems. The higher income groups will probably offer some very useful information regarding the quality of play environments and facilities.

There may also be some variance to people's acceptance of some of the ideas



concerning, for example supervised play areas and paying maintenance fees. The lower income group of the sample may be reluctant to pay maintenance fees due to their income levels. On the other hand, the higher income groups may not be as reluctant to pay these fees. Supervised play areas may not be very acceptable to both the lower income groups and higher income groups. The higher income groups would probably have their own means of supervising their children (e.g. nannies and hired help). The lower income group may have a conservative point of views towards this idea and may not accept someone besides them (parents) supervising their children. Hence, the idea of supervised play areas may be most favoured (or least objectionable) by the middle income groups of the sample.

### **V.C.vi. The Variable of District Social Class**

The different city parts and their effect on the questions outlined for this research are the main reason this variable is of concern. Furthermore, the understanding of the different problems that lie in different areas of the city and the perceptions of people residing in these areas could only benefit the overall understanding of the problems of the outdoor play of children in Jeddah. The city of Jeddah can be categorised into three main social classes: high, middle and low. This categorisation does not however, reflect the social class of individuals, meaning that a family of high social class could reside in a neighbourhood that is predominately occupied by middle class families and so on. The distinction between neighbourhoods in Jeddah could be due to two main reasons. One is the plot size of the subdivisions in the district and the second is the land prices in the district.

One of the areas where the district social class is likely to affect the responses of the sample is that of evaluation of play areas in Jeddah. The three district social classes might evaluate the neighbourhood play areas very differently from one another. It is expected that the lower the social class of the district the more dissatisfied the respondents will be with the play areas. This dissatisfaction may reflect the true nature of the play areas in the neighbourhood or district, however, there may be some other factors which might exaggerate the evaluation. The dissatisfaction with general services in the neighbourhood and district may contribute to the critical evaluation of play areas. Furthermore, the comparison between what the neighbourhood and district provides in terms of play areas and what the city of Jeddah as a whole offers may affect the evaluation of the play areas of the city. Therefore, it is expected that the evaluation of the city play facilities and areas are likely to be more favourable than the evaluation of individual districts. The positive evaluation of the city facilities and play areas are likely to be more positive with lower district classes. This, more positive view is perhaps due to the lack of exposure to alternatives which the higher classes (due to their higher incomes) would have experienced outside the Kingdom.



While the variable of district social class is not likely to affect the responses to the questions concerned with where families recreate, it is likely that it will affect questions concerned with the play experiences a child is offered in each of the different districts. The children of families residing in middle and low social district classes are more likely to play outdoors in areas where they might neighbours and other children (i.e. common areas to residents, empty lots of land and the streets). Due to the lack of facilities in the neighbourhood and the lack of alternatives these families have their children might be more likely exposed to the outdoor environment, whereas families residing in the higher district social classes would most defiantly have private open spaces for their children to play in. Furthermore, the nature of the urban fabric in low social class districts, with their streets having a somewhat organic nature, make them safer for children's play due to the relatively slow speed of vehicles passing through. Hence, the parents may not be as reluctant in allowing their children to play outdoors as parents residing in areas where the grid pattern dominates the street layout.

Perhaps the most benefit to be gained in this research from this variable is understanding the different problems and limitations facing children's play in the different parts of Jeddah. Furthermore, in analysing the suggestions for improvement and solutions to the problems, one is left with a basis for planning and designing play areas in the different parts of the city. In addition, by examining the suggestions put forth one can get a much better understanding of what the different people of the city value and desire.

#### **V.C.vii. The Variable of Residential Unit Type**

One of the urban features that seems to affect children's outdoor play greatly is where the child lives (See Chapter III). The type of residential area a family live in seems to affect not only the children but other members of the family as well in many ways (D.o.E. 1972). Hence, the importance in including this variable to the research. It would be interesting to find out whether the limitations and problems due to the residential unit type outlined in chapter III. apply to situation in Jeddah. Furthermore, in understanding the problems that might be caused by the residential unit types, one will ultimately be better equipped to put forth suggestions that are better suited to the society.

While the extent of the variable's affect on the responses is not fully recognised, it is suspected to affect many of the issues the questions address. One of the areas where there is a likelihood of influence is the sample's evaluation of the play areas in Jeddah. As is the case in Western urban areas, families residing in flats will be less satisfied with their neighbourhood play areas and facilities than those in detached units (villas). This dissatisfaction of families living in flats will be further amplified by two factors. One is the height of the building of the flats, and the other is that of the district social class. This is to



say that the higher the building, the more dissatisfied the family will be with the play facilities and areas. Likewise, the lower the district social class the lower the evaluation for the neighbourhood play areas. The city play areas and facilities and their evaluation by the sample are also likely to vary according to the residential unit type of the evaluator. The families that live in flats might be more positive in their evaluation than those living in villas. The differences could be due to factors discussed earlier, namely the greater possibility of exposure that the families in villas to more developed play areas.

Another area that may be affected by the variable is that of the play experiences offered to children in each residential unit type. It is expected that families living in villas, and their children, will have more of an opportunity to play outdoors due to the presence of private open spaces. Whereas the families in flats are limited in their access to the outdoors. Furthermore, respondents residing in different residential unit types will probably differ on the questions regarding which activities their children engage in at the present time as well as those questions concerned with which activities the children might wish to engage in.

The problems and limitations that families face in terms of children's play in each of the residential unit types will probably also differ. Each residential unit type will put forth the problems that they face and are concerned with. It is expected that the families residing in flats will put forth more problems and limitations to their children's play due to the many limitations that exist in terms of access, diversity and quality of play areas. While the residents of villas, in relative terms, have fewer problems and limitations, it is expected that this group will offer problems and limitations that affect the qualitative facet of play, e.g. more detailed design problems, the incorporation of certain activities in play areas and the establishment of alternatives to the existing facilities. The suggestions for improvement to the play areas and facilities in Jeddah for each group will therefore, follow the concerns that each group is being bothered from. This is to say that for residents of flats the suggestions will probably be more concerned with the quantitative, while those residing in villas the majority of suggestions will likely aim at improving the quality of play areas and facilities in Jeddah.

#### **V.C.viii. Other Variables**

In the previous sections some of the more important variables were discussed. In this section some of the variables that might prove to be significant will be discussed. First, is the variable of marital status of professionals and city officials. The significance of this variable is that the professionals and officials that are married would probably be more aware of the problems and limits to children's play areas in Jeddah. This is probably due to the fact that these individuals (if they do not already have children) would have children soon and as such, would be more observant of the play experiences that the city has to offer for the family. While single professionals and official might be just as critical of the



situation, dissatisfaction with the married ones is likely to be more.

Another variable that might prove to be important is the duration a family has resided in a residence. This variable might affect the evaluation of neighbourhood play areas greatly. People that have not lived in a neighbourhood for a long time might evaluate the facilities and areas differently than those that have been there for some time. The relatively new residents may not know exactly what the neighbourhood has to offer in terms of play facilities and therefore, may be critical due to lack of knowledge rather than experience. In addition, the variable may affect the respondent's acceptance of the idea of paying maintenance fees towards play areas. It is more likely that the longer a person has resided in the neighbourhood the more the willingness to invest in maintaining the amenities of the neighbourhood. As well as paying maintenance fees, the idea of supervised play areas will perhaps appeal more to residents that have lived in the neighbourhood for a while. This may be due to the fact that the longer the family have resided in a certain area, the more likely they are to make acquaintances and hence, be less fearful. Furthermore, living in area or neighbourhood for some time, the respondent may offer a more accurate account of the problems concerning children's play that exist and provide better and more precise suggestions for improvements.

Tenure types is another variable that might become very important, affecting several issues the research questions address. One of the likely areas that might be affected by this variable is that of the neighbourhood play facilities' evaluation. Owning a home or property in a neighbourhood will mean that an individual has an interest in maintaining the value of the property and the general appeal of the neighbourhood. Requiring more to be done in terms of amenities, such as more open spaces and children play areas, will probably mean that owners of property will be critical of existing play areas. Furthermore, the owners of property throughout Jeddah will perhaps be more informative in terms of the problems that exist in the neighbourhoods and in terms of suggestions for improvement. In desiring better standards in terms of amenities in the neighbourhood, property owners may be more accommodating in terms of ideas towards this objective. In particular, they might be very agreeable to the suggestion of paying a small monthly or yearly sum for the maintenance of neighbourhood play areas.

### **V.D. Conclusion**

Having discussed some of the more important issues, questions and variables that might affect the questions, the reader will find the questionnaire formats that have been formulated for this research in Appendix IV. In the coming chapters, particularly chapters VI and VII, further discussions that might be relevant to the research questions will arise. This is not an attempt by the author to confuse the reader, however, some issues are more



connected to the chapters that they have been covered in.

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## **Chapter VI : Methodology**



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## **VI.A. Introduction**

The goal of all environmental planners and/or designers is to create environments that best serve the uses for which they were created with minimal adverse effect on the existing natural environment. Although for the most part, environmental designers deal with the built aspects of planning and design, in recent decades more and more attention has been paid to the social aspects in an effort to improve developments and environments. This shift is a welcomed one for it provides the planner and designer with insights into the many problems relating to the development of the site or the redevelopment of existing sites. Such studies give a measure of people's desires and expectations; hence arming the planner and designer with one more weapon to add to the arsenal of tools and knowledge he may call upon in making decisions effecting the physical environment. This study is aimed at establishing an approach to ultimately establish planning and design guidelines for children's play environments in the urban environment, especially in the city of Jeddah, Saudi Arabia. The search for answers to the many questions that may lead to better play environments and/or facilities in cities is a sizeable task. The task becomes greater in the case of Jeddah for the simple fact that very little research has occurred there in this field. For this reason the method that the author adopted is one which consists of several aspects. To begin with there is a review of literature concerning children's play environments in more developed nations/cities which, in a sense, provides a spring board for the actual field research in Jeddah. Next, the actual field research carried out in Jeddah. As will be discussed later, the particular nature of Saudi society meant it was difficult to apply the methods commonly used for such research in the west. The method selected revealed some valuable information, but there remain misgivings about the method and this research should therefore be seen as identifying issues of enquiry for further research rather than completely resolving the questions of how to plan for play provisions in a Saudi Arabian city.

This chapter is basically made up of three parts. The first part will deal with a review of some of the literature that deals with the subject of children's play environment research. The second section in the chapter will look at the method that was used in this research. Issues such as criteria for sample selections and the method of questionnaire distribution will be discussed in this section. Furthermore, in this section some of the restraints (touched upon in chapter I) that were faced during the research will be briefly examined. The third section in this chapter is aimed at discussing the levels of measurements and the data analysis method that was used in this research. This will hopefully provide the reader with a better understanding of the findings and the conclusions that are to be discussed in later chapters.



## **VI.B. The Literature**

The literature dealing with the improvement of children's play environments in urban areas is in the most part limited to institutional (i.e. schools and pre-schools) environments, and that of medium to high residential density environments. This concern may be justified in that children in low density housing environments in general have fewer problems in finding spaces to engage in their activities. Furthermore, institutions are where many children converge and as such, become high density situations in terms of children per unit space. However, the urban environment is made up of many more components than medium to high density residential areas and schools and little attention has been paid to the many other constituent parts of the city in terms of play provision. The counter argument could be that researchers are limited and therefore attention should be paid to areas most frequented by children. This argument is a valid one, nonetheless it is argued here that some more attention should be paid to other pieces of the urban puzzle. A sizeable amount of the available literature tends to provide guidelines for play environments that seem to be based on the assumption that there is some gain for the child from playing (Heseltine and Holborn 1987, Moore et.al. 1987) . Environmental education or increased levels of cognitive awareness are seen as justification for special provision of play facilities and/or areas. This contrasts with the literature which, although recognising that such causes are worthy ones, proposes that children should be provided with suitable environments to play in even if the gain is minimal (Allen 1968). This literature suggests that for the child, the activity and the pleasure derived from it is more important than the gains. This, however, is not to say that when opportunities to provide some gain in the form of education, culture, or awareness present themselves, they should be overlooked. On the contrary, whenever possible a full utilisation of a given space with as many experiences possible for the child should be encouraged and demanded, especially in urban areas where spaces for play are very hard to come by.

The guidelines and planning criteria that have been arrived at in the literature have been established by research into many aspects of the subject. In the many inquiries carried out to date many different methods of information gathering have been utilised to understand the needs and desires of a sample. These methods include,

- a) Observation and behaviour mapping,
- b) Interviews and questionnaires
- c) In-depth studies (i.e. interviews and opinion gathering over a long period of time)
- d) A combination of two or more of the above mentioned.

While it is perhaps more beneficial to use more than one method in answering a certain question or issue, circumstance at times governs the process that can be adopted by the researcher. Each of the methods that have been used as outlined in the literature has



some benefits as well as disadvantages. For example, observing the behaviour of children at play and then recording it in terms of mapping and notes may provide valuable information in terms of children's use of spaces, however it does not really provide information about the children's desires in terms of what they might like the spaces to contain. Likewise, interviews and questionnaires may provide some insight into children's desires, but does very little to provide information on how children actually use the space. In trying to establish a method for gathering information, one is very much tempted to ask the crucial question: which came first the chicken or the egg? All the issues raised by the arguments between the researchers using "quantitative" or "qualitative" methodologies apply here. The qualitative methods provide for more quality in the data but require more effort and time in collecting the data and analysing it. Likewise, the qualitative methods do not offer the researcher a great deal of depth and understanding in terms of the problem, however it does offer a means by which a large quantity of people can have an input to the research as well as less time in gathering and analysing the data. It must be stressed that this research is primarily concerned with helping the planning and design professions make reasoned judgements on the provision of facilities for children's play. It is not, per se., a study of the child at play and the psychological and social issues involved with that. This research is hoped to be an applied rather than a pure research project. For these reasons, a research project which adopts more than one method of attaining the information has been taken here to be more likely to shed light on the issue of provision for children's play than one using primarily one method.



### **VI.C. The Method**

The method used to gather information for this research is a closed-end, questionnaire based method (See Appendix IV. for questionnaire formats). The choice of employing this method can be justified by several reasons. In section VI.B. some of the problems that are associated with the employment of different methods were briefly outlined. In the time and manpower available for this research, the employment of the closed-end questionnaire method was most feasible. In addition, the method offered the best means by which the research questions (See Chapter V) could be answered. Furthermore, the questionnaire method allowed the research to gain input from different groups within the society which may not have been possible by using other methods for reasons that will be discussed later. The input of the different groups is vital in ensuring 1) non-bias and 2) objectivity to the responses.

However, the employment of the closed-ended questionnaire method for data collection has some drawbacks. As well as the limitations of resources there was the added difficulty of the scale of the research. Had this research been more focused on establishing planning and design guidelines and/or criteria for a neighbourhood or district within the city of Jeddah, a more elaborate method (i.e. interviews, observation and behavioural mapping) might have been used. However, the intention here was to examine the planning implications at the scale of a city, and as such required a different approach. In addition, the author believes that although this research answers some questions that are crucial to the objective of providing the best possible environments for children in the urban context, this research has addressed to some extent the lack of research in this area in Jeddah. As such, this research must be viewed as a pilot to be followed with more intensive, better financed research projects in the future. The data gathered here can aid in the formulation of a wide ranging study by social planners into the needs of the local children.

The method that was used in this research was also very much governed by social factors touched upon in chapter I. To begin with, the society of Jeddah is a very distinct society within the Kingdom of Saudi Arabia. While maintaining many of the Islamic beliefs and culture, due to its geographic location and the relationship it has with the other parts of the world (i.e. being a commercial port and acting as gateway to Mecca), Jeddah's society tend to be much more moderate in actions and beliefs. The many cultures and intermixing of people in Jeddah is partly the reason for this moderation. However, on some issues the society still remains very suspicious and withdrawn. Amongst these issues is the society's reluctance to reveal family matters to people they do not know very well. In the case of investigating the society and the researching into social issues this fact is an obstacle. Furthermore, due to the stage of development the Kingdom is in at the moment, many



possible sampling methods are not feasible or indeed possible. For example, within the society, no reliable sampling frame is to be found to assist in choosing a simple random sample. Although the simple random method can be substituted by another method that suits the stage of development in Jeddah, it would have been preferred due to its ability to indicate a more varied and reliable response base, especially in terms of a large research dealing with a large scale.

Bias in a research project is to be avoided always, if the research is to base conclusions from a sample which could be applied to the population as a whole. Although interviews would have been a slightly better alternative to the questionnaires used in this research, the traditions of the society make this impossible. In employing interviews as a means of enquiry, the sample would have been completely a male sample. While this would have probably provided the research with more in depth information, it would come only at the expense of not finding anything regarding the females in the sample. Hence, a compromise had to be reached. Detailed information was traded for a better understanding and equal representation from the entire sample. One could argue that both methods could have been used, i.e. questionnaires distributed to the entire sample and interviews carried out with the males of the sample. This is a very valid argument, however as mentioned before, resources were not in abundance to carryout such an approach.

The method of gathering information for the research consisted primarily of gathering people's attitudes, concerns, evaluations, and expectations in the area of children's play areas, environments and facilities in Jeddah. A sample that fully represented the attitudes, desires, and wishes of the entire population was, due to limitations aforementioned, very difficult to achieve. The sample that was used consisted of four different groups of people with different occupations and/or functions within the society. Furthermore, maximum effort was exerted to diversify the sample in terms of economic and social levels, urban environment type and personal traits (e.g. gender). This was to ensure that findings are relatively reliable in relation to drawing conclusions that recognise the diversity within the city and, therefore, accurately reflect the issues facing planning and design professions who need to be able to decide what to do to meet the needs of whole populations, not the small segments so often examined by sociological studies.

Although the research aimed at providing answers to many questions and issues connected with the present, past and possible future play of children in Jeddah (See Chapter V), some of these questions and issues had to be deleted from the questionnaires as a result of them not being fully understood by the people of Jeddah. Before the questionnaires were fully distributed to the sample, a pilot survey was carried out on a similar sample of twenty (20) parents and fifteen (15) school children. One of the



main aims of this pilot survey was to discover the sample's understanding of the questions and issues involved in the questionnaires. The result was that although the majority of the questions and issues were understood by the pilot sample, some questions were not: Namely two questions that were discussed in chapter V had to be deleted because of limitations in time to carry out alterations to the questions. The two questions that had to be deleted from the research were: First, the question dealing with the range behaviour of children in outdoor environments was not understood (See Chapter V. Section V.B.iii.e.). The second question that was not understood by the sample was that dealing with the activities that the parents and children wished to involve themselves in had the facilities to support these activities been available in Jeddah (See Chapter V. Section V.B.vi.). It is regrettable that these two questions were not understood and had to be omitted from the questionnaires, they would have provided some valuable information concerning the planning and design of children's outdoor environments in Jeddah. If there is to be a follow up research project in this area, these questions should be addressed.

The four groups that were questioned and make up the sample for the questionnaire are as follows,

- i) Parents of school age children,
- ii) School children,
- iii) Professional environmental designers and students of environmental design in King Abdul Aziz University, and
- iv) Planning officials of the city and of The Ministry of Planning and Rural Affairs.

The four groups received questionnaires that probed some of the many research questions that were identified in chapter V. However, each group of the sample received a different questionnaire format. This approach was taken to allow maximum gain of information in relation to the planning and design process for the different groups and because different variables affected each group, making it impossible to use a standard questionnaire (See Chapter V).

To distribute the questionnaires and gather the information from the parents and school children, a mixture of sampling methods was used. To begin with, the city of Jeddah was divided into three different urban environments

- a) The non-planned parts of the city
- b) The planned parts of the city, and
- c) The parts of the city that are a mixture of both (See Diagram VI.C.1).

The city was also divided into districts related to income and social class. Although it is not always the case, land values were used to divide the city into low, middle, and high income and social classes (See Diagram VI.C.2). From the overlap of urban environment type and socio-economic classification, a pattern emerged in that the planned parts of the city were, in the most part, where middle and high socio-economic groups reside; the non-planned



parts catered primarily for the low end of the socio-economic spectrum; and the mixed urban pattern represented the residency of low to middle socio-economic groups. Hence the distribution of the questionnaires took on the following form. From the patterns that emerged three districts were chosen in which six schools of different school levels (i.e. primary, intermediate and secondary) were randomly chosen (three boys' and three girls' schools) in which the questionnaires were distributed (See Diagram VI.C.3). However, for the high income groups, private schools elsewhere in the city were chosen for the reason that within high income districts due to high land values, not many schools can be found. Hence the resultant distribution took on the form of questionnaires being distributed in the fashion outlined in Table VI.C.1.



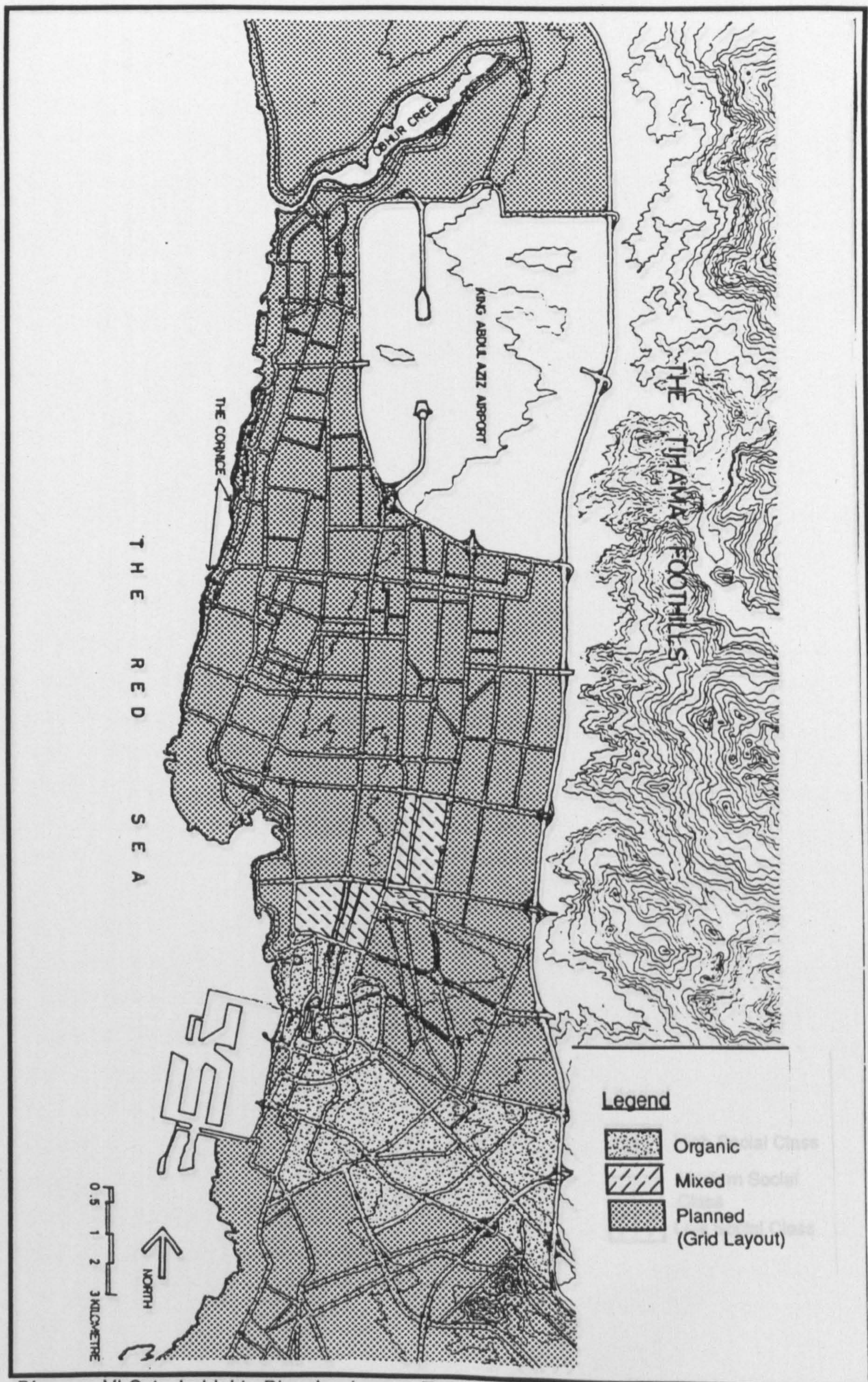


Diagram VI.C.1. Jeddah's Planning Layout Types



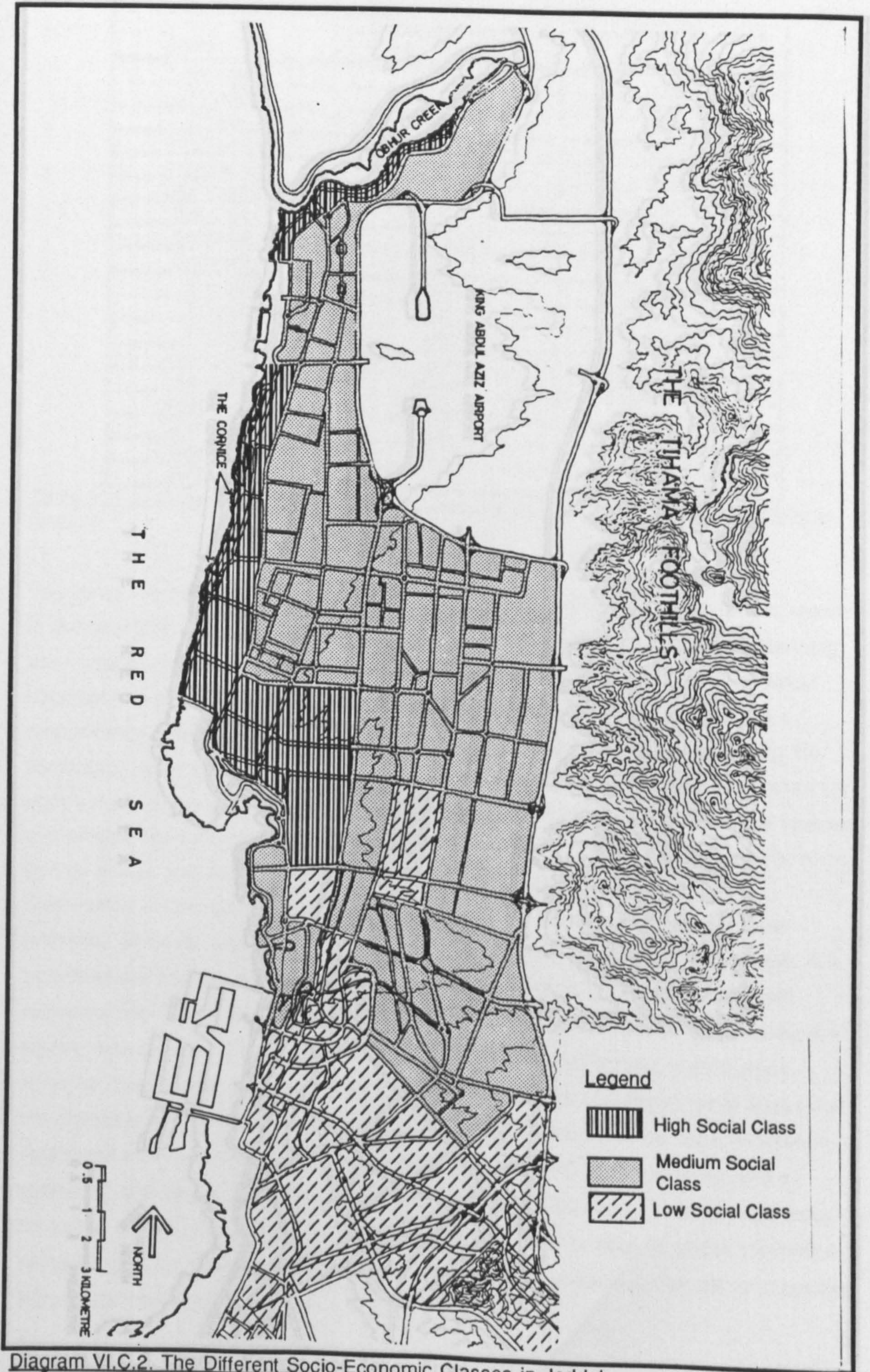


Diagram VI.C.2. The Different Socio-Economic Classes in Jeddah



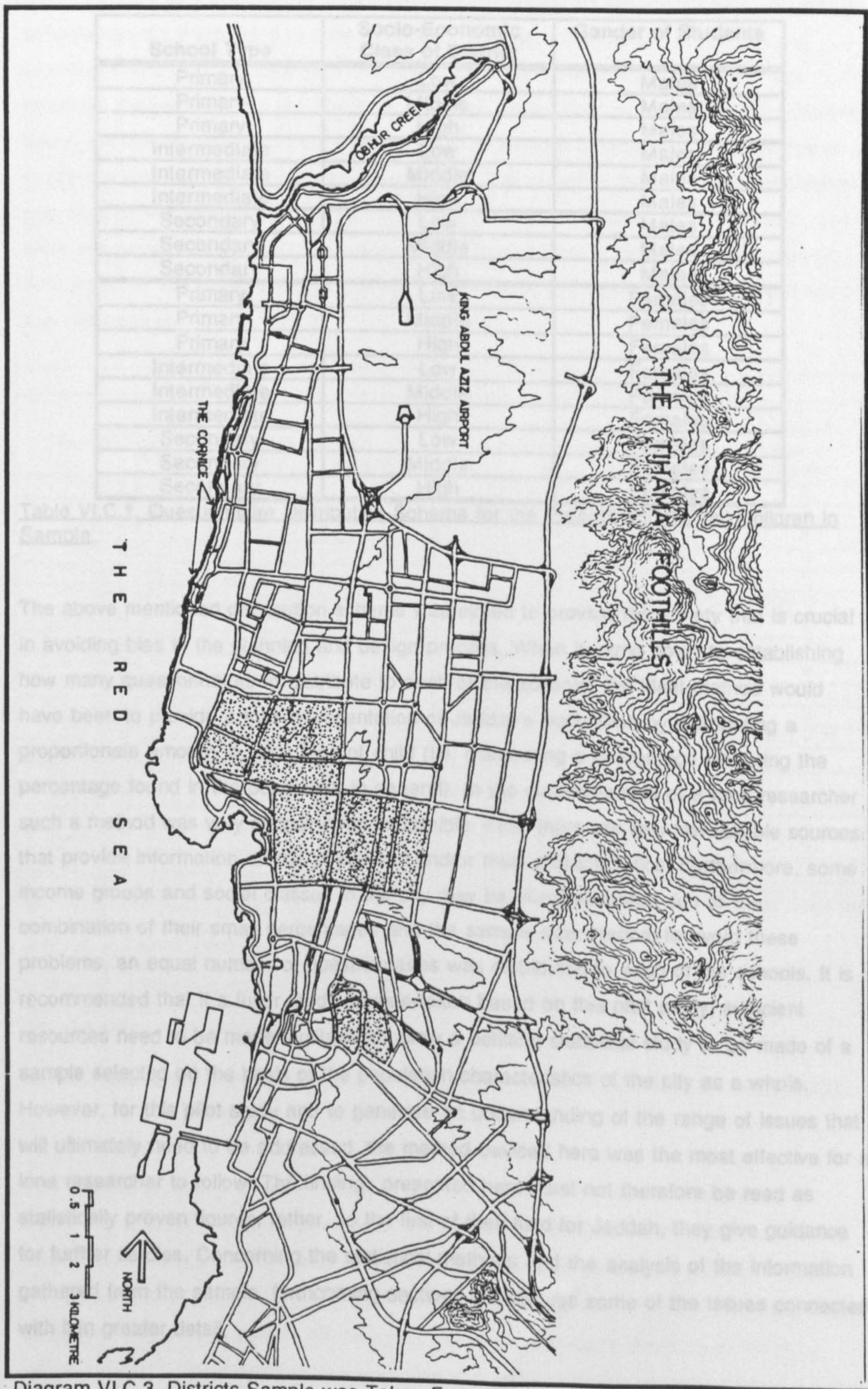


Diagram VI.C.3. Districts Sample was Taken From



School Type	Socio-Economic Class of District	Gender of Students
Primary	Low	Males
Primary	Middle	Males
Primary	High	Males
Intermediate	Low	Males
Intermediate	Middle	Males
Intermediate	High	Males
Secondary	Low	Males
Secondary	Middle	Males
Secondary	High	Males
Primary	Low	Females
Primary	Middle	Females
Primary	High	Females
Intermediate	Low	Females
Intermediate	Middle	Females
Intermediate	High	Females
Secondary	Low	Females
Secondary	Middle	Females
Secondary	High	Females

**Table VI.C.1. Questionnaire Distribution Scheme for the Parents and School Children in Sample.**

The above mentioned distribution scheme was aimed to provide the variety that is crucial in avoiding bias in the planning and design process. When it came down to establishing how many questionnaires to distribute to each of the schools, the ideal method would have been to provide a true representation of Jeddah's population by distributing a proportionate amount to each type of child (i.e. distributing a percentage reflecting the percentage found in the population in general). In the circumstances of a lone researcher such a method was very difficult if not impossible. First, there are very few reliable sources that provide information on the population and/or their characteristics. Furthermore, some income groups and social classes in the city may be misrepresented due to the combination of their small percentages and the sample size. Hence, to avoid these problems, an equal number of questionnaires was distributed to each of the schools. It is recommended that if a fuller study is undertaken based on this pilot study, sufficient resources need to be made available to allow a befitting statistical study to be made of a sample selected on the basis of the population characteristics of the city as a whole. However, for this pilot study and to generate an understanding of the range of issues that will ultimately need to be addressed, the method devised here was the most effective for a lone researcher to follow. The findings presented here must not therefore be read as statistically proven figures, rather, as the first of their kind for Jeddah, they give guidance for further studies. Concerning the statistical methods and the analysis of the information gathered from the sample, forthcoming sections will discuss some of the issues connected with it in greater detail.

**Each of the chosen schools was provided with 11 questionnaires for the parents, and 8**



questionnaires for the school children. With the assistance of the headmasters of boys' schools and the Presidency of Girls Education, children were chosen at random and provided with a questionnaire for their parents to fill out. Different children were then randomly chosen to fill out the questionnaires that were aimed at school children. Students taking the questionnaires to their parents were not allowed to answer a questionnaire so as to prevent parental influence on their responses. The response from both school children and parents was very good. From the 200 questionnaires distributed to the parents, 144 were answered or a 72% response rate. School children had a higher response rate of 81% from the 150 questionnaires that were distributed. The break-down of the distribution and response is in Table VI.C.2.

Parents			School Children		
School Type	No. of Questionnaires Distributed	No. of Questionnaires Returned	School Type	No. of Questionnaires Distributed	No. of Questionnaires Returned
Primary B-L	11	11	Primary B-L	9	9
Primary B-M	11	9	Primary B-M	8	8
Primary B-H	12	8	Primary B-H	8	8
Primary G-L	12	12	Primary G-L	8	8
Primary G-M	11	11	Primary G-M	9	9
Primary G-H	*See Secondary G-H		Primary G-H	*See Secondary G-H	
Intermediate B-L	11	6	Intermediate B-L	9	9
Intermediate B-M	11	11	Intermediate B-M	8	8
Intermediate B-H	11	0	Intermediate B-H	8	0
Intermediate G-L	11	11	Intermediate G-L	9	8
Intermediate G-M	11	10	Intermediate G-M	8	0
Intermediate G-H	*See Secondary G-H		Intermediate G-H	*See Secondary G-H	
Secondary B-L	11	9	Secondary B-L	8	8
Secondary B-M	11	11	Secondary B-M	8	7
Secondary B-H	11	9	Secondary B-H	9	9
Secondary G-L	11	9	Secondary G-L	8	8
Secondary G-M	11	10	Secondary G-M	8	8
Secondary G-H	33*	7	Secondary G-H	25*	15
<b>Total</b>	<b>200</b>	<b>144</b>	<b>Total</b>	<b>150</b>	<b>122</b>

B-L = Boys Low Income/Social Class

B-M = Boys Middle Income/Social Class

B-H = Boys High Income/Social Class

G-L = Girls Low Income/Social Class

G-M = Girls Middle Income/Social Class

G-H = Girls High Income/Social Class

\* Private school containing all three levels.

Table VI.C.2. Questionnaire Distribution and Response for Parents and School Children.

The distribution of the questionnaires to professional planners and environmental designers was done by a simple random method of distribution. A list of the recognised practices was made and five offices from the list were chosen randomly. Each of the offices was provided with eight (8) questionnaires, 40 in all were distributed to the practising designers and planners. With the co-operation of the managing directors of these practising firms, planners and designers were randomly selected and asked to fill out the



questionnaires provided. The response rate for the practising professionals was good, with 29 of the 40 (73%) distributed finding their way back to be part of the analysis for this research.

As for the students of environmental design in King Abdul Aziz University, 20 questionnaires were distributed through the three different levels (i.e. years) of the three departments (i.e. architecture, landscape architecture, and urban and regional planning) of the school. The distribution scheme did not take the form of simple random or any of the other statistically approved methods. The questionnaires were distributed through some of the professors of the author's acquaintance. This method was considered sufficient for this pilot study which aims to identify the range of issues to be dealt with by a fuller study. The response rate from the students was slightly lower than anticipated, but that could be due to the fact that exams were approaching and the students were very busy in preparations. Only 12 of the 20 distributed (60%) were gathered and are included in the survey from the students of environmental design. Hence a total of 49 questionnaires from professionals and students of environmental design were gathered. However, from the 49 questionnaires collected, only 41 were included in this survey because eight of the collected questionnaires could not be included due to their incomplete nature.

In an effort to tap into some of the concerns and policies that govern the practical side of children's play environments in Jeddah, some of the planning and city officials of Jeddah were included in the survey. The issues that they were to be asked about were very similar to those addressed with the practising designers and planners with the main difference being that the officials were asked to supply some information on the practical aspects of some of the issues. The questionnaires were distributed in two main places: the Ministry of Planning and Rural Affairs (Jeddah office), and the Municipality of Jeddah. Due to the lack of a sampling frame and any other form of systematic means of distribution, the questionnaires were distributed by means of hand to the people that worked in these establishments. The choice of to whom to give questionnaires was decided upon by the position in the hierarchy that person held. Most questionnaires were given to heads of departments and/or those who had some decision making roles. For each of the authorities, 25 questionnaires were distributed with a total of 50 for the two governmental agencies. The response from both was very good with 43 out of the 50 (86%) questionnaires being returned.

Hence, there were 460 questionnaires in all distributed to all the four main divisions of the population. Despite 350 (76%) of them being answered, it needs to be emphasised that this is not a statistically representative sample. Jeddah has a population of more than one million people, therefore 350 comprises no more than a fraction of a percentage of the population and as such, no substantiated real planning and design decisions can be taken



from such a small sample. Further, problems that have been identified by the author in the method for this research will be discussed in the conclusion (Chapter VIII) and can give useful guidance for the development of the full survey that it is hoped will develop from this pilot study.

Having stated some of the drawbacks of the survey, it is only fair to state some of the gains that the survey provided. To begin with, it forms the first in-depth piece of research on children's play environments in Jeddah. It is hoped that this preliminary work may provide a stepping stone for future research projects in this field. In addition, some of the findings may provide some new directions for researchers to investigate. Furthermore, if anything is learned about children's play areas in Jeddah and/or the people that affect it, then this research was worthwhile. A long journey starts with a step.

#### **VI.D. Levels of Measurements and Analysis of Data**

In constructing the questionnaires two very important factors were considered. The first factor is that of the time it would take a respondent to answer the questionnaire. The second factor was that of simplicity in the construction of the questionnaire so as to allow the respondents, who have had very limited experience in answering questionnaires, a clear and concise response format. Hence, special attention was paid to make the questionnaires simple in format and quick to answer. To achieve this simplicity in the questionnaires meant that a simple level of measurement would have to be employed.

The level of measurement that was used in the questionnaires of this research was the nominal level of measurement (i.e. to classify a variable into pre-established categories). While this level of measurement meant an ease of understanding by the respondents and relatively a short period of time for the respondents to answer the questions, there are some drawbacks to its employment. The drawbacks will be discussed in greater detail in Chapter VIII, but some general issues will be looked at here. One of the main drawbacks is the amount of analysis that can be done with the nominal level of information. The more complex methods of analysis cannot be employed with the nominal level of measurement, however when one considers that it is not in the interest of this research to statistically prove or disprove an issue or hypothesis, but rather consider the many issues that are involved in the topic and provide a basis for future research, then the nominal levels of measurements and the methods of analysis that can be employed thereafter will serve the aims of the research well.

The nominal levels of measurement was used in the majority of the questions in the questionnaires. However, some questions did employ other methods of measuring the sample's answers, specifically the questions that dealt with gathering information on



parent's attitudes of play (See Appendix IV). To gather this information, parents were asked to rank play as a need in the development of the child. Furthermore, parents were asked to rank the definition of play they thought best defined play and the purpose of play as an activity. In ranking the answers, different points were given to the answers, with the higher ranked answer getting higher points (See Chapter VII. Section VII.B.). This method allowed for a more precise means of tapping into the answers people gave than the simplicity of the nominal method where there can be only one distinct answer to a question.

Having stated earlier that the use of the nominal level of measurement meant the use of very basic methods of analysing the data collected, the type of analysis that was carried out with the data will be discussed briefly. To establish whether or not a response was dependant on a certain variable, the Chi Square test was employed. The reason for the use of the Chi Square test was due to its popularity as a hypothesis test in the social sciences. Furthermore, the test does not require the researcher to make certain assumptions concerning the population, and it is a test that is suitable for the nominal level of measurement. As Healey (1990) states,

Chi square is a nonparametric test of hypothesis and requires no assumption about the exact shape of the population distribution. Since this test is appropriate for nominally measured variables, we make only the minimum possible assumption with respect to level of measurement.(p.209)

While the Chi square test is a test that provides information concerning the dependence of a response on a variable, it does not, unfortunately, indicate in which direction the response is affected by the variable. For example, assume the Chi square test renders response (X) as dependant on the respondents' age. The test does not indicate whether this dependence increases or decreases with age. However, the test is a valid one in the situation of this research where the primary interest is in establishing a broad sense of dependence. Furthermore, once the dependence of the response is ascertained, then frequency tables can give a sense of how the response is dependant on the variable being tested.

The formula that is used in the Chi square test is as follows:

$$X^2(\text{Obtained}) = \sum \frac{(f_o - f_e)^2}{f_e}$$

Where:

$f_o$  = the cell frequencies observed in the bivariate table

$f_e$  = the cell frequencies that would be expected if the variables were independent. To obtain  $f_e$  the following formula is used



$$f_e = \frac{(\text{row marginal}) * (\text{column marginal})}{N} \text{ where } N = \text{the sample size.}$$

However, the above formulas by themselves do not render the test to be complete. There are two other very important factors that are involved in using the test. First, there is the matter of establishing or choosing an alpha ( $\alpha$ ) level for the test. Alpha ( $\alpha$ ) is a very important factor that will have a direct effect on the tests and choosing an appropriate alpha level is very important for alpha (coupled with the degrees of freedom) will determine the outcome and the reliability of the test. In general, the smaller alpha is, the more reliable the results of the test will be. In choosing the alpha level, Healey (1990) states,

..... social scientists conventionally set alpha at 0.05 or, somewhat less frequently, 0.10 or 0.01. The 0.05 level in particular seems to have emerged as a generally recognised indicator of a significant result. (p.155)

As such, for all the Chi square tests carried in this research alpha was set at 0.05.

The second factor that affects the test is that of the degrees of freedom that a bivariate table has. In explaining what "degree of freedom" means Healey (1990) states,

Degrees of freedom are the number of values in a distribution that are free to vary from for any particular statistic. A  $2 \times 2$  table has one degree of freedom because, for a given set of marginals, once one cell frequency is determined, all other cell frequencies are fixed (that is, they are no longer free to vary). (p.214)

To calculate the degrees of freedom, the following formula was used.

$$df = (r - 1) * (c - 1)$$

Where:

df= degrees of freedom

(r-1)= number of rows minus one

(c-1)= number of columns minus one

Having established the Alpha level, the critical and obtained Chi Square, then the tests of dependence can be done. In that,

if  $x^2(\text{obtained}) > x^2(\text{critical})$  then the response is dependant on the variable, or the variable does affect the response.

if  $x^2(\text{obtained}) < x^2(\text{critical})$  then the response is not dependant on the variable, or the variable has no affect on the response.

While the Chi square test is not the most complex statistical test available to a researcher, for this research, it does offer a good means of establishing some possible associations



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that could be researched and studied in full in future research projects. Other concerns regarding the levels of measurements and statistical tests used in this exist and will be discussed in greater detail in Chapter VIII.

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## **Chapter VII : The Findings**



### **VII.A. Introduction**

This chapter illustrates the results of the survey that was carried out on the sample in Jeddah, employing the methods described in Chapter VI. As a reminder to the reader, these findings should not be viewed as statistically proven, rather, they should be seen as indicative of some issues and problems that exist in children's outdoor play environments in Jeddah. Furthermore, these findings will hopefully assist in future research projects in this field in Jeddah. The chapter is mainly divided in four sections dealing with four different topics of concern. Each topic includes some questions that aid in better understanding the topic. A brief comment concerning the findings of the different topics involved in the research will be provided after the findings and the variables that have affected the sample's responses have been reviewed. The conclusions and some of the more general comments concerning the findings and the research will be found in Chapter VIII.

### **VII.B. The Attitudes of People Towards Play**

It is essential to understand the attitude of people towards play if provision for outdoor play that will benefit and be appreciated by the people that use it is to be achieved. Hence, one of the objectives of the social survey carried out in Jeddah was to enquire about people's attitudes towards play as an activity and the need for it in relation to children's healthy development.

#### **VII.B.i Play as a Developmental Requirement/Need**

First, parents of school children were asked to rate some developmental requirements or needs. These requirements were developed by the author's review of the literature (See Chapter II) and included things such as education, parental love, education, etc. By comparing the responses, play was rated as the fifth most important by the parents (See Diagram VII.B.i.1). This rating held true for the sample with no variables for age, sex, education level, or income level.



level, etc. not influencing them. The diagram below shows the population's response to this particular enquiry.

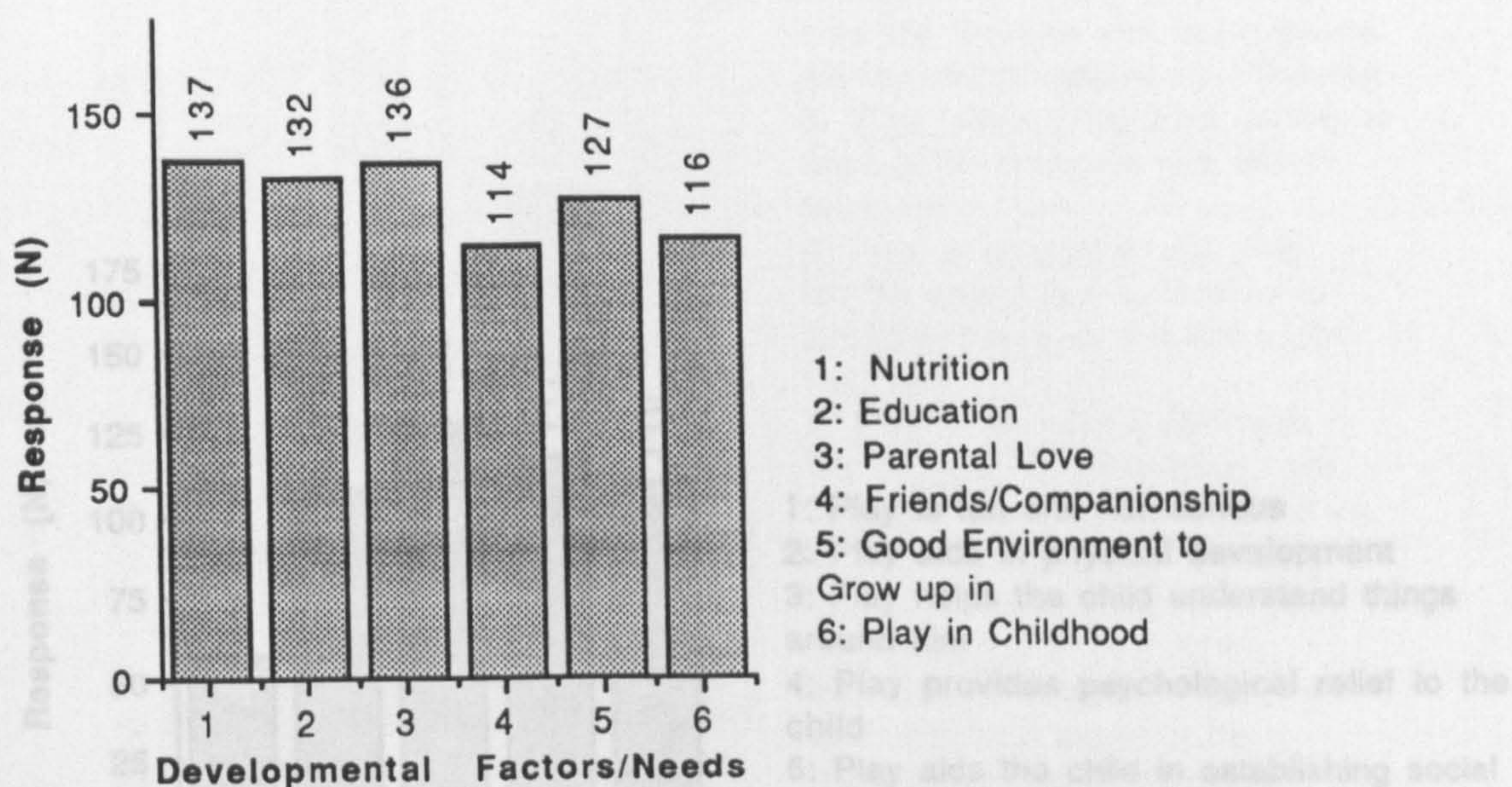


Diagram VII.B.i.1. Play's Relative Rating as a Developmental Need.

### VII.B.ii. The Function of Play

The second means used to assess parents' attitudes towards play was to ask them what function play serves in the child's life. Parents were given a list of five functions to choose from which had been devised from the literature review (See Chapter II). In addition, provision was made for them to give their own opinions as well. The five functions listed included the major functions that writers on the subject of play have identified at various stages of the history of the subject (See Chapter II). For example the Puritan view of play was that it was the opposite of work and frivolous, Freud's assumptions was that play provided "a safety valve" for the child to fulfil his wishes and to enable him to experience an alteration of reality. The Piagetian schools of thinking believed that play helps the child in cognitive development.

The population in the Jeddah survey were asked to choose three of the five functions (listed in Diagram VII.B.ii.1) that they thought best defined the functions of play in the child's life. Furthermore, they were asked to order or rank their choices from first to third. The response was perhaps surprising in that the respondents chose the response more in line with the Piagetian and Freudian suggestions on what play serves in the development of the child than the other possible responses. The top three responses chosen by the population were as follows,

- 1) Play helps the child in understanding things around him,
- 2) Play provides the child with psychological/mental relief, and
- 3) Play helps the child in socialising and making friends.

These responses held true to all the population, with variables such as age, sex, education



level, etc. not influencing them. The diagram below shows the population's response to this particular enquiry.

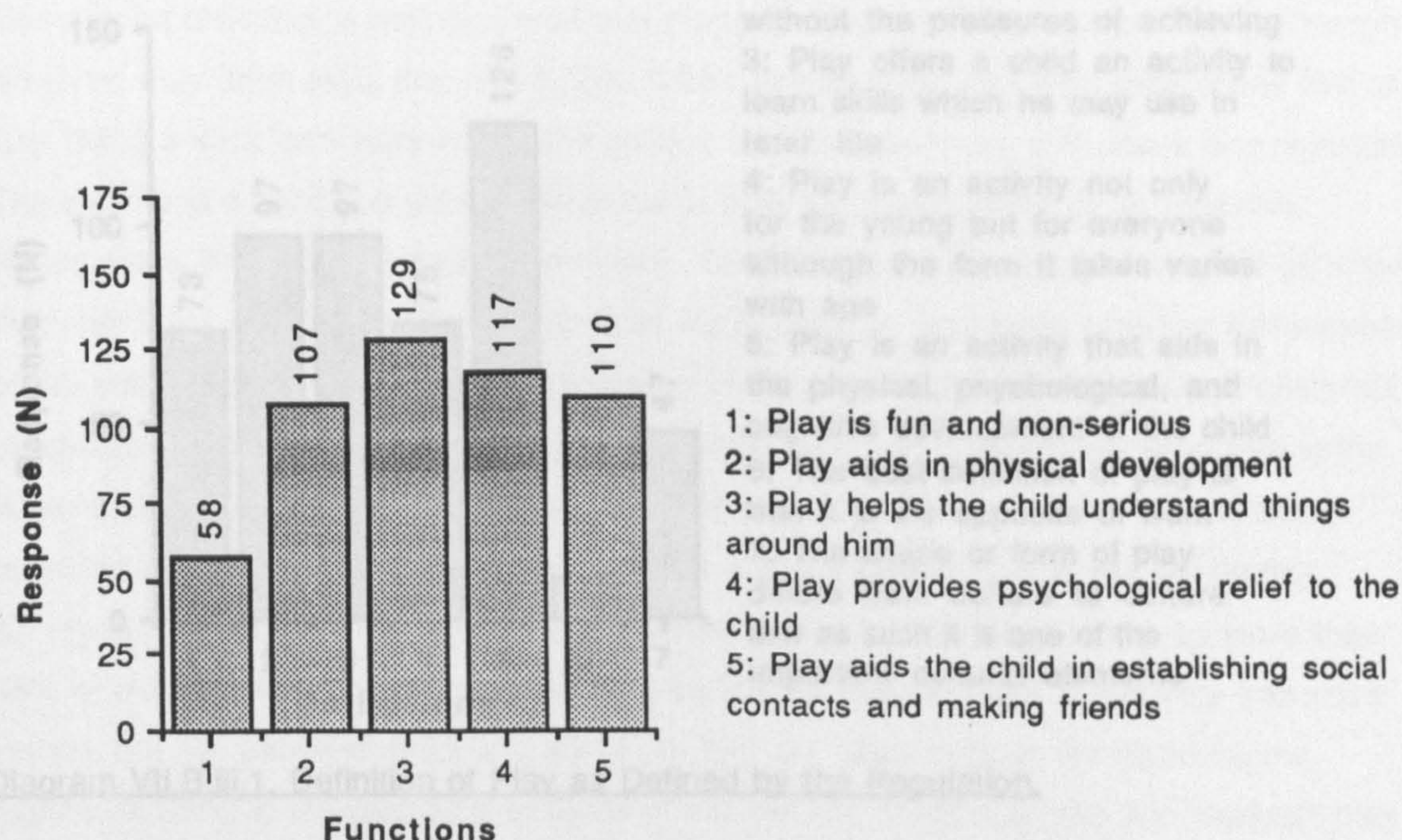


Diagram VII.B.ii.1. The Functions of Play as seen by the Population.

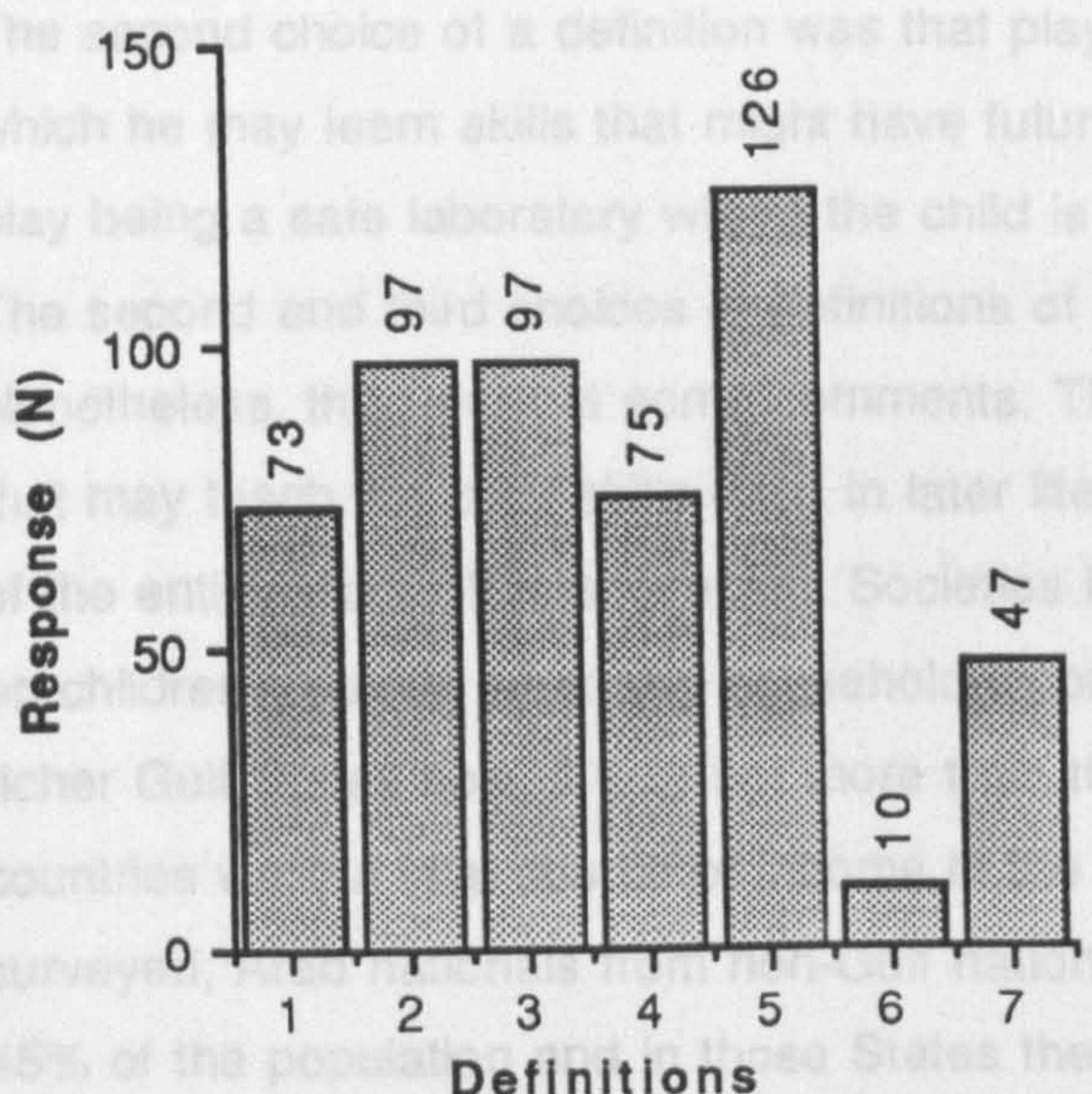
### VII.B.iii. The Definition of Play

Finally, in the first stage of the enquiry, parents were asked to define play as an activity as best as they could. Some assistance was given to them. This assistance took the form of a range of definitions being suggested from which they could choose if they felt them to be satisfactory. The suggested definitions were arrived at by the author from earlier research (See Chapter II), and included some of the definitions put forth by researchers in environmental design, psychology and other related disciplines. The population were also provided the freedom to supply their own definition(s) if they felt those provided inadequate.

The respondents were also asked to order or rank their answers in terms of the relative importance of those definitions to their own definition of play. The findings are shown below (Diagram VII.B.iii.1).



reflecting on earlier behaviour and actions of the generation may not yet have had.



- 1: Play is a voluntary and recreational activity
- 2: Play is an activity through which a child tries his theories and expectations without the pressures of achieving
- 3: Play offers a child an activity to learn skills which he may use in later life
- 4: Play is an activity not only for the young but for everyone although the form it takes varies with age
- 5: Play is an activity that aids in the physical, psychological, and cognitive development of the child
- 6: The best definition of play is that it is the opposite of work
- 7: The shape or form of play differs from culture to culture and as such it is one of the important cultural elements

Diagram VII.B.iii.1. Definition of Play as Defined by the Population.

The definition most chosen can be seen is the holistic one, encompassing the physical, psychological, and cognitive attributes of the child. However, this response or definition is dependant on one variable. Age seems to affect the choice of this definition, with more people of middle age (40-49 years old) making up more than 50% of the people that chose this definition (See Table VII.B.iii.1).

	20-29 years old	30-39 years old	40-49 years old	50-59 years old	60 and over	Total
Response (N)	13	22	47	9	0	91
Percentage of response	14%	24%	52%	10%	0%	100%
Percentage of Sample (N=141)	12%	33%	44%	9%	2%	100%

Table VII.B.iii.1. Dependency of Definition of Play with respect to Age of Respondents.

There are no definite reasons that the author can put forth for this dependency based on the present study. However one can speculate on some reasons. First it might be that the parents of this age group are at the optimum age in terms of child rearing, education or attitude, in that these parents are educated for the most part and, being so, will understand that an activity such as play might have a significant effect on the overall development of their children: A factor which the older, less educated, age groups may not identify. Furthermore, they would probably have recently experienced a child's (if not children's) development and growth and as such, probably have a better understanding of what a child requires during different stages in development. They also have the luxury of



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reflecting on earlier behaviour and actions of the child, which the younger generation may not yet have had.

The second choice of a definition was that play provided the child with an activity through which he may learn skills that might have future applications. The third choice was that of play being a safe laboratory where the child is free to experiment with ideas and concepts. The second and third choices of definitions of play are independent of all variables. Nonetheless, they warrant some comments. The second choice rating of play as an activity that may teach the child skills used in later life is perhaps due to the stage of development of the entire Middle Eastern region. Societies in this region are still very much dependant on children's help in work and household income. Although this may not hold true in the richer Gulf States now, it was not more than three decades ago that children in these countries were a vital source of income in the family. Furthermore, in the population surveyed, Arab nationals from non-Gulf nations in The Middle East made up more than 45% of the population and in those States the child's income input is still very important. Hence, the link between childhood and skills that are used in latter life could be the significant thing in the response of those in the sample rather than the link between play and skills (such as carpentry, plumbing, etc.).

In the third most common response, parents saw play as being a stress free activity in which the child experiments with things and ideas. This indicates the respondents' position that play is a non-serious activity where the child is free to make mistakes and try things that may benefit him in understanding things.

**Comment:**

After reviewing the three common attitudes towards play at present, the following is summarised from it: Although people saw play as an important factor in aiding child development, it is not seen as important as, for example education or nutrition.

Furthermore, play is taken to be a recreational or non-essential activity. These findings are quite understandable bearing in mind that Saudi Arabia is a developing country and some of the luxuries found in western societies are not available at present. However, one must ask the question, could this attitude change? Would play come to be considered as a necessity to the child's development if the physical environment was changed in a way that meant it could support play throughout the urban fabric? Unfortunately, the answer to such a question is a very difficult one and requires experience of such changes over time before it can be answered. It is difficult for several reasons, amongst which is the fact that understanding people's attitudes means understanding every factor that may influence this attitude such as people's own childhood experiences, their religious or philosophical points



of view and so on. The time factor is also crucial in charting the attitude as well, for with time the country will develop and more and more necessities of life will be no longer difficult to come by, hence allowing people to reach for what are now seen by the masses as the luxuries of life.

### **VII.C. The Evaluation of Play Areas/Facilities**

The second part of the survey was meant to deal with people's evaluation or appreciation of the physical play areas in the city of Jeddah. The questions related to this were not limited to parents as was the case in gathering people's attitudes. In this part of the survey parents, school children, students of environmental design, as well as planning officials were asked to evaluate the play areas and/or environments of Jeddah. In addition, parents and school children were asked to evaluate their immediate neighbourhood play areas or environments.

#### **VII.C.i. The Evaluation of Jeddah's Play Areas**

As far as Jeddah's play environments are concerned, there were mixed responses from the different people asked for their reactions. While the parents and especially the school children saw Jeddah's play areas as being in the most part fair to excellent, those concerned with the built environment such as planning officials, professional planners and environmental designers, and students of environmental design were of the view that Jeddah's play areas are very poor or only fair (See Diagram VII.C.i.1).

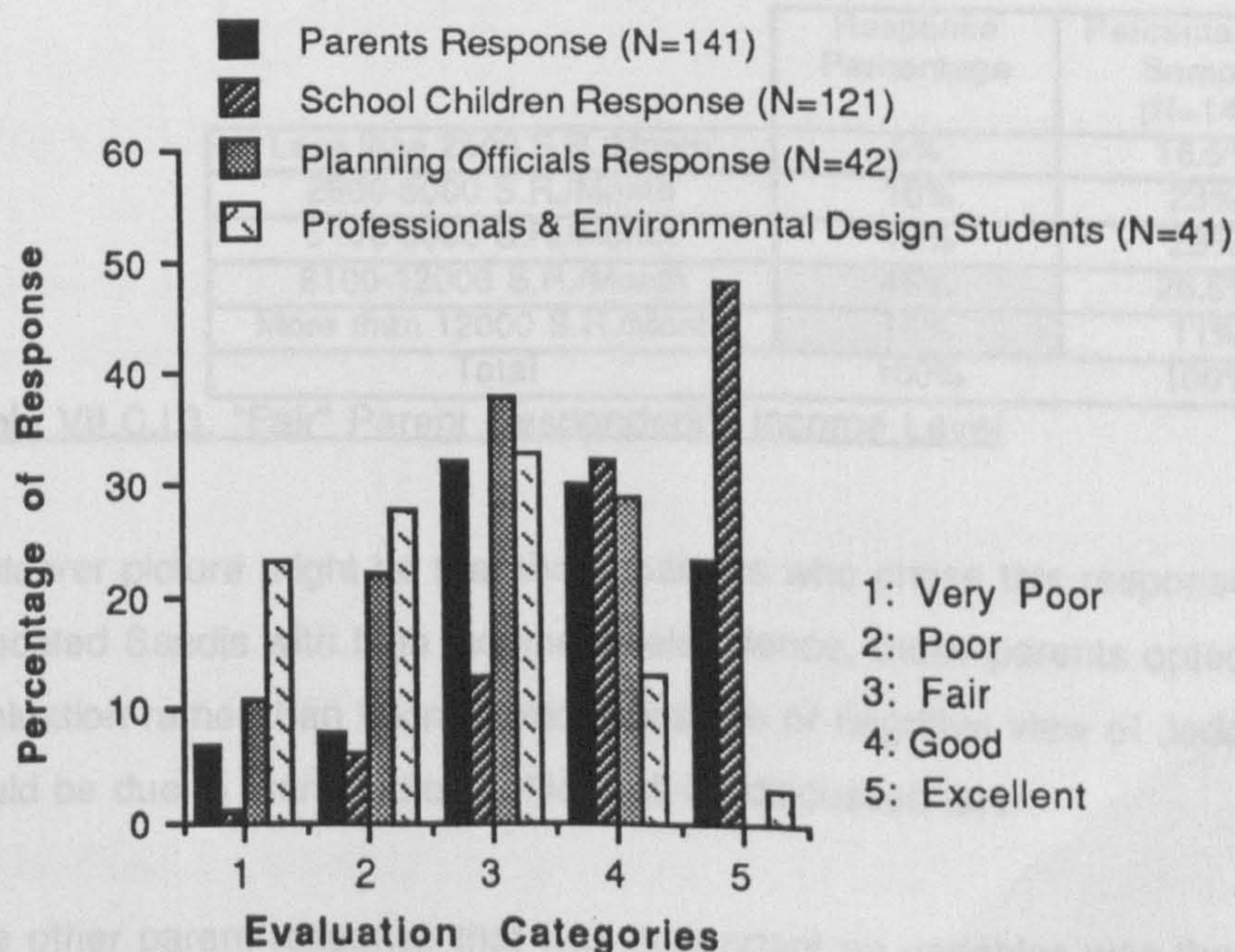


Diagram VII.C.i.1. Population's Evaluation of Jeddah's Play Areas.



This response is almost the exact opposite of the fair response in terms of the variable. Of the 141 parents in the sample, the majority (32%) saw Jeddah's play areas as being fair, an additional 30% saw it as being good, and 23% viewed it as being excellent. The fair response, after running Chi Square tests, was dependent on three variables with an Alpha level set at 0.05 (or a confidence level of 95%). First, this response was chosen more by Saudi nationals than Arab nationals (See Table VII.C.i.1).

	Response Percentage	Percentage of Sample (N=141)
Saudi	67%	52%
Arab	33%	48%
Total	100%	100%

Table VII.C.i.1. "Fair" Parent Respondent's Nationality

Another variable on which the response is dependant is that of the respondent's education level, with people holding a first degree (i.e. college and/or polytechnic) or higher degree choosing it more than those people that only have school education (See Table VII.C.i.2).

	Response Percentage	Percentage of Sample (N=141)
School Education	27%	41%
Polytechnic/University	51%	46%
Higher Education	22%	13%
Total	100%	100%

Table VII.C.i.2. "Fair" Parent Respondent's Education Level

The third variable of the "fair" response is that of the respondent's income level, with parents in the highest income groups (8000 Saudi Riyals (S.R.) per month or more) choosing it more often than other income groups (See Table VII.C.i.3).

	Response Percentage	Percentage of Sample (N=141)
Less than 2500 S.R./Month	5%	16.5%
2600-5000 S.R./Month	16%	23%
5100-8000 S.R./Month	18%	23%
8100-12000 S.R./Month	45%	26.5%
More than 12000 S.R./Month	16%	11%
Total	100%	100%

Table VII.C.i.3. "Fair" Parent Respondent's Income Level

A clearer picture might be that those parents who chose this response were mainly educated Saudis with high income levels. Hence, these parents opted to be neutral in their evaluation rather than taking a more positive or negative view of Jeddah's play areas. This could be due to many factors which will be discussed later.

The other parent response that was dependant on variables was the "excellent" response.



This response is almost the exact opposite of the fair response in terms of the variable measurements. It is dependant on four variables. Nationality is the first, with Arab nationals choosing it more than Saudis (See Table VII.C.i.4).

	Response Percentage	Percentage of Sample (N=141)
Saudi	29%	52%
Arab	71%	48%
Total	100%	100%

Table VII.C.i.4. "Excellent" Parent Respondent's Nationality

The second variable to affect the response is that of education level, with people with only school education choosing the response more often than people with a first degree or higher (See Table VII.C.i.5).

	Response Percentage	Percentage of Sample (N=141)
School Education	64%	41%
Polytechnic/University	27%	46%
Higher Education	9%	13%
Total	100%	100%

Table VII.C.i.5. "Excellent" Parent Respondent's Education Level

The third variable that the response is dependant on is income level, with people of lower income choosing it more than any other income group (See Table VII.C.i.6).

	Response Percentage	Percentage of Sample (N=141)
Less than 2500 S.R./Month	30%	16.5%
2600-5000 S.R./Month	41%	23%
5100-8000 S.R./Month	4%	23%
8100-12000 S.R./Month	22%	26.5%
More than 12000 S.R./Month	3%	11%
Total	100%	100%

Table VII.C.i.6. "Excellent" Parent Respondent's Income Levels

The fourth and final variable that the response is affected by is that of the district social class. Parents residing in low class districts chose it more often than people residing in other areas of the city (See Table VII.C.i.7).

	Response Percentage	Percentage of Sample (N=141)
Low	50%	31%
Middle	47%	63%
High	3%	6%
Total	100%	100%

Table VII.C.i.7. "Excellent" Parent Respondent's District Social Class



environments. The factors that might be responsible for them can only be speculated upon

**Comment:**

Some preliminary conclusions can be arrived at in the present stage of review. First, parents think of Jeddah's play areas in the most part positively. However, parents that are more educated, Saudi nationals, and/or those with higher income levels are impartial. In contrast, parents from other parts of the Arab world, with a school education only, residing in low social class districts, and/or of low income levels view Jeddah's play areas in the most positive light.

These findings could be due to several reasons. First, people with higher education and income levels have probably travelled to European countries and/or The United States and therefore have probably been exposed to better play environments. However, if that was the case they might have been expected to view the play environments of Jeddah as being very poor. That this was not so could relate to two main reasons. The first may be one of pride. The feeling that the city is theirs and therefore to rank the play environments in it as being very poor is to denigrate their home. However, the same group could not realistically rate the play areas/facilities as being good or excellent for the reason of being honest. Hence, it could be reasoned they might take the neutral view, one that would not be a false response and at the same time it would not harm the national or civic pride. For those parents with limited education and income level, those that viewed Jeddah's play areas most positively, the opposite might be true. They probably have not travelled to Western countries and as such, have nothing to compare to except what is in the Arab world. In comparison to what is in much of the rest of the Arab world Jeddah's play areas are plentiful. Perhaps future research could provide substance to the speculations laid down here.

The evaluation of all other groups (school children, professional planners, etc.) held true with no variables affecting their responses. One exception was the planning officials' response to Jeddah's play areas as being "Fair". This was dependant on the education level of the respondent. With officials holding a post graduate degree choosing it more than other education levels (See Table VII.C.i.8). The number of respondents is too small to make any statistical tests and should only be viewed as a possible variable.

	Response Percentage	Percentage of Sample (N=42)
Secondary School Education	0%	7%
Polytechnic/University	79%	83%
Higher Education	21%	10%
Total	100%	100%

Table VII.C.i.8. "Fair" Response of Planning Officials' Education Levels

This survey has shed some light on how Jeddah's population evaluates the city's play



environments. The factors that might be responsible for them can only be speculated upon from the present study and further research remains to be done for a full understanding to develop. However, some general factors can be discussed now. First, to the average lay person, Jeddah's play areas are fair if not good. However, once a person is exposed to better play areas this view may change to a more negative view of the situation. Professionals, or those involved with provision and design of play areas, are much less satisfied with the situation. This is evident because 53% of parents (N=141) viewed play areas positively as did an amazing 80% of school children (N=121), whilst 51% of professional planners/designers and students of environmental design (N=41) viewed the situation of play areas in Jeddah negatively. This difference in opinion or evaluation could be due to the greater knowledge professionals and students have of the factors affecting the environment and hence their evaluation is indicative of the situation. On the other hand their dissatisfaction with the existing play environments could be due to discontent with environmental planning and design practices in general. Planning officials were very neutral in their responses, with almost equal percentages in the positive, neutral, and negative views. This is perhaps understandable, for if they were of the negative opinion it would mean self incrimination for the situation. Another conclusion could be that the general public are not very well educated in the field of environmental design. In other words, the public may not understand the many aspects that can lead to a better environment in general and a better play environment in particular. This lack of knowledge may lead them to be more satisfied with the situation than those who "know better". However, general education seems to play a role in people's non acceptance of the present situation, but this cannot be backed with solid evidence.



### VII.C.ii. The Evaluation of The Immediate Neighbourhood Play Areas

As part of the evaluation of Jeddah's play areas, parents and school children were then asked to evaluate their neighbourhood play areas. The result of this question was that both parents and children were not satisfied with their neighbourhood play environments, although parents were less satisfied than were the children (See Diagram VII.C.ii.1)

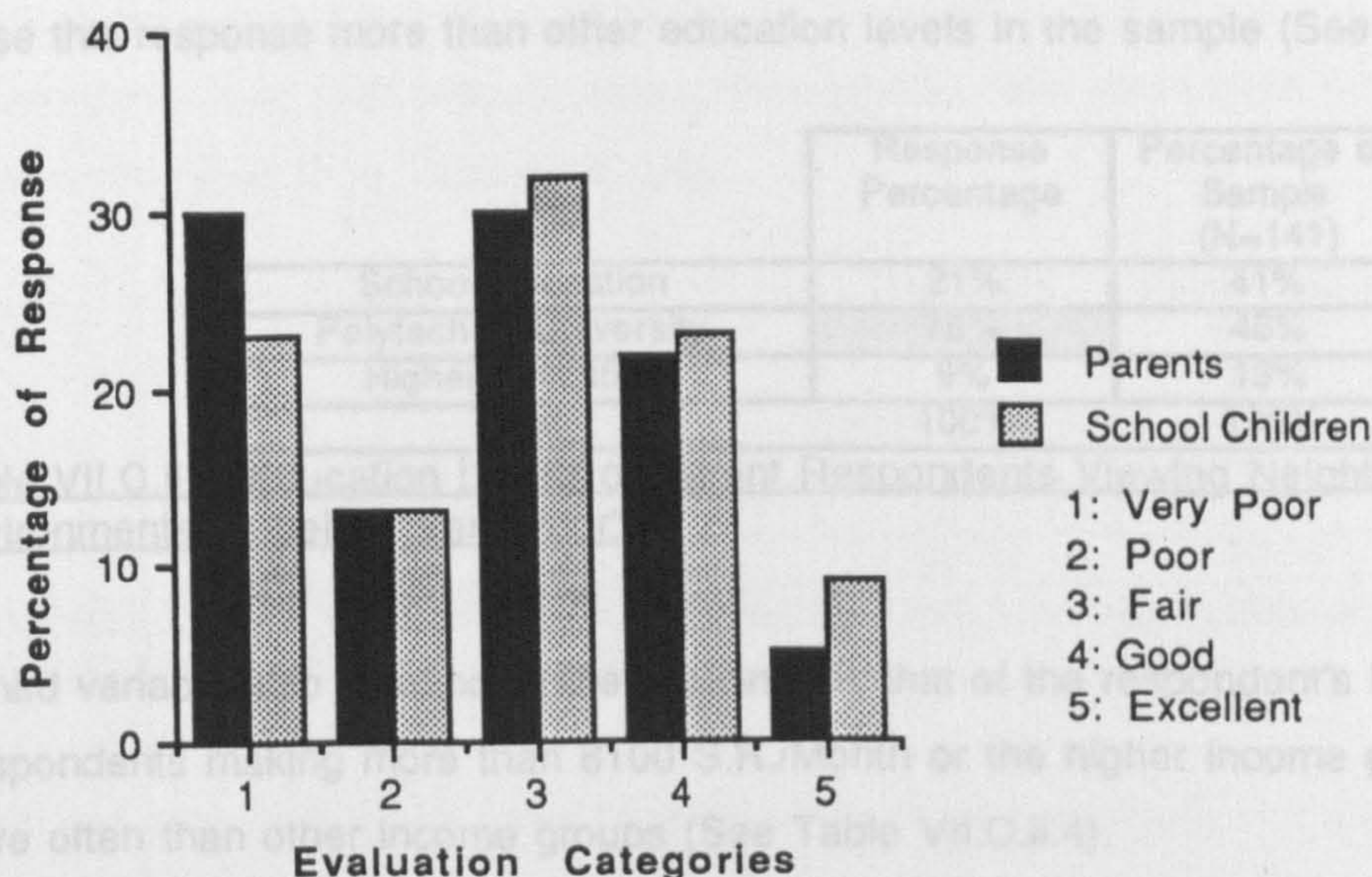


Diagram VII.C.ii.1. Parents' and School Children's Evaluation of Neighbourhood Play Areas

A comparison between the responses of children and parents (See Diagram VII.C.ii.1) reveals some interesting findings. The parent's responses were mixed, the majority of parents (43% N=141) viewed their neighbourhood play areas as being poor or very poor. A further 30% saw the play environments in their neighbourhood as being "fair". Finally, only 27% of the parents asked viewed their neighbourhood play areas as being good or excellent. Among the school children in the sample, 36% (N=121) viewed their neighbourhood play areas as being poor or very poor. Another 32% viewed them as being "fair", and the remaining 32% viewed them favourably. The children's responses were independent of any variable affects. On the other hand, the parent's responses were dependant on some variables. In the "very poor" response category, some variables do seem to affect it. Firstly, the Nationality of the respondents is significant. Saudi nationals seemed to be more dissatisfied with the neighbourhood play areas than Arab nationals (See Table VII.C.ii.2).



	Response Percentage	Percentage of Sample (N=141)
Saudi	77%	52%
Arab	23%	48%
Total	100%	100%

**Table VII.C.ii.2. Nationality of Parent Respondents Viewing Neighbourhood Play Environments as being "Very Poor"**

**Table VII.C.ii.3. Education Levels of Parent Respondents Viewing Neighbourhood Play Environments as being "Very Poor"**

Another variable that the "very poor" response is dependant on is that of the respondent's education level. It seems that people holding a first degree (i.e. polytechnic or university) chose this response more than other education levels in the sample (See Table VII.C.ii.3).

	Response Percentage	Percentage of Sample (N=141)
School Education	21%	41%
Polytechnic/University	70%	46%
Higher Education	9%	13%
Total	100%	100%

**Table VII.C.ii.3. Education Levels of Parent Respondents Viewing Neighbourhood Play Environments as being "Very Poor"**

**Table VII.C.ii.4. Income Levels of Parent Respondents Viewing Neighbourhood Play Environments as being "Very Poor"**

A third variable also influencing the response is that of the respondent's income level.

Respondents making more than 8100 S.R./Month or the higher income groups chose it more often than other income groups (See Table VII.C.ii.4).

	Response Percentage	Percentage of Sample (N=141)
2500 S.R./Month or Less	0%	16.5%
2600-5000 S.R./Month	24%	23%
5100-8000 S.R./Month	26%	23%
8100-12000 S.R./Month	37%	26.5%
More than 12000 S.R./Month	13%	11%
Total	100%	100%

**Table VII.C.ii.4. Income Levels of Parent Respondents Viewing Neighbourhood Play Environments as being "Very Poor"**

**Table VII.C.ii.5. Residential Unit Types of Parent Respondents Viewing Neighbourhood Play Environments as being "Very Poor"**

Furthermore, the type of residential unit in which the respondent lives seems to affect the respondent's choice of the "very poor" category. From European and American studies, it was expected that people living in high rise flats (more than five storeys high) might be the most dissatisfied. Indeed, Coleman (1985) strongly recommends that high rise flats should no longer be built. However, the result of the survey shows that the opposite is true. The people residing in flats in buildings of two storeys and those residing in villas or detached housing unit types were the ones that most rated their neighbourhood play areas as being very poor (See Table VII.C.ii.5).

**Table VII.C.ii.5. Residential Unit Types of Parent Respondents Viewing Neighbourhood Play Environments as being "Very Poor"**



	Response Percentage	Percentage of Sample (N=141)
Villa-Detached	33%	27%
Flat in 2 Storey Building	29%	20%
Flat in 3-5 Storey Building	36%	41%
Flat in a Building of More Than 5 Storeys	2%	12%
Total	100%	100%

Table VII.C.ii.5. Residential Unit Types of Parent Respondents Viewing Neighbourhood Play Environments as being "Very Poor"

The final variable that seems to influence the response is that of tenure type, with those parents that owned their property taking the negative view more often than those having other tenure types (See Table VII.C.ii.6).

	Response Percentage	Percentage of Sample (N=141)
Ownership	56%	39%
Rental	41%	57%
Lease	3%	4%
Total	100%	100%

Table VII.C.ii.6. Tenure Types of Parent Respondent Viewing Neighbourhood Play Environments as being "Very Poor"

As for the other responses given by the parents in their evaluation of their neighbourhood play areas, there were some interesting findings. Those that saw their neighbourhood play environments as being "fair" came mainly from the lowest income group of the population (See Table VII.C.ii.7).

	Response Percentage	Percentage of Sample (N=141)
2500 S.R./Month or less	31%	16.5%
2600-5000 S.R./Month	20%	23%
5100-8000 S.R./Month	11%	23%
8100-12000 S.R./Month	20%	26.5%
More than 12000 S.R./Month	18%	11%
Total	100%	100%

Table VII.C.ii.7. Income Levels of Parent Respondents Viewing Neighbourhood Play Environments as Being "Fair"

For those that viewed their neighbourhood play areas in a positive manner, three variables seem to affect the response. First, the variable of nationality, with Arab nationals viewing the play areas more favourably than Saudis (See Table VII.C.ii.8).

	Response Percentage	Percentage of Sample (N=141)
Saudi	33%	52%
Arab	67%	48%
Total	100%	100%

Table VII.C.ii.8. Nationality of Parent Respondents Viewing Neighbourhood Play Environments as being "Good"



The next variable that the response is dependant upon is that of the respondent's district social class. People residing in the low district social class tended to choose the "good" response more often (See Table VII.C.ii.9).

	Response Percentage	Percentage of Sample (N=141)
Low Class	50%	31%
Middle Class	43%	63%
High Class	7%	6%
Total	100%	100%

Table VII.C.ii.9. District Social Class of Parent Respondents Viewing Neighbourhood Play Environments as being "Good"

The third of the variables that the "good" response seems to be dependant on is that of the respondent's residential unit type. More people in high rise (more than 5 storey buildings) flats chose it than respondents residing in different residential units (See Table VII.C.ii.10).

	Response Percentage	Percentage of Sample (N=141)
Villa-Detached	21%	27%
Flat in 2 Storey Building	7%	20%
Flat in 3-5 Storey Building	41%	41%
Flat in a Building of more than 5 Storeys	31%	12%
Total	100%	100%

Table VII.C.ii.10. Residential Unit Types of Parent Respondents Viewing Neighbourhood Play Environment as being "Good"

### **Comment:**

The evaluation of Jeddah's play environments is multi-dimensional. On the one hand, the general public view Jeddah's play areas/facilities favourably, when asked about the city as a whole. However, this positive view changes to a slightly more negative one when specific neighbourhood areas are under scrutiny. The reasons for this shift may be due to several factors but further research will be necessary for a fuller understanding. One factor could be people's image of Jeddah in that the image they have of Jeddah is not the different components of the city, but rather the city as a whole. This would explain the differences in the responses between the general public and the design and planning professionals or those who are trained to recognise the whole by looking at and/or examining the different component parts. In addition to the trained professionals, people that have been highly educated or have been exposed to other play areas in the world seem to be less satisfied with the situation. Again, the reason could be that they have come to be more perceptive of the situation and evaluate it from a multi-faceted point of view.



The residential unit type is a variable that seems to only affect the neighbourhood evaluation rather than Jeddah's population. The author believes it is not the units themselves that affect the response, but rather the form of the district or neighbourhood. It is in the new grid pattern lay-outs that most villas-detached units and two storey flat buildings are located. The effects of these lay-outs on their occupants will be discussed later when the problems facing or limiting children's play in Jeddah is discussed. Finally, Saudis are more negative in their evaluations than Arab nationals. This might be due to two main reasons. First, Saudis have in the most part been exposed to the Western world more and secondly, Saudis might feel a sense of concern towards their country (city) and hence will always be dissatisfied in order to strive for improvement.



### VII.C.iii. Family Recreation Areas and Best Play Areas in Jeddah

In an effort to further understand the evaluations made by the respondents and the factors that may be involved in reaching such an evaluation, two further questions were asked of the parents (N=141). First, the question of where parents spent their free time with their families for recreation to provide an idea of their use of the different facilities available. Second, both parents (N=141) and school children (N=121) were requested to give five play or recreational areas that they thought were the best in Jeddah.

The question of where parents spent their family recreation showed that families visited friends and other family as a means of recreating most of the time. Their second choice for family outings was that of paying a visit to the Cornice (See Chapter IV). The third choice was to go to a shopping centre or a commercial area. The importance of visiting friends and family and going to shopping centres or commercial areas held true to all the population with no variable affecting these responses. However, the Cornice response was dependant on the income level of the respondent, with more people from the lower-middle income groups (2600-5000 S.R./Month) choosing it than other income groups (See Table VII.C.iii.1).

	Response Percentage	Percentage of Sample (N=141)
2500 S.R./Month or less	13%	16.5%
2600-5000 S.R./Month	31%	23%
5100-8000 S.R./Month	22%	23%
8100-12000 S.R./Month	27%	26.5%
More than 12000 S.R./Month	7%	11%
Total	100%	100%

Table VII.C.iii.1. Parents Choosing the Cornice as a Family Recreation Destination Income Levels

The second enquiry dealt with the best play areas or facilities in Jeddah. This finding confirms that the Cornice is in fact the sole recreational area in Jeddah which caters for the different play activities of adults and children. For this question, both parents (N=141) and children (N=121) were asked to state the best five play areas/facilities in Jeddah. For the parents, the first choice was the Cornice, followed by parks/neighbourhood play areas/neighbourhood open spaces and amusement parks respectively. However the choice of the Cornice was once again dependant on the variable of income level whereas the other responses were independent of any variable affects. For the parents who thought the Cornice provided the best play area in Jeddah, their income level was of high-low income or low-middle income levels (2600-5000 S.R./Month) (See Table VII.C.iii.2).



	Response Percentage	Percentage of Sample (N=141)
2500 S.R./Month or less	13%	16.5%
2600-5000 S.R./Month	29%	23%
5100-8000 S.R./Month	21%	23%
8100-12000 S.R./Month	28%	26.5%
More than 12000 S.R./Month	9%	11%
Total	100%	100%

**Table VII.C.iii.2. Parents Choosing the Cornice as the Best Play Area/Environment in Jeddah Income Levels**

Children had almost the same response to the question as parents, although the order of the responses varies a little. The school children thought that the amusement parks were the best play areas/facilities in Jeddah, followed by the Cornice, sports/health clubs, and public parks and/or neighbourhood open play areas respectively. Only the response of "public parks/neighbourhood open spaces" was independent of any variables. However, the choice of amusement parks was very much dependant on the sex of the child, with over 60% of those choosing it being females (See Table VII.C.iii.3).

	Response Percentage	Percentage of Sample (N=121)
Male	39%	56%
Female	61%	44%
Total	100%	100%

**Table VII.C.iii.3. The Gender of School Children viewing Amusement Parks as the Best Play Areas/Facilities in Jeddah**

The response that the best play area/facility in Jeddah was the Cornice is also dependant on a variable, that of age of the respondent. Older teenagers chose it more often than other age groups (See Table VII.C.iii.4)

	Response Percentage	Percentage of Sample (N=121)
Less than 10 Years Old	4%	2%
10-14 Years Old	38%	50%
15-19 Years Old	55%	45%
20-24 Years Old	3%	3%
Total	100%	100%

**Table VII.C.iii.4. The Age of School Children viewing The Cornice as the Best Play Area/Facility in Jeddah**

The "health/sports clubs" response was dependant on sex, with males almost exclusively choosing it than females (See Table VII.C.iii.5).

	Response Percentage	Percentage of Sample (N=121)
Male	83%	56%
Female	17%	44%
Total	100%	100%

**Table VII.C.iii.5. The Gender of School Children viewing Sports/Health Clubs as being the Best Play Areas/Facilities in Jeddah**



**Comment:**

The responses of parents and school children to the two questions can be readily understood in the light of Jeddah's current play provisions. The Cornice is the only area in Jeddah designated specifically as a recreational area. As a result, it scores highly as the place for family outings and also ranks very highly with both parents and children as the best available at the present time. When one also realises that most, if not all, the amusement parks of Jeddah are located on the Cornice, one comes to realise how important the Cornice is for Jeddah's recreational and play purposes (See Chapter IV). As for the parent's choice of a shopping centre or commercial areas as a place for family recreation, this is a very interesting finding. However, when one considers that most shopping centres in Jeddah provide, as a means of attracting customers, play areas and equipment, the response becomes less surprising (See Chapter IV). In addition, these play areas for the most part are located indoors with air-conditioning (in contrast to outdoor play spaces which seldom cater for extremes in Jeddah's climate) hence, the response becomes very understandable.

The facts that were gathered in this survey thus far indicate several realities that are noteworthy. To begin with, the Cornice is Jeddah's recreational and play "life line". The remainder of the city, as seen by the majority of those surveyed, has little to offer in terms of play and recreation. There are some who have said that their neighbourhood open spaces offer good play areas. It is sad to disappoint these people, but most of these spaces will not be there for long for most are undeveloped lots of land and when they are developed, the neighbourhood kick-about will disappear. As for the child respondents, their choices very much echo that of the parents with the exception of the health/sports clubs. This response and facility, however, is almost totally limited to boys as the girls are not provided with public sponsored clubs at all. This is due, in the main, to the cultural pressure or beliefs held by the majority of people. However, both parents and young girls are demanding that the situation to be changed as exemplified by the following statements taken from the questionnaires:

There are no proper play areas in Jeddah to speak of! Parks are not designed, they are just planted areas. Neighbourhoods have no areas where children can play, and if there is it is usually very far away. Further, boys get much better recreational opportunities than do girls. For most girls with free time "nothing" is all they can do. (Parent No.112, Male, 45-49 years old, Saudi national)

There are no clubs for girls anywhere. The amusement parks are always crowded and expensive. We girls are very restricted in movement, we must wait until our fathers have time to take us and they are busy most of the times. (Young No.066, Female, 10-14 years old)



Hence it is reasonable to conclude that the play areas/environments in Jeddah as viewed by the population are very poor for girls and young ladies. With the exception of some scattered play facilities (such as those found in shopping centres) and the Cornice, Jeddah's play environments for them are non-existent.

#### **VII.D. The Everyday Play Experience in Jeddah**

In the third section of the survey an attempt was made to gather some information regarding the day to day play of Jeddah. In other words, the every day play of youngsters as opposed to special outings designed for recreation. The every day play of children and what affects it, where it occurs, when it occurs, and so on, is the main concern of this section. For this part of the survey, most of the questions were directed at the two groups that would render the most beneficial information to the survey: the parents and school children. In addition, some comparisons between the play of the present generation and the previous generation will be made. The first question to be dealt with is that of children's outdoor play. Do children play outdoors in their normal day to day life in Jeddah? If they do, how often and when (time of day) does it occur?

##### **VII.D.I. Frequency of Outdoor Play and Its Limitations**

The question of the frequency of outdoor play or how often did children in Jeddah usually play outdoors was answered by both parents and children. The response from both groups was that outdoor play in Jeddah occurred in the most part at weekends and/or school holidays and on special occasions or never. However, the responses differed according to the sex of the child. For the parents describing the play of their male children, the weekends/school holidays response scored the highest, followed by "never". There was only one variable that made an impact on the weekend/school holiday response, that of nationality, with more Arab nationals choosing it than Saudis. As for the females, the parents almost unanimously chose the "never" response, followed by the weekend/school holidays response, with no variables affecting the responses at all (See Diagram VII.D.I.1).



Young men chose it more often than did the young ladies (See Table VII.D.1.1)

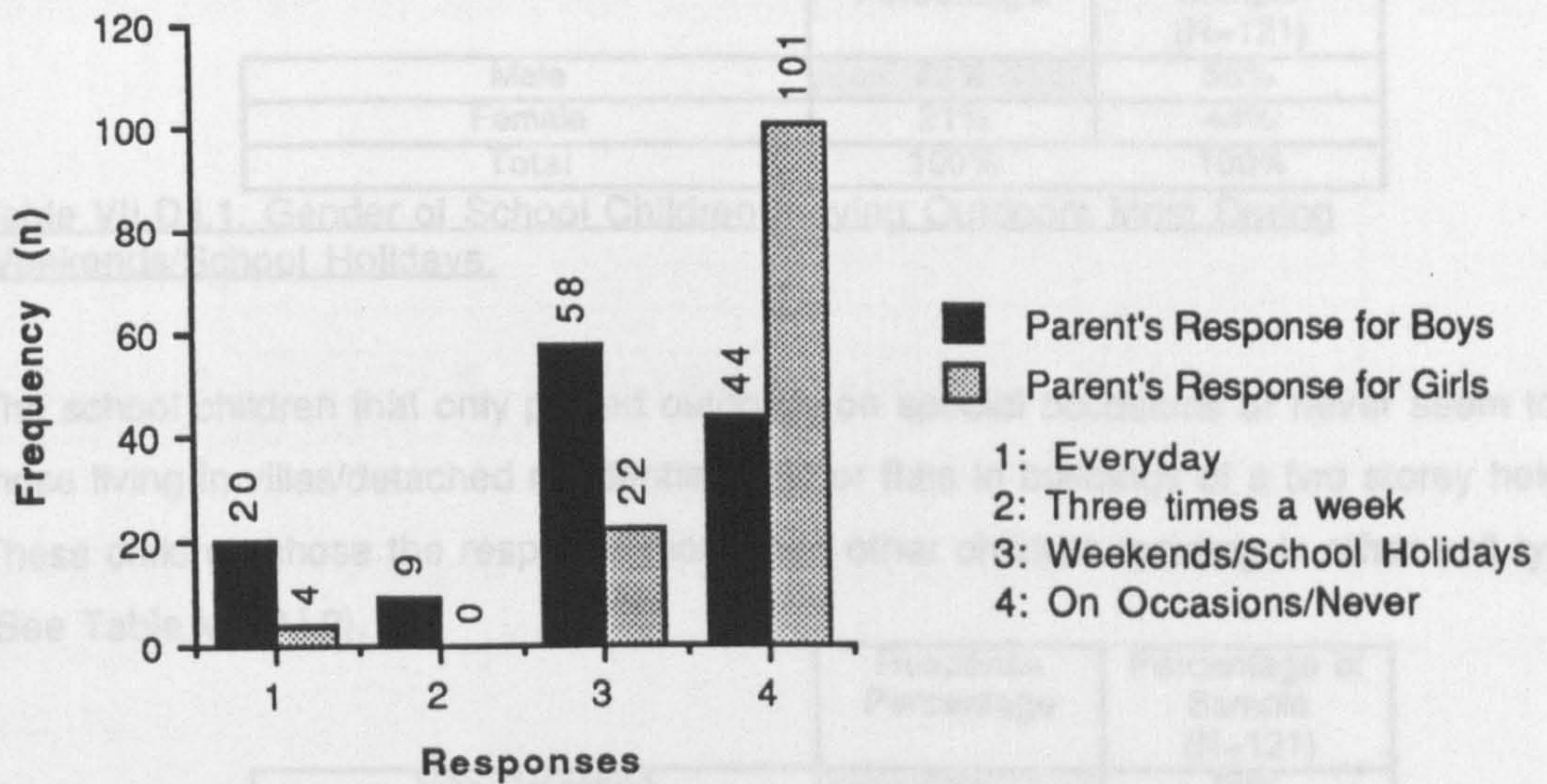


Diagram VII.D.i.1. Frequency of Outdoor Play of Children of Both Genders According to Their Parents.

While the response of the children very much reflects the response of the parents, there are some differences. For the children, the weekend/school holiday was the response most chosen, with the on occasions/never response following (See Diagram VII.D.i.2).

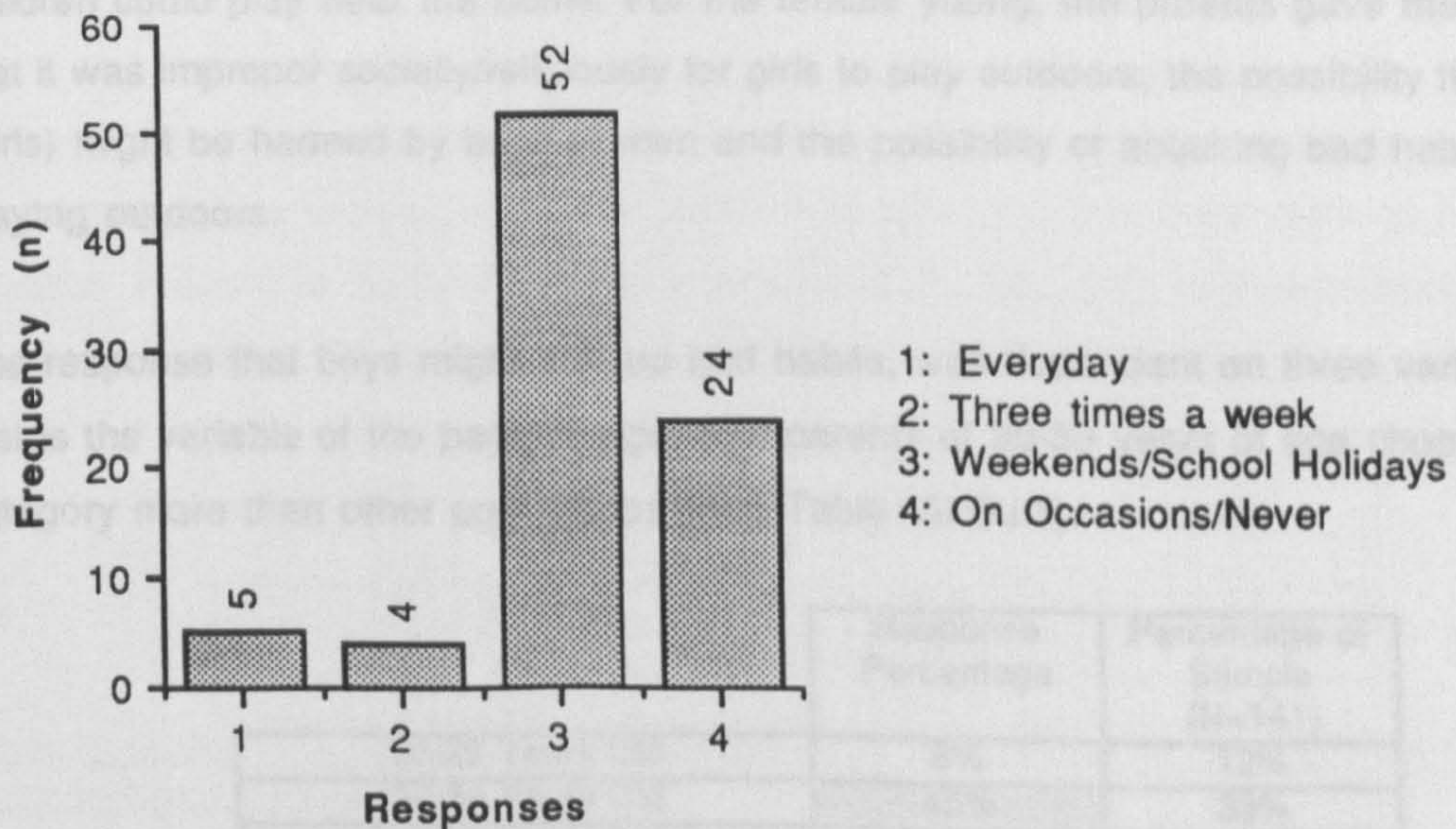


Diagram VII.D.i.2. Frequency of Outdoor Play According to School Children

The response of weekends/school holidays was dependant on one variable, gender.



Young men chose it more often than did the young ladies (See Table VII.D.i.1).

	Response Percentage	Percentage of Sample (N=121)
Male	79%	56%
Female	21%	44%
Total	100%	100%

Table VII.D.i.1. Gender of School Children Playing Outdoors Most During Weekends/School Holidays.

The school children that only played outdoors on special occasions or never seem to be those living in villas/detached residential units or flats in buildings of a two storey height. These children chose the response more than other children residing in other unit types (See Table VII.D.i.2).

	Response Percentage	Percentage of Sample (N=121)
Villa-Detached	58%	36%
Flat in 2 Storey Building	25%	22%
Flat in a Building of 3 Storeys or More	17%	42%
Total	100%	100%

Table VII.D.i.2. Residential Unit Types of School Children Playing Outdoors on Occasions or Never

To get a better understanding of the factors influencing the occurrence (i.e. general lack of it) of outdoor play for children, both the parents and the school children were asked to give reasons. The parents view was different for the sexes. For the male young, the reasons given by parents were that their children might pick up bad habits from playing outdoors, the dangers of automobiles and the lack of proper or suitable play areas in which the children could play near the home. For the female young, the parents gave the reasons that it was improper socially/religiously for girls to play outdoors, the possibility that they (girls) might be harmed by boys or men and the possibility of acquiring bad habits from playing outdoors.

The response that boys might pick up bad habits, was dependant on three variables. The first is the variable of the parent's age, with parents of 30-39 years of age choosing this category more than other age groups (See Table VII.D.i.3).

	Response Percentage	Percentage of Sample (N=141)
20-29 Years Old	8%	12%
30-39 Years Old	46%	33%
40-49 Years Old	36%	44%
50-59 Years Old	10%	9%
60 Years Old or More	0%	2%
Total	100%	100%

Table VII.D.i.3. Age of Parents Viewing Outdoor Play as an Activity aiding in The Acquisition of Bad Habits by Boys



The second variable to influence the response is that of nationality, with more Saudis thinking outdoor play was aiding their boys in acquiring bad habits (See Table VII.D.i.4).

	Response Percentage	Percentage of Sample (N=141)
Saudi	63%	52%
Arab	37%	48%
Total	100%	100%

**Table VII.D.i.4. Nationality of Parents Viewing Outdoor Play as an Activity aiding in The Acquisition of Bad Habits by Boys**

The third variable to influence this response is that of income level. Parents of middle income (5100-8000 S.R./Month) chose it more than other income groups (See Table VII.D.i.5).

	Response Percentage	Percentage of Sample (N=141)
2500 S.R./Month or Less	7%	16.5%
2600-5000 S.R./Month	27%	23%
5100-8000 S.R./Month	32%	23%
8100-12000 S.R./Month	17%	26.5%
More than 12000 S.R./Month	17%	11%
Total	100%	100%

**Table VII.D.i.5. Income Levels of Parents Viewing Outdoor Play as an Activity aiding in The Acquisition of Bad Habits by Boys**

Hence, a preliminary conclusion could be that the fear that parents have about their boys acquiring bad habits is primarily associated middle income Saudis of the age of 30-39 years old (young parents). The conclusion will be discussed later in detail.

The second response that parents saw as limiting the boys' outdoor activities/play was the danger that automobiles posed to the boys. This response was dependant on three variables. The first is the nationality of the respondent, with Arab nationals choosing it more than Saudis (See Table VII.D.i.6).

	Response Percentage	Percentage of Sample (N=141)
Saudi	36%	52%
Arab	64%	48%
Total	100%	100%

**Table VII.D.i.6. Nationality of Parents Viewing The Dangers of Automobiles as the Limiting Factor to Boys' Outdoor Play**

Another variable influencing this response was that of the social class of the district in which the respondent resided in. Middle class district residents chose it a lot more than other district social classes (See Table VII.D.i.7).



	Response Percentage	Percentage of Sample (N=141)
Low	15%	31%
Middle	79%	63%
High	6%	6%
Total	100%	100%

**Table VII.D.i.7. District Social Class of Parents Viewing The Dangers of Automobiles as the Limiting Factor to Boys' Outdoor Play**

The third variable to have an effect on the response is that of residential unit type of the respondent. More parents residing in villas or detached units chose the response as a limiting factor than other residential unit types (See Table VII.D.i.8).

	Response Percentage	Percentage of Sample (N=141)
Villa-Detached	42%	27%
Flat in 2 Storey Building	21%	20%
Flat in 3-5 Storey Building	35%	41%
Flat in a Building of More than 5 Storeys	2%	12%
Total	100%	100%

**Table VII.D.i.8. Residential Unit Types of Parents Viewing The Dangers of Automobiles as the Limiting Factor to Boys' Outdoor Play**

Hence, parents who viewed the dangers posed by automobiles are mainly those residing in villas/detached units, in middle social class districts and mainly Arab rather than Saudi origin.

The parents response that the limiting factor to boys' outdoor play was that there were no proper play areas near the home was dependent on two variables. The first of these was nationality, with more Saudis choosing it more than Arab nationals (See Table VII.D.i.9).

	Response Percentage	Percentage of Sample (N=141)
Saudi	65%	52%
Arab	35%	48%
Total	100%	100%

**Table VII.D.i.9. Nationality of Parents Viewing The Lack of Proper Play Areas as the Limiting Factor to Boys' Outdoor Play**

The second variable that seems to affect the response is that of the respondent's residential district social class. With people residing in middle class districts choosing it a great deal more often than other districts (See Table VII.D.i.10).



	Response Percentage	Percentage of Sample (N=141)
Low	17%	31%
Middle	80%	63%
High	3%	6%
Total	100%	100%

Table VII.D.i.10. District Social Class of Parents Viewing The Lack of Proper Play Areas as the Limiting Factor to Boys' Outdoor Play

As for the parents views on the limiting factors to girls' outdoor play, the responses gave a great deal of insight into some of the problems or perceived problems in Jeddah's society. The response that the majority of parents gave as limiting their daughters from playing outdoors was that it was improper socially or religiously for girls to play outdoors. This response was not affected by any variable. The other responses, that boys and/or men may harm the girls if they played outdoors, and the fear that the girls might possibly pick up bad habits from playing outdoors are also independent of any variables.

The young respondents were also asked to give some of the reasons preventing them from playing outdoors. The responses were slightly different from those the parents gave. The young respondents' primary reason for not playing outdoors was they had little time to do so. This response was chosen more by boys than girls (See Table VII.D.i.11).

	Response Percentage	Percentage of Sample (N=121)
Male	76%	56%
Female	24%	44%
Total	100%	100%

Table VII.D.i.11. Gender of School Children Viewing the Lack of Time they have as the Limiting Factor to Outdoor Play

The second reason offered by the school children was that there were no proper play areas near the home in which they could play. This response was independent of any variables and held true for the sample. The third ranking response was that it was improper socially or religiously to play outdoors. As might be expected, this view was taken more by girls than boys (See Table VII.D.i.12).

	Response Percentage	Percentage of Sample (N=121)
Male	33%	56%
Female	67%	44%
Total	100%	100%

Table VII.D.i.12. Gender of School Children Viewing Outdoor Play as Improper Socially/Religiously

The response was also dependent on another variable, namely that of residential unit type. More school children residing in flats in buildings of more than three storeys chose it



than other respondents (See Table VII.D.i.13).

	Response Percentage	Percentage of Sample (N=121)
Villa-Detached	33%	36%
Flat in 2 Storey Building	6%	22%
Flat in a Building of 3 Storeys or More	61%	42%
Total	100%	100%

**Table VII.D.i.13. Residential Unit Types of School Children Viewing Outdoor Play as Improper Socially/Religiously**

### **Comment:**

The daily outdoor play of children in Jeddah is a complex issue. The amount of outdoor play that does occur is very little, occurring on weekends or never for boys and almost never for girls. The reasons that parents gave indicate many things to the person not familiar with the situation in Jeddah. The fear that children may pick up bad habits from playing outdoors and the possibility of boys and men harming girls indicates the rapid change in the society. Urban life and the problems that seem to accompany it (crime, violence, drugs, etc.) are still for the most part a novelty to the society. It would therefore appear to be that the fear of the unknown is what drives people. This fear is especially strong when it comes to girls' outdoor play which is to be expected due to the social and religious factors that exist in the society, but is probably also due to the newness of much of Jeddah. Its speed of growth in the recent past means neighbourhoods have not yet settled and formed.

Although the fear factor is a significant issue to be dealt with, it is not the only factor limiting the outdoor play of children. The fact still remains that there are no proper and accessible environments within local neighbourhoods for the children to practice their right to play. The automobile is the dominant feature in the layouts of Jeddah's districts for the most part, with pedestrians ignored in the designs (See Chapter IV). This is very evident from the fact that the response that automobiles were the factor limiting children's outdoor play was dependant on the two variables of the district social class and type of residential unit. The people that were most likely to view this as a limiting factor to outdoor play resided in the main in villas/detached units in middle class districts. Here the car is favoured and grid layouts for neighbourhoods/districts have been laid out to speed the progress and access of the car.

The lack of play areas in neighbourhoods is a major problem in all of Jeddah. The people that did see it to be a problem were predominantly Saudis and people residing in districts of middle class. This might be due to the Saudis interest in achieving an improvement and



to the fact that the middle-class districts of Jeddah are laid out to favour the automobiles and do not accommodate many outdoor spaces beyond the garden/yard, (except streets and inaccessible spaces that are a result of street layout).

The children's responses very much echo that of their parents which indicates the reality of the problems that do exist. The situation is especially poor for girls. The social constraints should not be an excuse for ignoring them, but rather should be looked upon as a challenge to provide for them in difficult and different circumstances. The one response of the children that did not reflect the parents' responses was that of the lack of time that the young people, especially boys, had to play. This response might be a bit exaggerated due to the timing that the survey was carried out. For practical reasons the researcher had to complete the survey during a time when most school children/students were preparing for mid-year examinations. Hence, they might have felt they had little time to play at that time, which might not have been the case during other times.

The religious/social inappropriateness that is attached to girls' outdoor play is understandably being passed on from one generation (parents) to the next (offspring). In that sense it follows that girls whose social status encourages stronger family ties feel stronger about it. However, the dependence of the response on residential unit type may seem strange. Children residing in flats in buildings of three storeys or more chose this response more often than other young people residing in different units. This could be due to two reasons. Firstly, it is safe to assume the area in which this group of children live is highly dense and as such, is most probably a low income area. If these assumptions are correct then it is understandable, for lower income groups tend in the Saudi society to be stricter in their religious beliefs and actions. The second reason could be that these lower income people aspire to middle class values, and it is a very middle class attitude or value that children playing outdoors are only to pick up bad habits. This attitude would have probably been passed on from the parents to the young.

#### **VII.D.ii. Places of Outdoor Play**

If there are no organised or designed places for the young to play in, then where do they play? This question was posed to both children and parents. The response of parents and children varied slightly. This variation will be discussed after a review of the responses of both groups and the variables that affected the responses.

The parents' responses were that their young boys usually played in vacant lots of land near the home, in the garden/open space of the building, near the building entrance and the roof of the building respectively. For the daughters, the parents said that they played usually on the roof of the building and the garden/open space of the building (See



Diagram VII.D.ii.1).

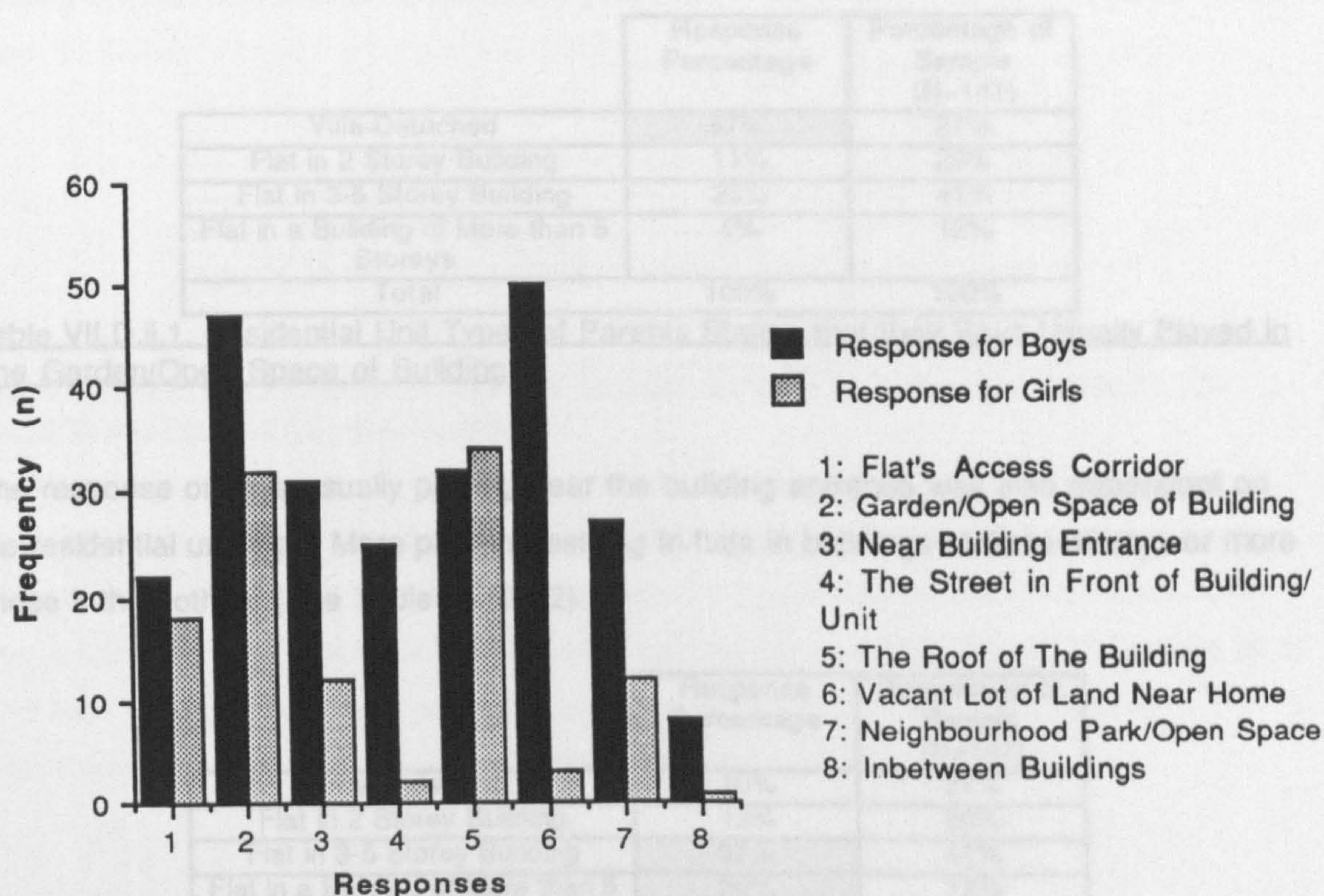


Diagram VII.D.ii.1. Places Children Usually Played According to Parents

The responses the parents gave to the places where their children played were dependant on a number of variables. For convenience the responses given to where boys played will be discussed first, followed by the responses of where girls played.

The response that boys played in vacant lots of land near the home, was independent of all variables and held true for the whole sample. As for the garden/building open space response, it was dependant on four variables. However, the variable that seems to be the crucial one is that of residential unit type. The other three variables are in many ways just reinforcing elements to this in that they are mutually dependant. For example, one would not have a garage if one did not have a car. Hence, the three variables of nationality, district social class, and income level are supporting the variable of residential unit type. People residing in villas/detached units chose this response more often than people residing in other unit types (See Table VII.D.ii.1). The dependency is an expected one for it seems logical that if one had a private open space, the children will use it for their play activities.



	Response Percentage	Percentage of Sample (N=141)
Villa-Detached	57%	27%
Flat in 2 Storey Building	11%	20%
Flat in 3-5 Storey Building	28%	41%
Flat in a Building of More than 5 Storeys	4%	12%
Total	100%	100%

Table VII.D.ii.1. Residential Unit Types of Parents Stating that their Boys Usually Played in The Garden/Open Space of Building

The response of boys usually playing near the building entrance was also dependant on the residential unit type. More parents residing in flats in buildings of three storeys or more chose it than others (See Table VII.D.ii.2).

	Response Percentage	Percentage of Sample (N=141)
Villa-Detached	10%	27%
Flat in 2 Storey Building	13%	20%
Flat in 3-5 Storey Building	57%	41%
Flat in a Building of More than 5 Storeys	20%	12%
Total	100%	100%

Table VII.D.ii.2. Residential Unit Types of Parents Stating that their Boys Usually Played Near The Building Entrance

The fourth response that boys usually played on the roof of the building was dependant on the income level of the household. People in the middle of the income spectrum chose it, while the extremes did not. The significant changes in the percentages are in those households making 2600-5000 S.R./Month and 8100-12000 S.R./Month (See Table VII.D.ii.3).

	Response Percentage	Percentage of Sample (N=141)
2500 S.R./Month or Less	0%	16.5%
2600-5000 S.R./Month	35%	23%
5100-8000 S.R./Month	27%	23%
8100-12000 S.R./Month	38%	26.5%
More than 12000 S.R./Month	0%	11%
Total	100%	100%

Table VII.D.ii.3. Income Levels of Parents Stating that their Boys Usually Played on The Roof of The Building

As for the girls, parents responses were limited to two that could be analysed. The first is that girls usually played on the roof of the building. This response was independent of all variables. The second response was that girls played in the garden/open space of the building and this response was dependant on four variables. However, as was the case



before the most important of the variables is that of the residential unit type. Where people residing in villas-detached units chose the response more often than other unit types (See Table VII.D.ii.4).

	Response Percentage	Percentage of Sample (N=141)
Villa-Detached	61%	27%
Flat in 2 Storey Building	13%	20%
Flat in 3-5 Storey Building	23%	41%
Flat in a Building More than 5 Storeys	3%	12%
Total	100%	100%

Table VII.D.ii.4. Residential Unit Types of Parents Stating that their Girls Played in The Garden/Building Open Space Usually

When the children were asked where they usually played outdoors, the responses were different from those of parents. Possible reasons for these differences will be discussed after a review of the responses. The children said that they usually played in a vacant lot of land near the home, on the Cornice/beach, garden/roof/private open space, and amusement parks respectively (See Diagram VII.D.ii.2).

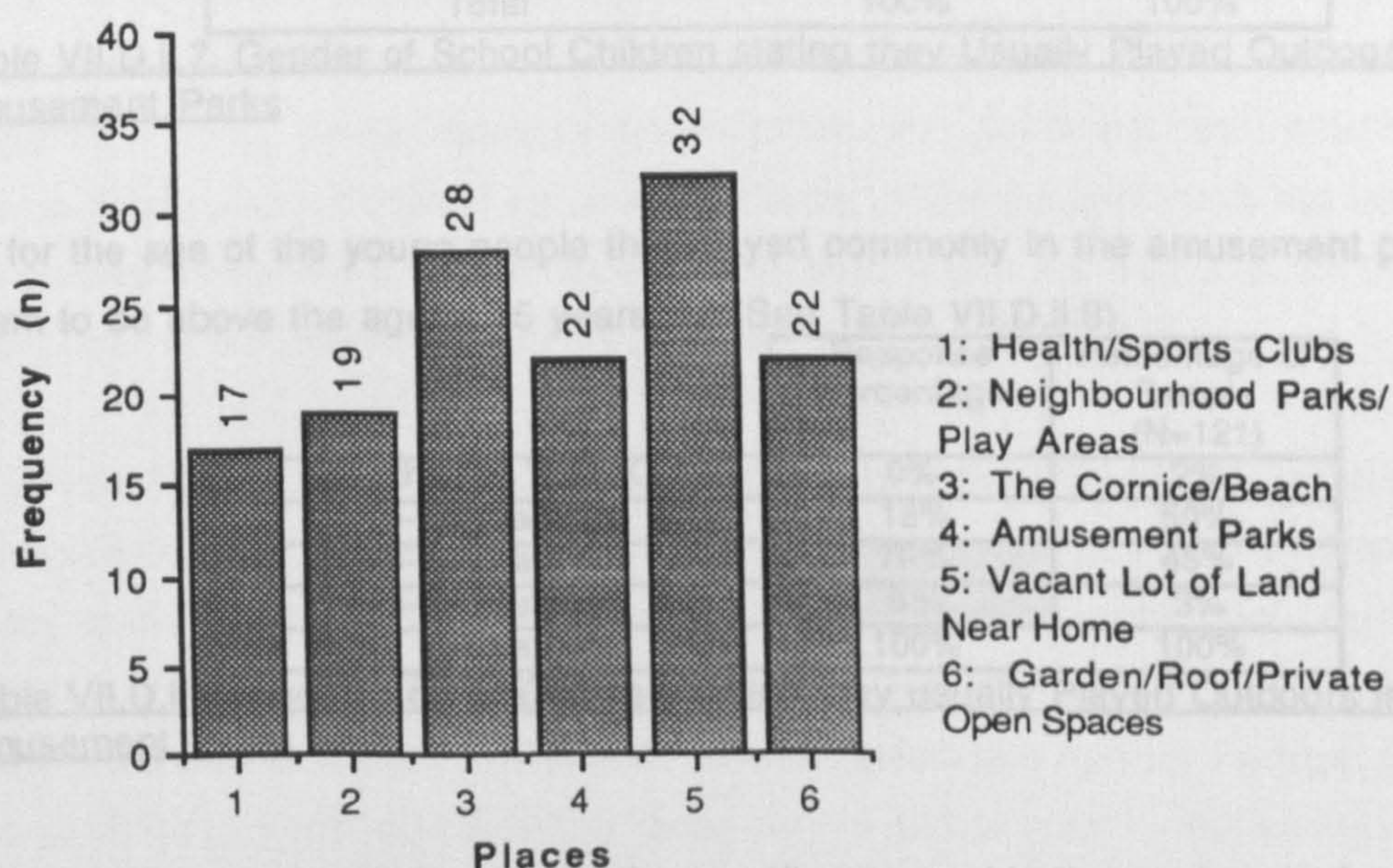


Diagram VII.D.ii.2. Places School Children said they Played Usually

The responses stated above are dependant on a number of variables. The first response that vacant lots of land near the home provided a place for the young to play was dependant on the variable of gender. In that only boys chose it (See Table VII.D.ii.5).

	Response Percentage	Percentage of Sample (N=121)
Male	100%	56%
Female	0%	44%
Total	100%	100%

Table VII.D.ii.5. Gender of School Children Playing Outdoors Usually in a Vacant Lot of Land Near the Home



The second place that school children frequented for their play according to them was that of the Cornice/beaches. This response was also dependant on the gender of the young respondents, with more girls choosing it than boys (See Table VII.D.ii.6).

	Response Percentage	Percentage of Sample (N=121)
Male	46%	56%
Female	54%	44%
Total	100%	100%

Table VII.D.ii.6. Gender of School Children Playing Outdoors Usually in The Cornice/Beaches

The amusement park response seems to be a choice for older girls than other groups. In that it was girls stating that they usually played in these parks rather than boys (See Table VII.D.ii.7)

	Response Percentage	Percentage of Sample (N=121)
Male	41%	56%
Female	59%	44%
Total	100%	100%

Table VII.D.ii.7. Gender of School Children stating they Usually Played Outdoors in Amusement Parks

As for the age of the young people that played commonly in the amusement parks they seem to be above the age of 15 years old (See Table VII.D.ii.8).

	Response Percentage	Percentage of Sample (N=121)
Less than 10 Years Old	0%	2%
10-14 Years Old	18%	50%
15-19 Years Old	79%	45%
20-24 Years Old	5%	3%
Total	100%	100%

Table VII.D.ii.8. Age of School Children stating they usually Played Outdoors in Amusement Parks

Children claiming that their outdoor play usually occurred in the garden, roof or private open space were inevitably mainly those who had access to such spaces. This is made evident from the fact that the response was dependant on the variable of residential unit type. More children living in villas/detached units chose this response than other unit types (See Table VII.D.ii.9).

	Response Percentage	Percentage of Sample (N=121)
Villa-Detached	64%	36%
Flat in a 2 Storey Building	14%	22%
Flat in a Building of 3 Storeys or More	22%	42%
Total	100%	100%

Table VII.D.ii.9. Residential Unit Type of School Children Playing Outdoors Usually in Gardens/Roofs/Private Open Spaces



The response was also dependant on the district social class. However this dependency is to be expected due to the residential unit type dependency. Another variable that may be of significance in later analysis is that children of a younger age opted for this response more than older children (See Table VII.D.ii.10).

	Response Percentage	Percentage of Sample (N=121)
Less than 10 Years Old	0%	2%
10-14 Years Old	86%	50%
15-19 Years Old	14%	45%
20-24 Years Old	0%	3%
Total	100%	100%

**Table VII.D.ii.10. Age of School Children Playing Outdoors Usually in Gardens/Roofs/Private Open Spaces**

### **Comment:**

Thus, the responses of parents and young people varied (with the exception of the responses to the "vacant lot of land" and "gardens, roofs, and private open spaces" response options). These variations are important. The differences are perhaps due to two factors. Firstly, perhaps "play" as an activity holds different meanings to the young and to the parents. Secondly, a fault in the survey method and/or the way in which the question was posed to the population may have caused the variations.

It is evident that while parents view the "usual" play of every day in the same manner as the researcher, i.e. spontaneous activity in a limited frame of time, the children did not. The young of the population viewed play, or an activity that they would name play, more in the light of a structured activity requiring pre-planning. This is evident from the responses, with many more play or recreational specific areas/places being named. Perhaps the spontaneous play that adults see as being play is looked upon by the younger minds as just a normal activity of every day life. The significance of the difference in perceptions concerning play is important for the planner to understand. While older members of the society might only appreciate their children playing in environments that they see suitable, it is important for the planner not to compromise the appeal an environment has to children for the sake of satisfying the adults. A compromise in which environments appeal to children and are acceptable to adults must be the goal of the planner/designer. Furthermore, in the case of Jeddah, more adult education concerning play must be pursued in order to make some of the enjoyable (to children) and unconventional play environments acceptable in the society.

The parents responses to where children played usually indicates the really desperate



situation in Jeddah. The vacant lots of land, which the majority of boys use for their play in Jeddah, will sooner or later be developed, leaving the developed areas of the city with little or no alternatives. While the streets are there they will be, unless they are made more appropriate for pedestrian use (see Chapter III), unsafe asphalt deserts. The question that might be asked is, if money were spent to make the streets of Jeddah more habitable, what is the guarantee it would be used for children's outdoor play? The answer to such a question is a very difficult one, for it is almost impossible, and always has been, to provide definite answers when dealing with people and social behaviour. However, the response that children played near the front of the building entrance was given by those people residing in flats in buildings of three storeys or more. The significance of this dependence is that these units exist mainly in areas of high density in which streets are narrow. As such, vehicular speed in these streets tends to be slower than average and hence could be the reason that parents feel relatively comfortable in allowing their children to play near them. Another argument could be that because of the high density of the areas and/or the net density (the household density) that the parents relieve this density by allowing their children to leave the house for a while.

As for girls, the results reinforce the earlier claims of the appalling situation in which they find themselves. The home is their only domain, whether it be the garden or the roof. Their only play activities seem to be during family outings to the Cornice. Hence, while all children in Jeddah suffer from the lack of "near the home areas for play" for their daily free time, those children without access to gardens or private spaces suffer more. As one parent put it, "I think I am very lucky to have a garden in which my children can play" (Parent No.139, Age, 30-34 Years Old, Female, Saudi), and indeed she is!

#### **VII.D.iii. Parents' Play When Young**

These findings are for the present generation. However the question of whether the places of play in Jeddah have always been the same was also asked to see if there are differences in the play possibilities today in comparison with the past. The parents were asked to supply the answer as to where they played when they were younger. The responses indeed showed there have been some changes. To begin with, the age at which parents would allow their children to play outdoors is different from when the parents themselves were allowed to play outdoors. While the male parents were allowed to play outdoors at an age of 6-10 years old, they will only let their sons play outdoors when they reach the age of 11-15 years old. As for the ladies, parents said that they would never let their daughters play outdoors even though the mothers were allowed to play outdoors at an age of 6-10 years old (See Diagram VII.D.iii.1). These findings could not be explained by one, or even several reasons, for they are a reflection of a complex society evolving from generation to generation. However, one factor that could be influential is the rapid



physical and social changes that occurred in the urban environment since the discovery of oil (See Chapter IV). With the dangers of strangers, cars, different values and cultures and a new set of rules for social contact, the interactions of the society become more and more introverted. One of the results of this inward-looking life style is the limitation of children's range in the environment (See Chapter III).

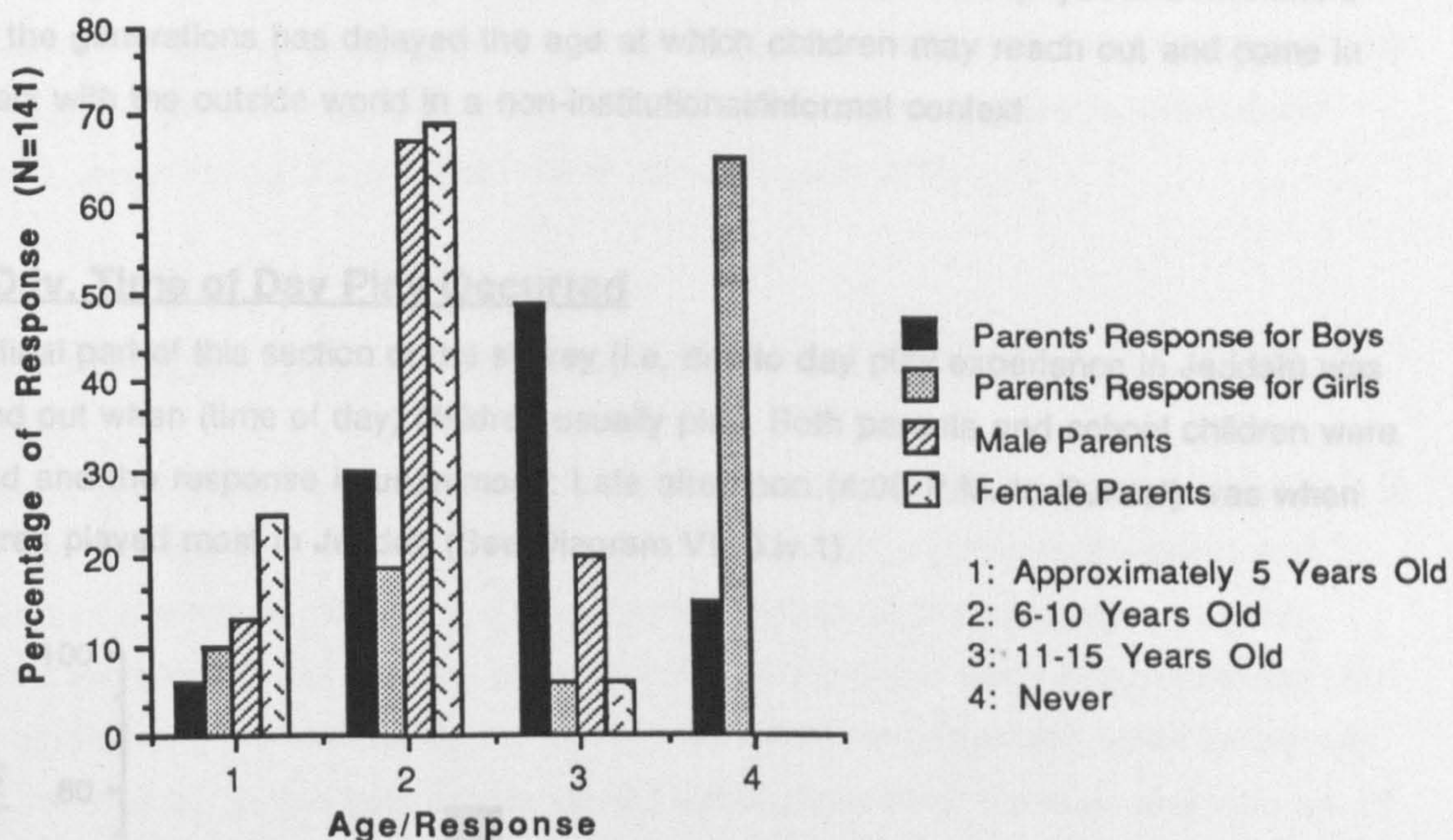


Diagram VII.D.iii.1. Age at Which Permission to Play Outdoors was Granted For Parents (Previous Generation) and Children (Present Generation)

In another measure that was hoped to shed some light on generational differences, parents were asked where they most commonly used to play when they were young. The responses were similar to those of this generation's most frequented play areas. For male parents, the vacant lot of land near the home was the most frequently visited play area, followed by near the entrance to the home/building, and the street respectively. When compared to the places for play of the young boys of today, we come to realise the street today no longer provides the play potential it once did for young boys. As for the female parents, there is really no difference, with both generations playing in the garden, roof, and/or private open spaces. However, the older generation of females when playing on roofs were able to socialise in a way that the younger generation now cannot. This socialisation occurred due to buildings in the old patterns of development being connected, and as such, girls could join their neighbours in their play by simply walking from roof to roof. With the new development pattern and building codes, however, this is impossible (See Chapter IV).

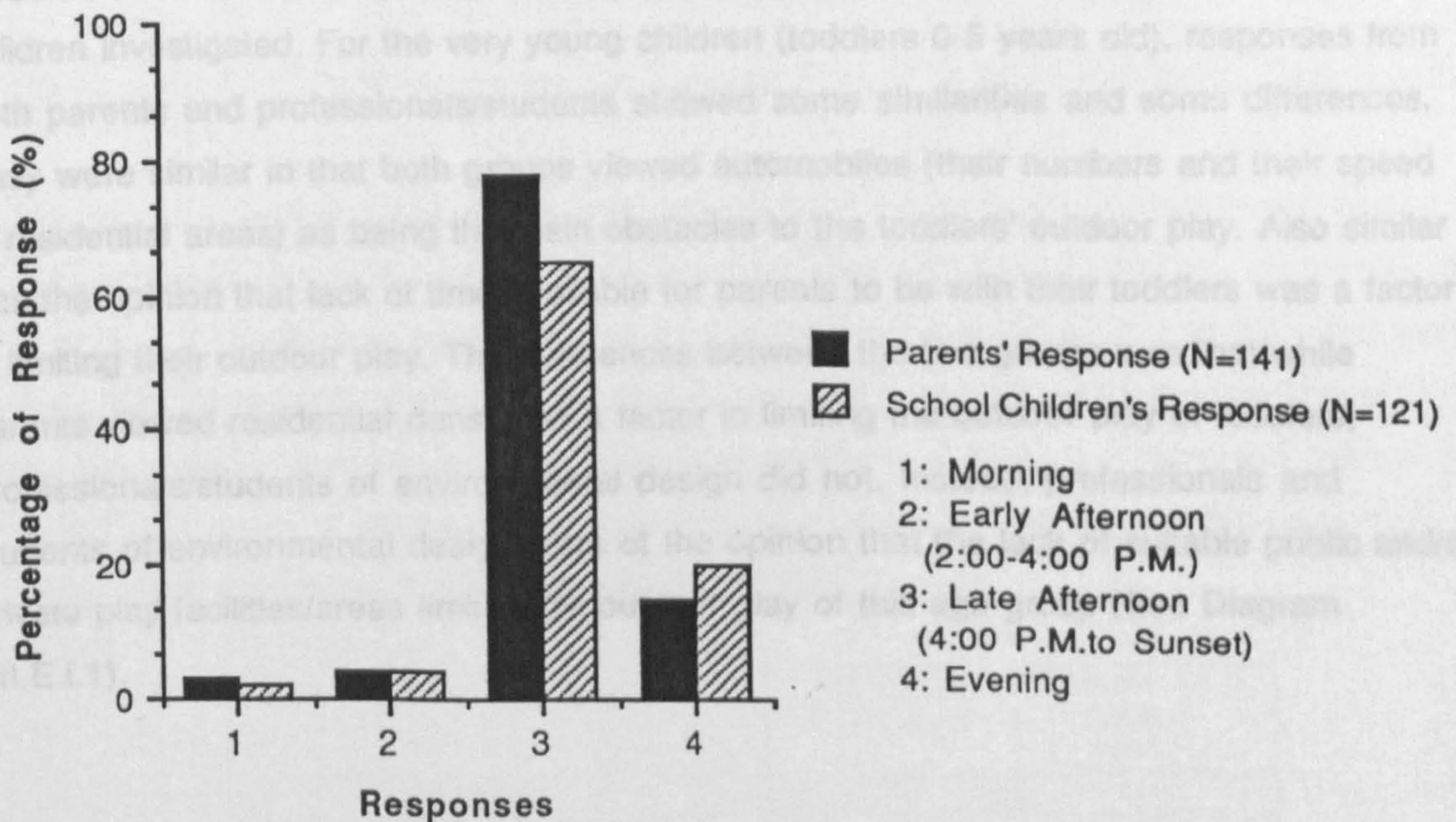
Hence, differences between the generations' play can be seen. More freedom was offered



to the play of the older generation in terms of the places they may practice their spontaneous play activities. Today's generation, on the other hand, are offered more structured play areas that for the majority are a considerable distance from home, and for those areas that are catering for spontaneous/unstructured play, they are constantly decreasing with development and lack some of the qualities (e.g. socialisation) which the older spaces had. Furthermore, the changes in the social and the physical environment over the generations has delayed the age at which children may reach out and come in contact with the outside world in a non-institutional/informal context.

#### **VII.D.iv. Time of Day Play Occurred**

The final part of this section of the survey (i.e. day to day play experience in Jeddah) was to find out when (time of day) children usually play. Both parents and school children were asked and the response is unanimous: Late afternoon (4:00 P.M. to Sunset) was when children played most in Jeddah (See Diagram VII.D.iv.1).



**Diagram VII.D.iv.1. Time of Day Children Usually Played Outdoors**

This response is understandable when one considers the hot climate people in Jeddah have to contend with.



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## **VII.E. Problems Facing Play Areas in Jeddah and Some Suggestions for Improvement**

The fourth, and final part of the survey was concerned with finding the main problems with play environments in Jeddah in terms of planning and design: What do people value or look for in a play environment? How do people respond to some suggestions for improving the existing situation? Also, this section of the survey will aid any future attempts to establish planning and design guidelines for play environments in Jeddah. The groups that were responsible for providing the information for this section are parents, professional planners and/or designers and students of environmental design.

### **VII.E.I. Problems Facing The Play of Children of Different Age Groups In Jeddah**

To begin, what are the main obstacles to the play of the different age groups of children in Jeddah? This question was directed at parents, professional planners/designers and students of environmental design. The responses varied for the three age groups of children investigated. For the very young children (toddlers 0-5 years old), responses from both parents and professionals/students showed some similarities and some differences. They were similar in that both groups viewed automobiles (their numbers and their speed in residential areas) as being the main obstacles to the toddlers' outdoor play. Also similar was the opinion that lack of time available for parents to be with their toddlers was a factor in limiting their outdoor play. The differences between the two groups was that while parents viewed residential density as a factor in limiting the outdoor play of toddlers, professionals/students of environmental design did not. Instead, professionals and students of environmental design were of the opinion that the lack of suitable public and/or private play facilities/areas limited the outdoor play of this age group (See Diagram VII.E.I.1).



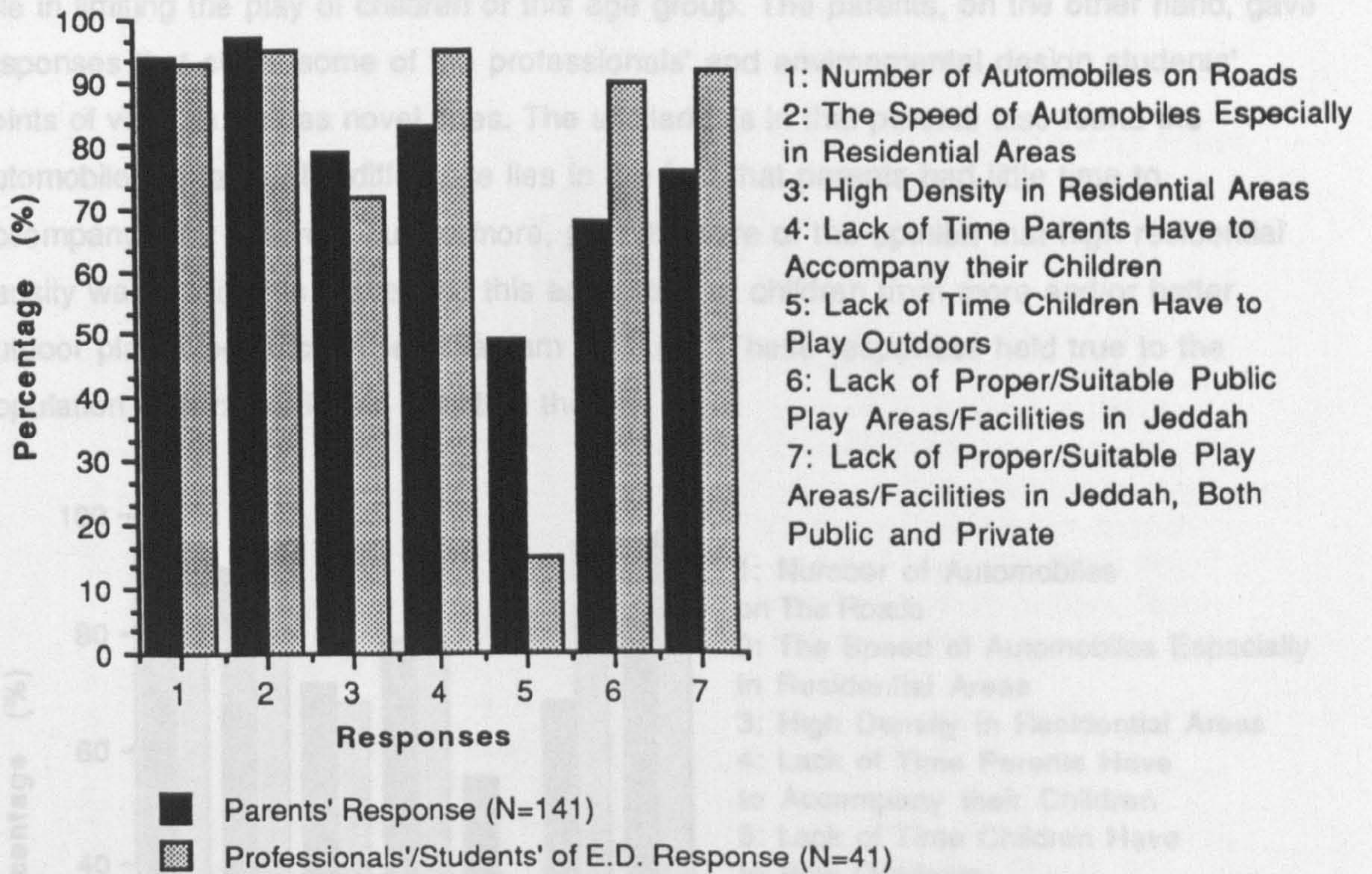


Diagram VII.E.i.1. Factors Limiting The Outdoor Play of Children (0-5 Years Old) in Jeddah.

The top four replies are shown in Diagram VII.E.i.1, although the professionals' and environmental design students' responses were very high through out the responses, they may not reflect the true opinion of the professionals and students due to the small sample size. The responses, however, held true for the entire sample with the exception of the parents' response stating that the residential density is a factor in limiting the outdoor play of this age group of children. This response was dependant on the variable of gender, with more fathers choosing it than mothers (See Table VII.E.i.1).

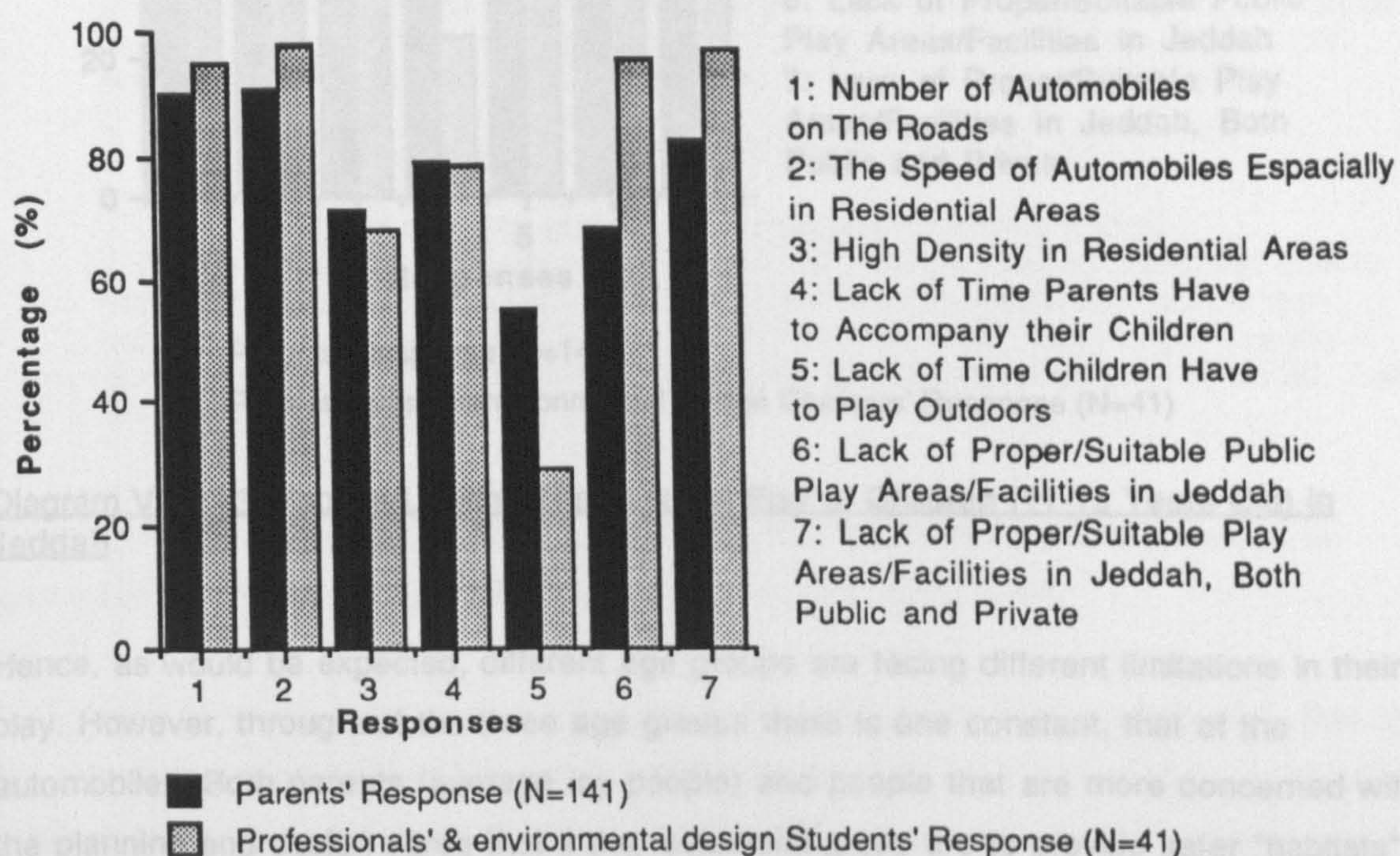
	Response Percentage	Percentage of Sample (N=141)
Male	84%	77%
Female	16%	23%
Total	100%	100%

Table VII.E.i.1. Gender of Parents Viewing Residential Area Density as a Factor in Limiting the Outdoor Play of Children 0-5 Years Old

When the same question was posed to both groups for children of 6-10 year old children, the responses differed. The four highest scoring responses for each group were similar and different at the same time. The professionals' and environmental design students' responses did not differ greatly from those they gave to the younger age group. They still held to the opinion that automobiles (number of them on roads and speed at which they are driven) are the major deterrent to children's outdoor play. Automobiles aside, they



thought that the lack of good and/or suitable play areas or facilities in Jeddah play a major role in limiting the play of children of this age group. The parents, on the other hand, gave responses that share some of the professionals' and environmental design students' points of view as well as novel ones. The similarity is in that parents also found the automobiles at fault. The difference lies in the fact that parents had little time to accompany their children. Furthermore, parents were of the opinion that high residential density was a factor in preventing this age group of children from more and/or better outdoor play experiences (See Diagram VII.E.i.2). These responses held true to the population with no variables affecting them.



**Diagram VII.E.i.2. Factors Limiting The Outdoor Play of Children (6-10 Years Old) in Jeddah**

The third group of children (young people) the enquiry targeted were those of 11-15 years of age. Again, the four highest responses of the groups asked differed from one another and from the responses they gave for the other age groups. The parents still viewed automobiles as the main problem (although less than for the younger age groups), followed by the lack of proper and/or suitable play areas in Jeddah and the lack of time they had to accompany their children respectively. Professionals and environmental design students whilst still concerned about the automobile, placed this second behind the opinion that the lack of proper play areas in Jeddah, whether public or private, as the major limiting factor in this age group's outdoor play behaviour/practice. This is a change from the responses given by the professionals and students for the younger age groups (See Diagram VII.E.i.3). All the responses were independent of all variables and held true to the entire sample.



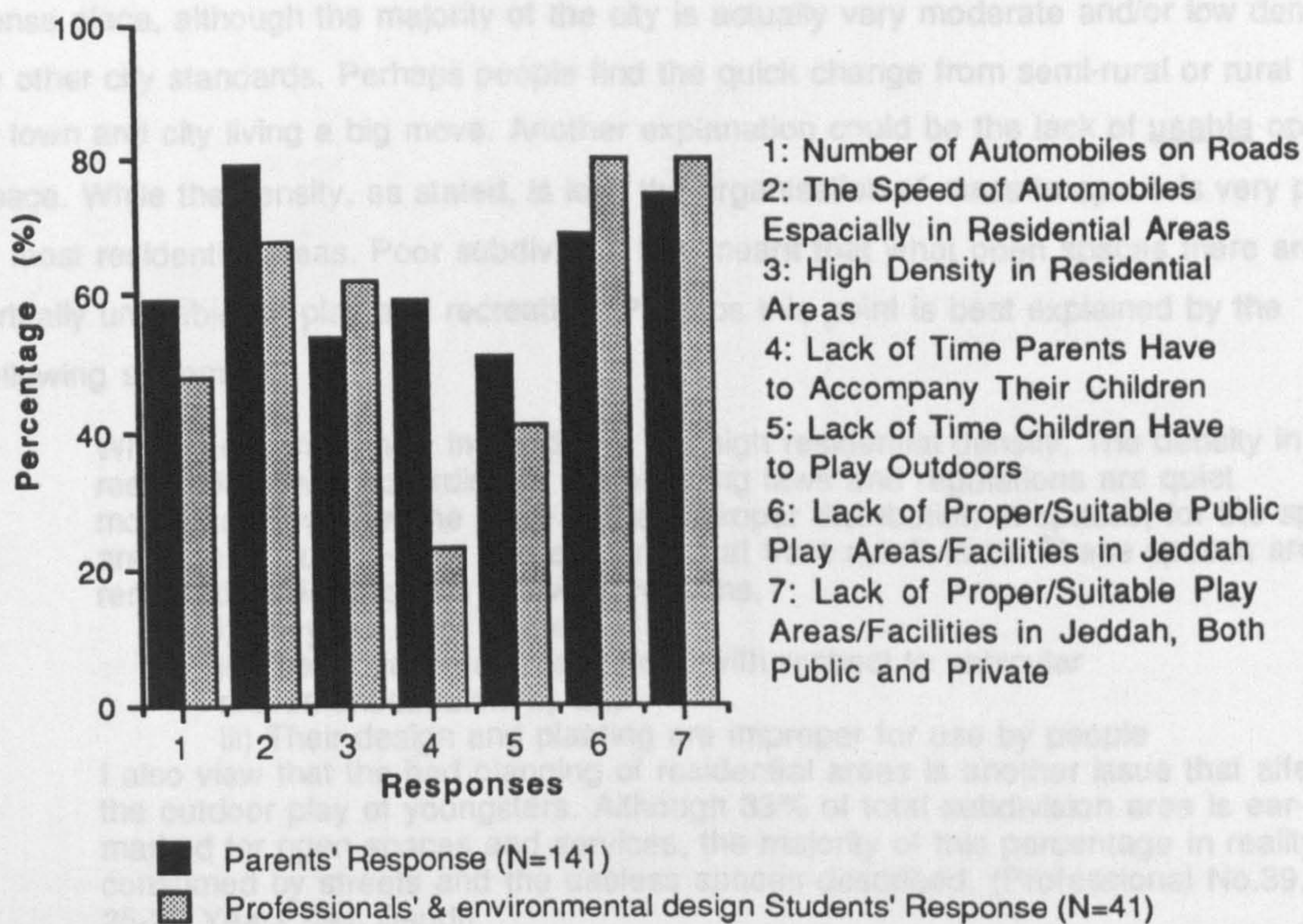


Diagram VII.E.i.3. Factors Limiting The Outdoor Play of Children (11-15 Years Old) in Jeddah

Hence, as would be expected, different age groups are facing different limitations in their play. However, throughout the three age groups there is one constant, that of the automobiles. Both parents (average lay people) and people that are more concerned with the planning and design agree that if the residential areas are to provide safer "habitats" for children (and other groups), automobiles must be controlled.

According to the two groups (automobiles aside) the lack of time parents have to accompany children was mentioned particularly for the two younger age groups (for the older children designers and students see this as being important, although parents see this as a constant problem) as a limiting factor. This issue lies in the *Exosystems* of the child's play/development world. That is to say, it lies in a sphere in which the immediate social and physical environments can not really affect the situation Garbarino (1989) explains this concept:

..... exosystems are those settings that have power over his or her life, yet in which the child does not participate. They include the workplaces of parents, and those centres of power, such as the school boards and planning commissions, that make decisions affecting the child's day-to-day life.(p.25)

The second issue which appears consistently in the parents' responses is that of high residential density. The reasons for this might be twofold. On the one hand, the people of



Jeddah have not yet adapted to urban living. To them Jeddah appears to be a highly dense place, although the majority of the city is actually very moderate and/or low density by other city standards. Perhaps people find the quick change from semi-rural or rural living to town and city living a big move. Another explanation could be the lack of usable open space. While the density, as stated, is low, the organisation of mass to space is very poor in most residential areas. Poor subdivision has meant that what open spaces there are virtually unusable for play and recreation. Perhaps this point is best explained by the following statement,

What is occurring now in Jeddah is not high residential density. The density in residential areas according to the planning laws and regulations are quiet moderate. However, the issue is the improper distribution of spaces, for the spaces are nothing but left-over spaces derived at from subdivision. These spaces are rendered useless for the following reasons,

- i) They are small in area,
- ii) Their location are dangerous with respect to vehicular movement/circulation, and
- iii) Their design and planting are improper for use by people

I also view that the bad planning of residential areas is another issue that affects the outdoor play of youngsters. Although 33% of total subdivision area is earmarked for open spaces and services, the majority of this percentage in reality is consumed by streets and the useless spaces described. (Professional No.39, Age 25-29 Years Old, Saudi)

Hence, although there are plenty of spaces to be found according to the statistics, to people living in these areas those spaces might as well not be there.

The third issue which appears and reappears in the responses of all age groups is that of the lack of proper or suitable play areas and facilities in Jeddah, whether they are provided by the public or private sectors. The fact that this issue is consistently mentioned underlines the terrible state of play areas in the city of Jeddah. This view is stronger among people concerned with the planning and design of environments, which is to be expected for they are the people that might be thinking of what could have been or what might be.

Planning officials (N=42) were also asked (in a different format) to voice their views concerning the issues or factors that limit the outdoor play of children in Jeddah. The response was very similar to those of parents, professionals and environmental design students. The issues that concerned planning officials most were that there were no proper/suitable play areas or facilities in Jeddah, the dangers of automobiles, and a new issue of climatic conditions being extreme. Officials saw neither the lack of free time parents have to accompany their children nor the high residential density as being as important, although these two issues were not ranked very much lower than that of the climatic conditions being extreme (See Diagram VII.E.i.4).



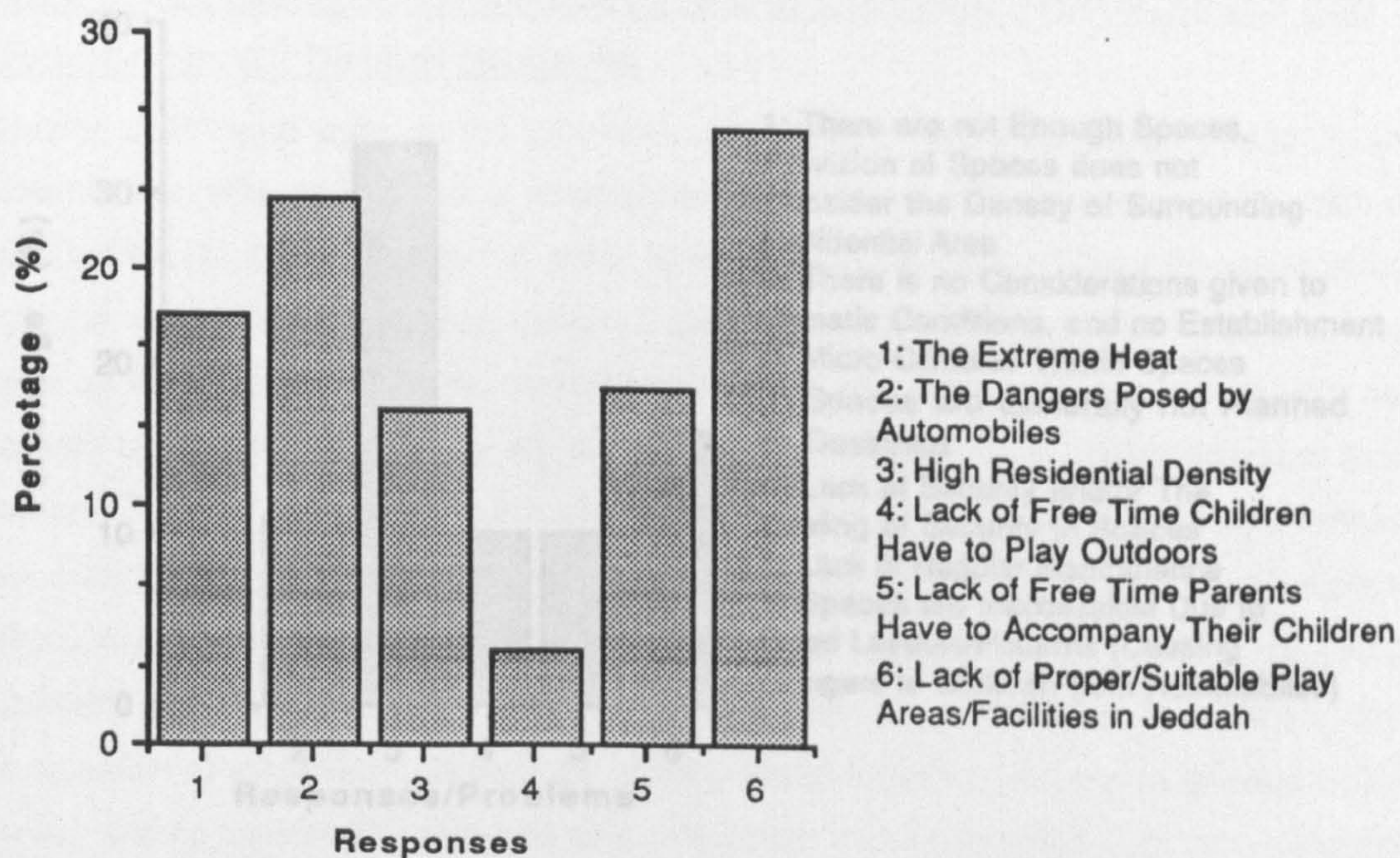


Diagram VII.E.i.4. Planning Officials' Opinions on The Limiting Factors to Children's Outdoor Play in Jeddah

#### Diagram VII.E.i.4. Planning Officials' Opinions on The Limiting Factors to Children's Outdoor Play in Jeddah

Having roughly understood the issues that both parents and people concerned with the urban environment feel as being the principle concerns to be tackled, professionals and students of environmental design (N=41) were then asked to name some of the problems of planning and design facing children's outdoor play areas in Jeddah. The response was that the main problem was a lack of planned or designed play areas in Jeddah, followed by the short supply of play areas and the inaccessibility of spaces that did exist due to their location with respect to roads. All the responses were independent of variables and held true to all the sample (See Diagram VII.E.i.5).

Finally, the supply of these spaces must take into consideration the residential areas and/or the adjacent landscape in terms of density, social attitudes and value, and all other factors that are influencing or might influence the spaces. Finally, residential areas must be oriented towards the pedestrian. Pedestrians should be granted more rights in the outdoor areas (i.e. streets) that are adjoining their homes. Furthermore, the layout and/or the pattern of residential areas should provide for communal areas that benefit the community and follow the objective of granting the pedestrian more influence in the communal areas of the neighbourhood. At a first glance these broad directives seem simple, however these guidelines need further consideration which will be discussed later.



## VII.E.II. Suggestions for Improvement of Officials, Professionals and Environmental Design Students

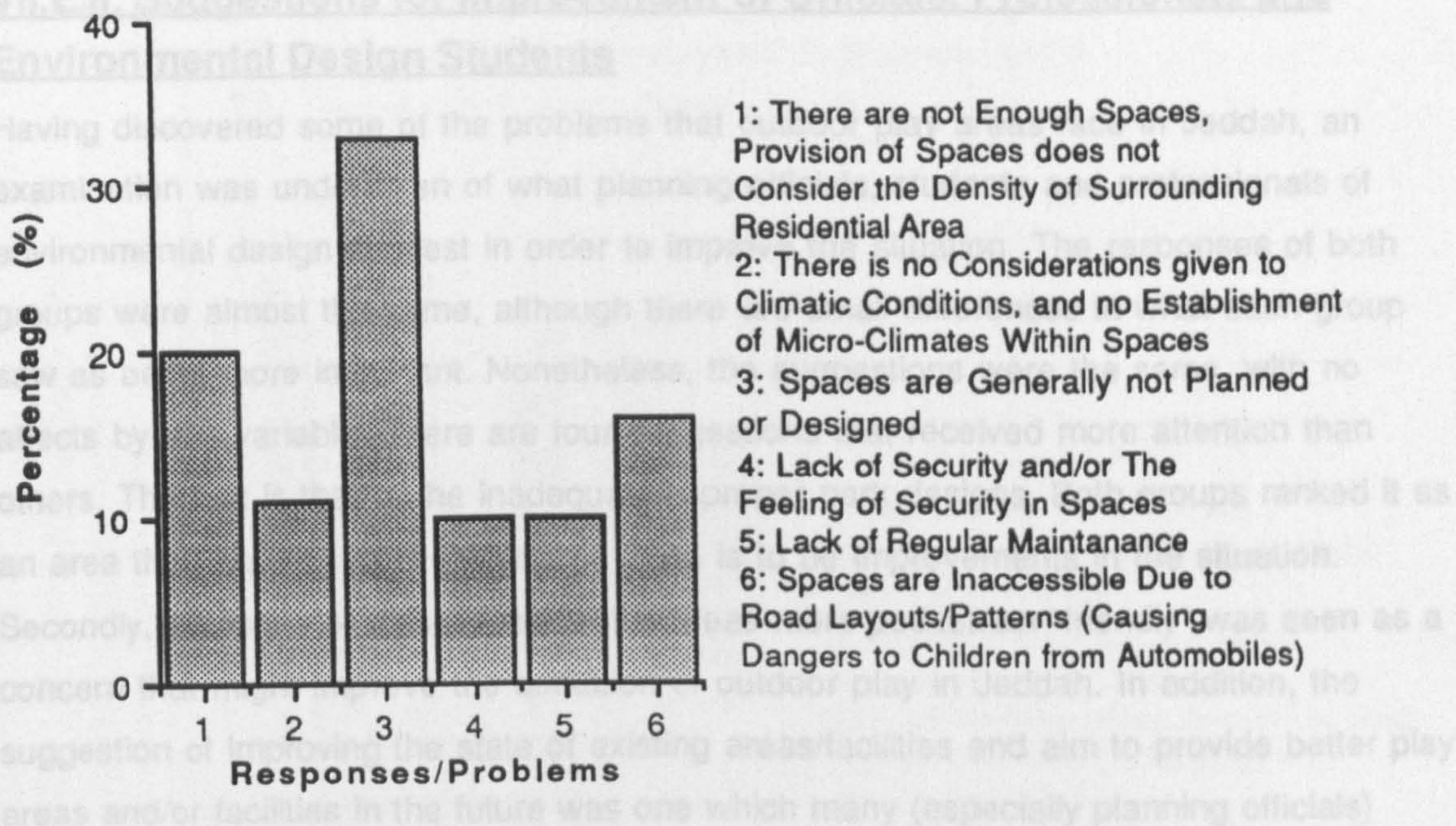


Diagram VII.E.i.5. Professional Planners'/Designers' and Environmental Design Students' Views on The Problems of Planning and Design of Play Areas in Jeddah

### Comment:

If one views these replies to formulate some broad guidelines, one would come to make the following suggestions. To begin with, children's outdoor play areas must be taken seriously. In that they deserve equal attention as other city services and structures. They must be planned and designed using the most up to date information in the field, for they affect the future generations and therefore the future of society. Second, an ample supply of spaces must be provided to ensure equal opportunity for all children to engage in outdoor play and all the advantages that accompany it. The supply of these spaces must take into consideration the residential areas and/or the adjacent land-use in terms of density, social attitudes and value, and all other factors that are influencing or might influence the spaces. Finally, residential areas must be oriented towards the pedestrian. Pedestrians should be granted more rights to the outdoor areas (i.e. streets) that are adjoining their homes. Furthermore, the layout and/or the pattern of residential areas should provide for communal areas that benefit the community and follow the objective of granting the pedestrian more freedom in the communal areas of the neighbourhood. At a first glance these broad directives seem simple, however these guidelines need further consideration which will be discussed later.

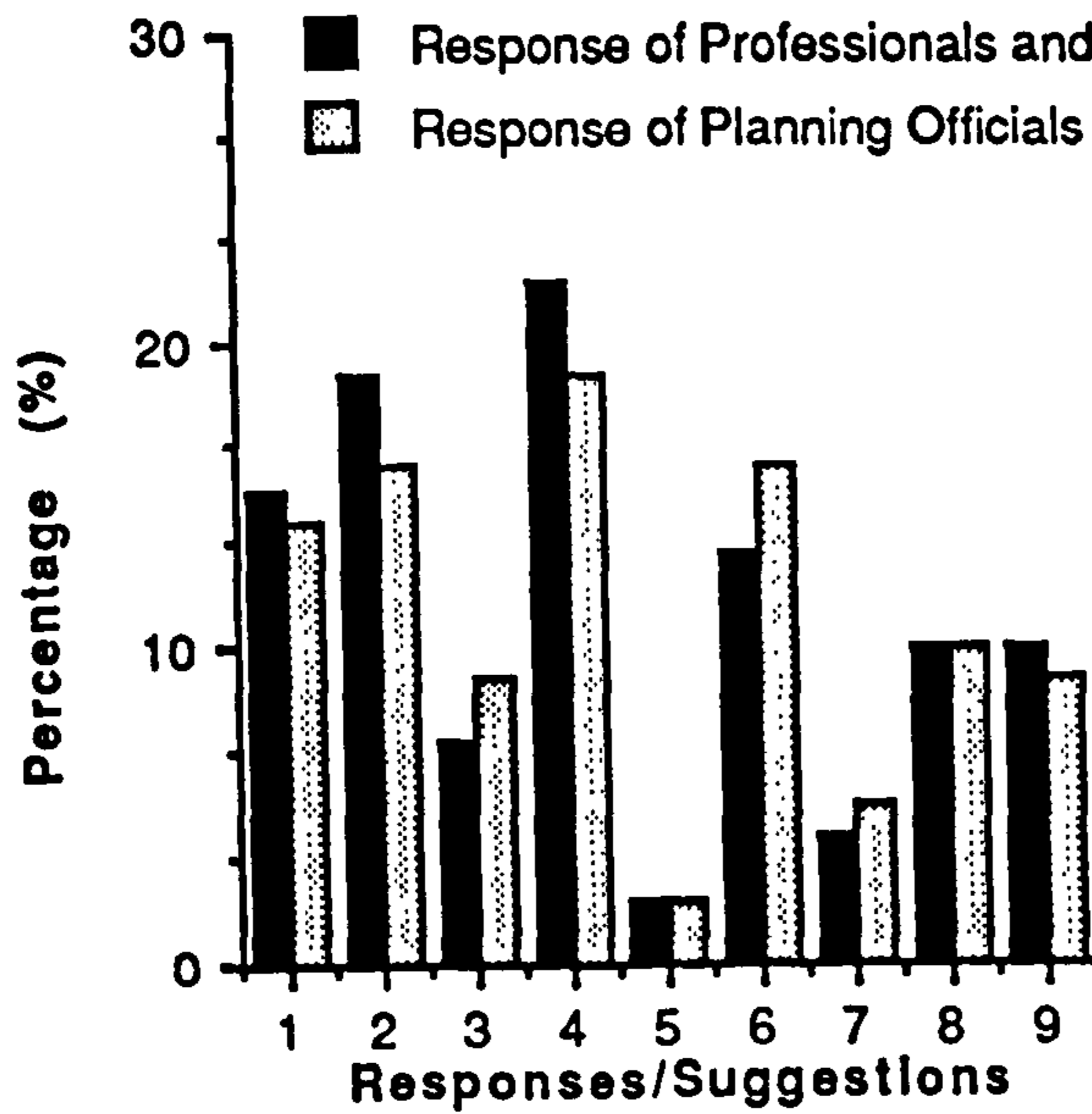


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### **VII.E.ii. Suggestions for Improvement of Officials, Professionals and Environmental Design Students**

Having discovered some of the problems that outdoor play areas face in Jeddah, an examination was undertaken of what planning officials, students and professionals of environmental design suggest in order to improve the situation. The responses of both groups were almost the same, although there are small differences in what each group saw as being more important. Nonetheless, the suggestions were the same, with no affects by any variable. There are four suggestions that received more attention than others. The first is that of the inadequate/improper park designs. Both groups ranked it as an area that requires more attention if there is to be improvements in the situation. Secondly, the issue of making residential areas more pedestrian "friendly" was seen as a concern that might improve the condition of outdoor play in Jeddah. In addition, the suggestion of improving the state of existing areas/facilities and aim to provide better play areas and/or facilities in the future was one which many (especially planning officials) favoured. The fourth suggestion that received marked support from both groups is that of protecting play areas/spaces from the extreme climatic conditions of Jeddah. There were some other suggestions that received positive responses from both groups, however the above mentioned four were the ones most favoured and most significant in the two samples (See Diagram VII.E.ii.1).





- 1: Create a more Favourable Micro-Climate in Play Areas and/or Protecting the Areas from Extreme Climatic Conditions  
 2: Make Residential Areas More Pedestrian Oriented  
 3: Make School Grounds Open to Neighbourhood Children's Play During Non-School Times  
 4: Park Should be Designed for Use and Not Only For Beauty

- 5: Reduce School Work for Children so as to Allow them More Free Time to Play  
 6: Improve Existing Facilities and Areas and in The Future, Aim to Provide Play Areas/Facilities that Benefit The Development of The Child  
 7: Introduce The Participation of Children in Planning and Design Decisions  
 8: Encourage the Private Sector to Provide Play Areas/Facilities that Offer The Child Varied Experiences, such as Historical, Traditional, and Natrual  
 9: Provide Supervised Play Areas in Some Neighbourhoods

Diagram VII.E.ii.1. Suggestions for Improving The Existing Situation of Outdoor Play in Jeddah

### VII.E.iii. Suggestions of Parents and Children for Improving Outdoor Play

Thus far, the suggestions derived have been based on the responses of professional planners/designers, environmental design students and planning officials. However, to take their views only would mean that we have once again fallen into the conviction that these people (the talented few) know best. The state of most urban centres of the world testify to the failure of this hypothesis. Hence, the importance of asking the views of the users - the parents and people that do use or will be using the spaces (the children). To achieve this task, children were asked to give reasons for liking the places they ranked as the best play areas in Jeddah. It was hoped that this would provide some insight into what children valued in play spaces. Parents were also asked to provide some reasons as to why the places in which they played when they were younger were pleasurable and/or what features in those spaces left an impression that has lasted into adulthood. Thus, by examining these findings one would come to realise what features in the environment are culturally dependant (i.e. both generations valued), and what features that once existed and no longer exist in play areas.



The parents' responses were that they enjoyed the places they played at when they were young due to four main features. The first is that spaces were large and gave a sense of openness. This feature was closely followed by the characteristic that the space had or that it overlooked natural elements such as trees, flowers, water, etc. The third of the features was that of spaces being accessible with no interference in getting to them, especially by automobiles. The fourth notable feature was that spaces were near the home. The other features and/or reasons given were interesting and are listed in Diagram VII.E.iii.1. However the above mentioned four were the only ones of significance.

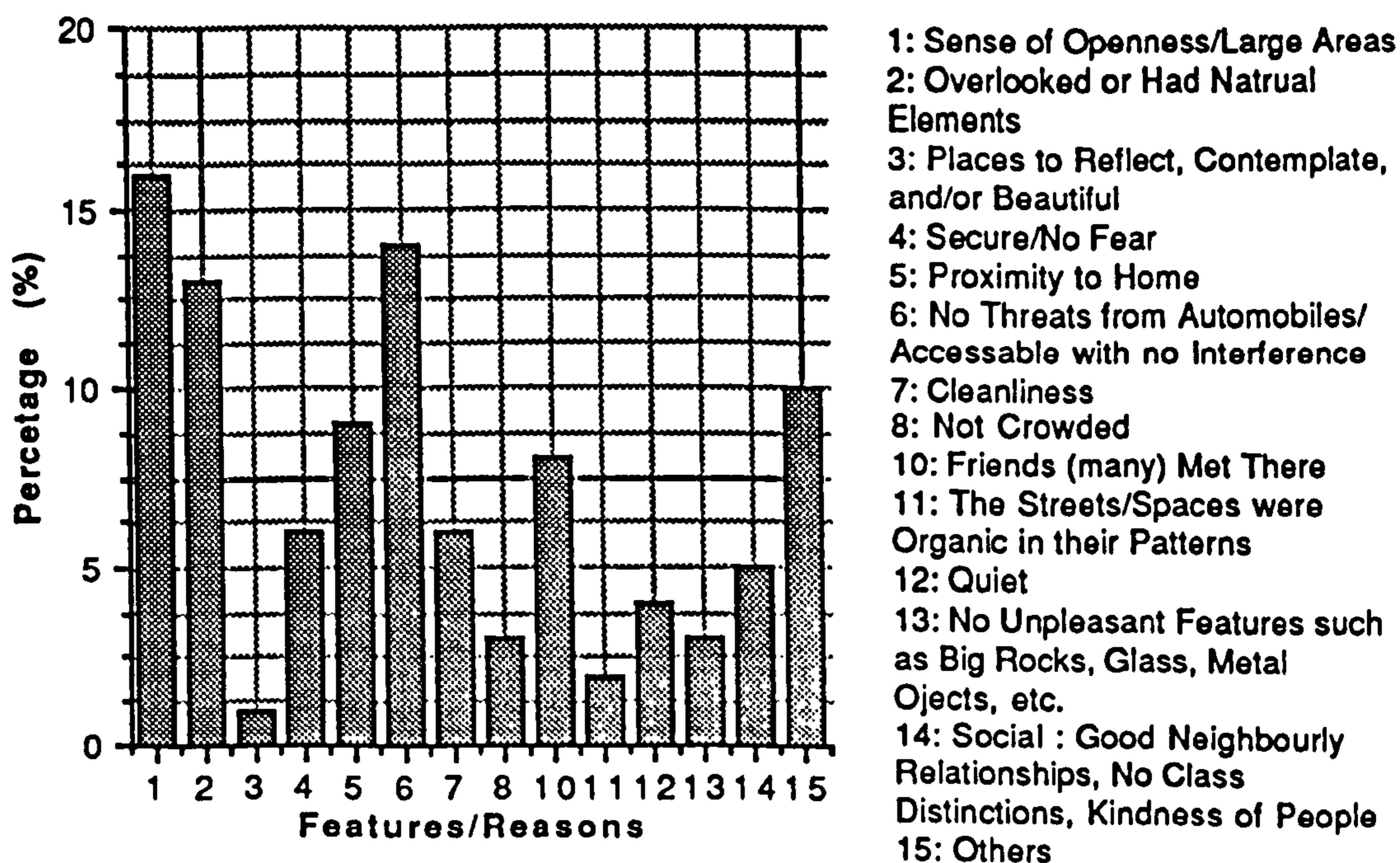


Diagram VII.E.iii.1. Features/Reasons that Made Parents' Childhood Play Spaces Pleasant and Memorable

The children, when asked to give the same information, provided responses similar to their parents, although the list of responses was much shorter. Nonetheless, the young people viewed the spaces that they enjoyed most in Jeddah as having two main features. Namely, the presence of natural materials and the presence of an adequate supply of proper equipment and facilities. The other responses in terms of response percentages were markedly behind the two stated above. The closest response to the above was that the spaces were clean, organised, or orderly (See Diagram VII.E.iii.2).



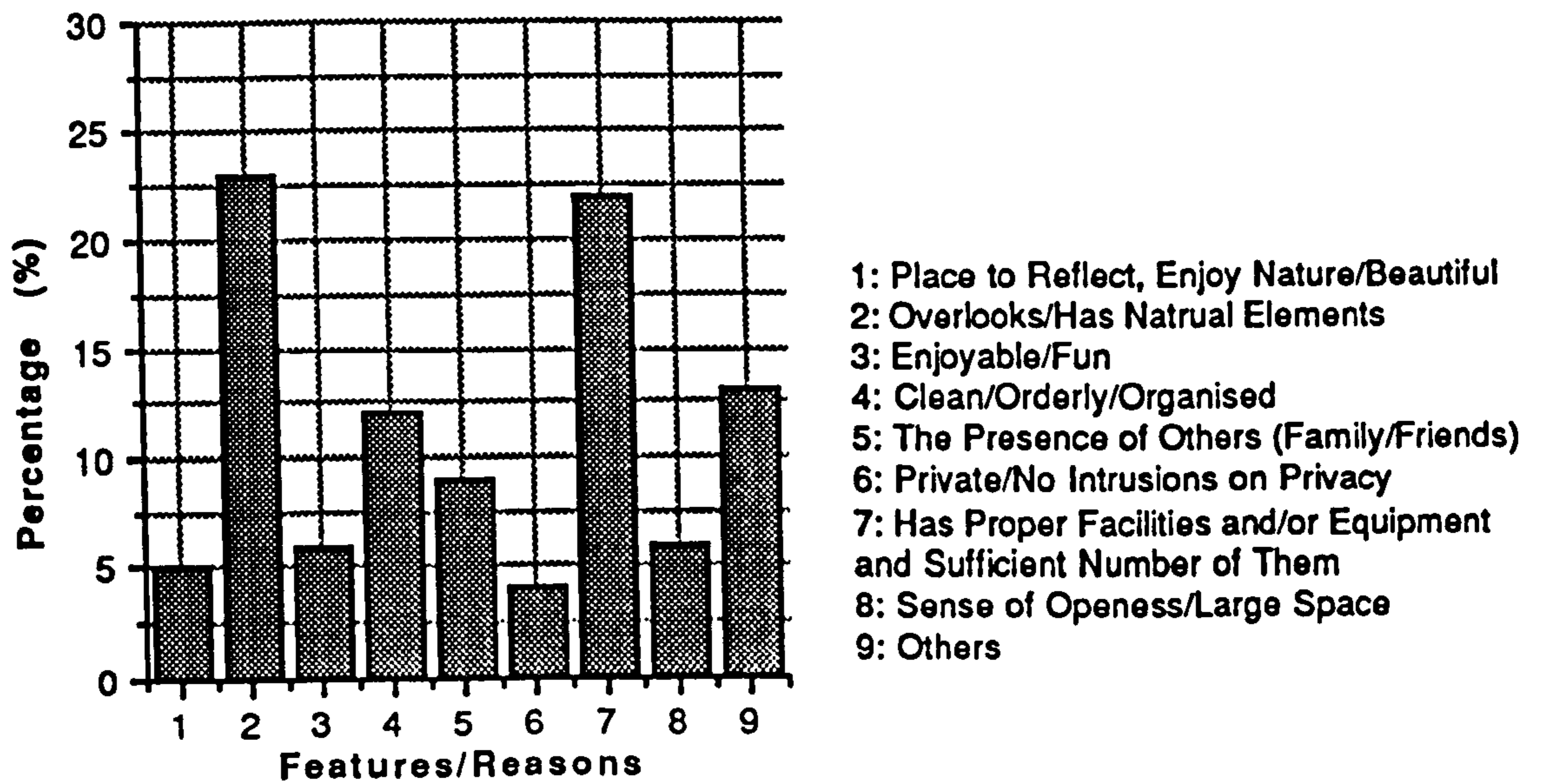


Diagram VII.E.iii.2. Features/Reasons that Make Children's Play Areas in Jeddah Enjoyable or Pleasant

### Comment:

Hence, we see some factors which have persisted through the generations and others which have disappeared. The presence of natural elements in a space made the space more pleasant and memorable for both generations, although more so for the older generation. Some would argue that natural materials in any space is a human desire and need. Although this research is not concerned with this topic, it does seem to confirm that man requires contact with nature regardless of culture. The other factors that differed from generation to generation were many, and upon examination give some clues as to how the built environment has affected people's lives. Although the urban growth that occurred in Jeddah since the discovery of oil might be blamed for many of the problems consequence upon it, it would be very foolish to place all the fault upon it. There were many social and cultural changes that coincided with the growth of the cities, and as such these would have to be liable for some of the problems.

The response of the parents of the feature/property of the spaces being accessible or that there were no obstacles (i.e. interference from vehicles) in going there, is one which the present generation hardly mentioned. The reasons are very obvious and were mentioned before. The pattern of streets, the speed and number of cars in the present neighbourhoods create houses which are isolated from all services and facilities that the neighbourhood may have. Further, the parents might not have thought of this as a feature or something of value when growing up and using the streets and spaces in their youth, however the high response might be due to a comparison between the situation they were in, and the one they find their children in now.



As for the response that spaces were enjoyable for the reason they were large and gave a sense of openness, it is expected that parents would choose this response more than the children. There might be two main reasons for this. One is that there were plenty of large spaces when the parents of today were children. The other reason could be one of perceptions of spaces discussed earlier in that parents feel themselves being crowded, which is the result of the planning pattern and its implementation championed by the planning officials in Jeddah. As such they compare today's spaces, that only exist in plans and statistics with those of yesteryears and find that there were spaces that were usable throughout the built fabric then. Hence, their perception is that the spaces were bigger and open then.

The proximity to home of the spaces parents played in is non-existent in the responses of the children of today. This again could be clearly understood from what has been discussed thus far. In that the present urban planning policy, and the planning patterns are not considering pedestrians, children, and the elderly in the city; but rather the automobile.

#### **VII.E.iv. Evaluation of Planning and Design Guidelines**

Although the above enquiry rendered some interesting comparisons between the two generations in terms of outdoor play, nonetheless it was not sufficient in obtaining detailed information regarding future guidelines for play environments. To this end, parents were then asked to rate some guidelines (obtained from literature plus some concepts that the author from his research believed might be worth testing). The response was that basic things in a play space were rated very highly by the parents, and luxury items or features were not seen to be as important. Such responses are to be expected due to the inadequate play provisions that exist today.

The features that parents viewed as being most important to a successful play area were as follows. Their first choice was that play areas should have supporting facilities and/or services such as toilets, drinking points, first aid, etc. The second choice was that play areas had to be located away from vehicular circulation. These responses were followed by the view that play areas should preferably be large in area so as to allow for socialisation and the need to protect play areas from climatic conditions and create a pleasant micro-climates. The presence of an adult in the play area supervising the play of children was also considered by parents to be of importance. However, this response was dependant on the variable of age, with parents of 30-49 years old choosing it more than other age groups (See Table VII.E.iv.1).



	Response Percentage	Percentage of Sample (N=141)
20-29 Years Old	10%	12%
30-39 Years Old	34%	33%
40-49 Years Old	46%	44%
50-59 Years Old	9%	9%
60 Years Old or More	1%	2%
Total	100%	100%

**Table VII.E.iv.1. Age of Parents Viewing that the Presence of an Adult to Supervise Children's Play and Play Area is an Important Feature of a Good Play Area**

A fifth feature that parents felt a good play area should have is the presence of natural materials. However, this response was dependant on the variable of income level, with parents making 8000 S.R./Month or more choosing it more often than other income groups (See Table VII.E.iv.2).

	Response Percentage	Percentage of Sample (N=141)
2500 S.R./Month or Less	15%	16.5%
2600-5000 S.R./Month	25%	23%
5100-8000 S.R./Month	19%	23%
8100-12000 S.R./Month	29%	26.5%
More than 12000 S.R./Month	13%	11%
Total	100%	100%

**Table VII.E.iv.2. Income Levels of Parents Viewing that the Presence of Natural Material is an Important Feature of a Good Play Area**

The remaining features were considered to be important by the parents, but the five mentioned above were the most important for play environments in Jeddah to parents (See Diagram VII.E.iv.1).



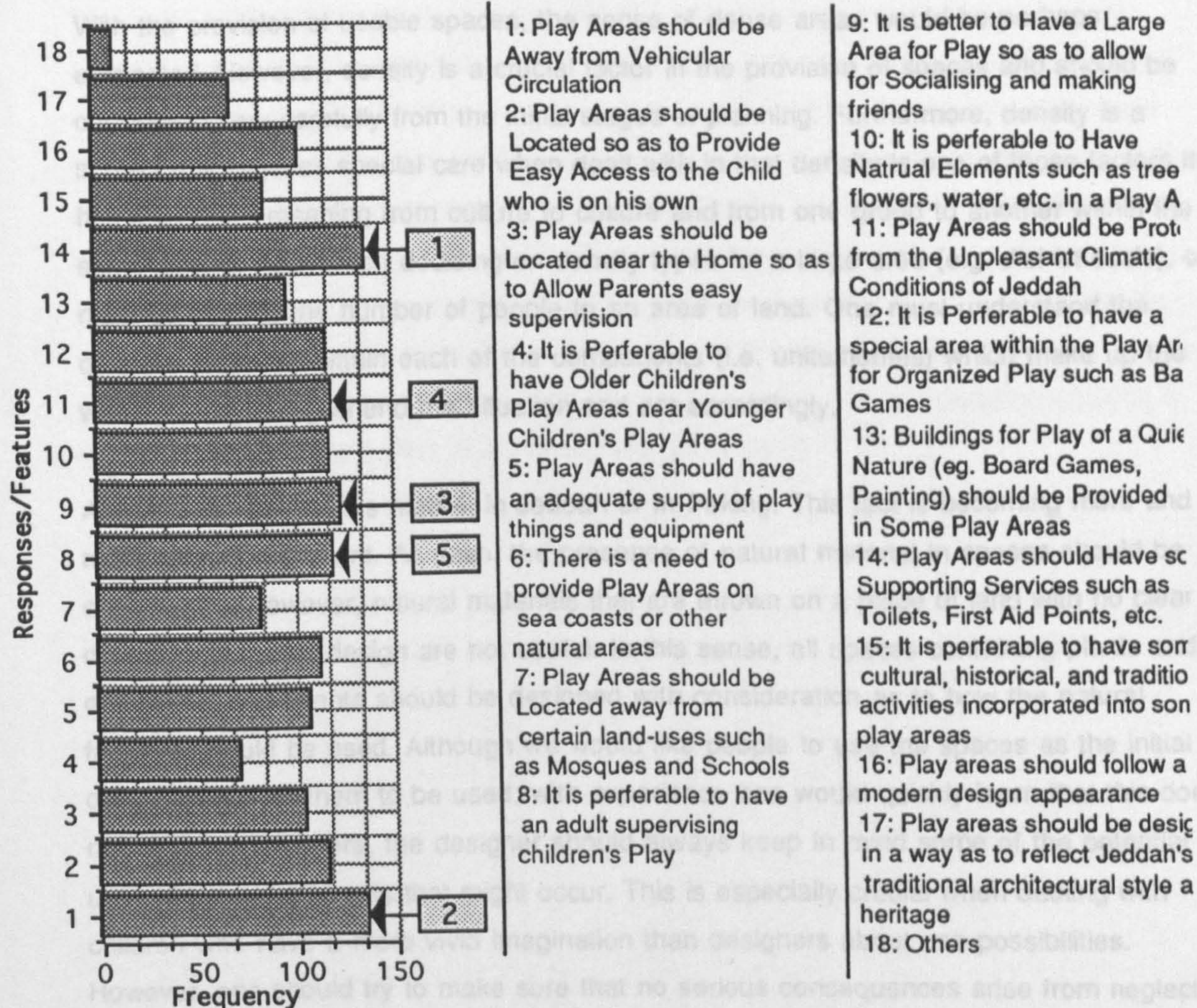


Diagram VII.E.iv.1. Parents' Evaluation of Some Features of Play Environments/Spaces

Hence from the review of some of the features that professionals, planning officials, students of environmental design, parents, and school children identify as important in a play area, one may come to the following conclusions regarding the planning and design features that appeals to these groups. The need to control traffic and automobiles especially in residential areas seems to be one feature that would be greatly appreciated by all. The control of traffic could be done in several ways. The issue however is not how we can render the automobile a burden rather than a life easing device. The issue is how can pedestrians and automobiles coexist without either one being put at a disadvantage. To achieve this, one would have to tackle the problem/challenge from the beginning or from the planning policy stage. Furthermore, the objective of peaceful coexistence between the automobile and the pedestrian should follow through all the stages of planning and design: From the stage of deciding which pattern or layout the city should take to achieve the objective to the stage that materials (i.e. paving) are decided upon. Consistency is a very hard thing to achieve. However, it is the thing that distinguishes the professional from the non-professional.



With the provision of usable spaces, the sense of dense areas would be perhaps eliminated. However, density is a crucial factor in the provision of spaces and should be considered very carefully from the initial stages of planning. Furthermore, density is a subject that requires special care when dealt with in that density is one of those factors that has a different meaning from culture to culture and from one group to another within the same culture. Also, when deciding on density types for a large area (e.g. district scale), one must go beyond the number of people to an area of land. One must understand the different situations within each of the components (i.e. units/homes) which make up the whole to fully comprehend the situation and act accordingly.

Almost everyone enjoys nature, in Jeddah or in Peking. This fact is becoming more and more beyond argument. As such, the presence of natural material in spaces should be encouraged. However, natural materials that are thrown on a piece of land with no clear definition of use or design are not useful. In this sense, all spaces containing plants and other natural elements should be designed with consideration as to how the natural features should be used. Although we would like people to use the spaces as the initial design meant for them to be used, with experience one would quickly learn that this does not happen. Therefore, the designer should always keep in mind some of the potential uses of natural elements that might occur. This is especially crucial when dealing with children who have a more vivid imagination than designers about use possibilities. However, one should try to make sure that no serious consequences arise from neglect. In using natural materials in spaces, the designer can kill two birds with one stone, so to speak. Placing natural materials in strategic locations will create micro-climates in spaces which are pleasant and relieve people from the extreme heat of Jeddah. Having mentioned all the above advantages of using natural materials in a space, there remains one more which is at the centre of the subject of this research: Providing the child with a play material that is very interesting. To begin with, natural materials offer a child a means of understanding some of the processes of nature. They offer a reflection of time, with the changing of seasons and growth, and also the practical to the theory that children study at school. These are only some of the experiences natural materials offer to the child. Truly, they do offer a more versatile experience than most play props and equipment that exist today.

Variety in almost everything in life keeps interest alive. Similarly, play areas need not all have swings, slides, sea-saws, etc. One can only imagine children's feelings when it comes to playing in play areas that are the same all the time. There needs to be a greater diversity in the experiences that the child is offered in play areas. One needs only to compare between the involvement and interest shown by a child at an Adventure Playground and the child who is swinging aimlessly and in some kind of a daydream in a conventional playground to figure out which type of experience the child is enjoying more.



This does not mean swings and slides and the conventional playgrounds should be altogether disposed of and not supplied in the future, however, if play is to aid in the development of the child then play must always provide stimuli. In this light, play areas should provide for varied experiences (stimuli) which would aid in the development of the child. These experiences should range from playing with sand and water to playing in or with computer enhanced games and perhaps underwater treks with supervision. The provision of these experiences should not be the sole responsibility of governmental/public agencies. As was mentioned earlier, a policy which encourages the private sector to undertake some of the provision of these facilities. A policy that has direction on what is required and the best means of achieving the goals set.



## **VII.F. Concluding Comment**

To summarise this report of findings and highlight the more important findings: The population in Jeddah seem to view play with a positive attitude, that is to say they view play as a necessity for children. However, play is not seen as a crucial part in the child's development, or as important as other developmental requirements (education, nutrition, etc.). How much of this attitude is due to the present condition of the physical environment is a question that is unknown. However, there must be an effect. Although attitudes for the most part are passed down from one generation to the next, had the previous generations been offered proper play areas, perhaps today's generation might find play in childhood as important as education.

There is one conclusion that is beyond argument, that of the poor state of children's play areas/environments in Jeddah. While people seem to be satisfied with the Cornice, the remaining parts of the city (e.g. neighbourhoods) have little to offer. Even the Cornice seems only to be favoured by the low to middle income groups, which in a rich country such as Saudi Arabia leaves a significant amount of people that are not satisfied. Furthermore, as people become more and more educated and more exposed to alternatives and/or better play and recreational facilities, there is a danger they will come to realise the neglect of this aspect of life by the city planners and designers. For this reason, the author believes that now is the time to act, for it will only be, at a maximum approximation, two decades before people will start to voice their disapproval.

So what is to be done? To begin with as was stated earlier, a new policy for planning must be adopted. The main goal of this policy should aim at providing an urban environment that is safe, suitable, and pleasant for people. As a branch of this goal, the objective of providing suitable urban environments for children should follow. With this objective, children's play environments/areas should be planned and designed to a minimum of standards and guidelines according to the most up to date information about the process and function of play, as well as other factors that affect the use of outdoor spaces such as religious beliefs, cultural values, etc. The findings of this survey support the author's beliefs that a large amount of the information and experiences that more developed nations have to offer can and indeed should be used in the future planning and design of children's play facilities and environments in Jeddah. However, some of the information might have to be altered to suit the cultural and social differences that exist. Furthermore, for any plan to be successful there needs to be collaboration between the different agencies that have an impact on the plan. Although this research might provide some insight to the problems that exist and some of the possible solutions, it is by no means even close at providing a solid ground to establish foundations for the solutions. To achieve the most beneficial solutions and plans, there needs to be a significant amount of research into the problem and the



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possible solutions.

This survey, as was mentioned before (See Chapter I), aims at initiating a process which will hopefully arrive at establishing planning and design guidelines for play environments in the city of Jeddah. Although some valuable information concerning play environments/facilities was gathered in this survey and some insight into the play behaviour of children in Jeddah was brought forth, a great deal more remains to be done if the ultimate goal of establishing planning and design guidelines for play environments is to be achieved. Perhaps the most important thing that needs to be done is for more research to be carried out. Future research should not concentrate solely on issues that are directly linked to the subject of play environments in urban settings. As was illustrated and highlighted in the findings of this research project, there are many issues that require attention and research which may not be directly connected to the subject matter at hand. However, to better understand the subject matter and hence provide better play environments for the urban child this research is recommended. In Chapter VIII some suggestions (arrived at from this research) for future research projects are laid down.

### VII.G. References

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## **Chapter VIII : Conclusions**



### **VIII.A. Introduction**

Play to the child is an important activity. Unfortunately urban environments the world over are not very supportive of this activity. The fact that more and more children are living in urban areas only increases the urgency of acting to improve the urban environment to ensure it better supports children and their activities. The issues that have to be addressed, in the process of making the urban environment more "child friendly", are numerous. Issues such as land development, land values, open space allocations, traffic management, site design and others have to be looked at closely before definite answers concerning the subject can be reached.

There are also some points concerning the research itself which need to be addressed in this chapter. Points concerning the methods used, the findings and their applicability, and general issues and improvements that could be made in future research to ensure more and better knowledge concerning the subject matter.

This chapter will be concerned with presenting some of the conclusions that can be reached from this research. Furthermore, some of the issues raised by the research will be and highlighted discussed.

While this research is primarily aimed at establishing an approach to constitute future research and areas in which such research may venture, some valuable information has emerged in its own right which could be acted upon at the present time. As such, this chapter will also aim at providing some suggestions for future considerations on the subject of children's play environments, particularly in Jeddah.

The final part in this chapter will deal with trying to raise some issues that are of primary concern to the subject of children's play environments in urban settings. Furthermore, there will be some suggestions and concepts that might provide a way forward to improving the state of play environments. While these suggestions and/or concepts are primarily directed at Jeddah, perhaps they could be utilised for other urban areas with alterations and allowances for cultural and physical differences that may exist. In addition, some of the planning and design practices that exist will be examined and some suggestions on improving them and/or establishing new practices if appropriate will be provided in this section.



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## **VIII.B. Retrospect on Methods and Possible Future Considerations**

In this section some issues concerning the methodology used in this survey will be addressed. Furthermore, some suggestions will be made on how to avoid some of the problems encountered in this study and how to generally improve the method in future research. The issues that will be addressed include the sample size, distribution schemes, sampling frames and the levels of measurements that were used and the possibilities for improving upon them.

### **VIII.B.I. Sample Size and Distribution**

The 76% response rate of this research (i.e. 350 questionnaires) is a good rate for a pilot survey. Furthermore, the issues and the range of responses relevant to the subject proved to be very useful in shedding some light on the situation of children's play in Jeddah. However, for the purpose of establishing planning and design guidelines, one must consider a much larger number. The city of Jeddah has an approximate population of 1.2 million people. A sample size for research aiming at establishing guidelines for this population needs to be a substantial percentage of that population. The larger the percentage of the population, the closer the truth will be approached in terms of identifying the population's wishes, concerns and perceptions. However, one must also keep in mind that the larger the sample, the more problems a research project is likely to face in terms of management, resources and other concerns. For example, if 2% of the population was the sample size, this would imply that a research project is to question and advise 24,000 people. It may not seem like a large number on paper, however, in reality the financial and human resources that would be needed is considerable. Furthermore, the management of such a project needs people that are experienced in handling such a large number of possible respondents.

The need for a large scale research project in the subject matter of this research is needed. This pilot survey has indicated that there are many problems the population of Jeddah are facing in terms of children's play. While such a project will require a commitment from individuals and a strong financial backing, it is justified and indeed needed.

A valuable trait of the method used in this survey is that it takes into account the many different points of views and concerns that different groups hold. In future research, one might incorporate the views of other groups as well. Private investors and developers might highlight some new issues worth research and thought. Furthermore, they might voice their concerns and ideas concerning children's play environments. The police might also have some valuable information and views on the subject of traffic management and



automobile restrictions in the different neighbourhoods and districts of Jeddah. The fact is, children's play environments is a large topic and many agencies, professions and people affect and/or are connected to some aspect of the subject. The more people, agencies, professions and issues involved in any future full-scale research project, the better the end result for all, namely a play environment which aids the development of the future generations.

One must also consider the possibility of using different methods for different groups in a sample. The questionnaire in this survey served well to gather a good amount of information from the four groups involved. However, the information that some groups might offer might not be gathered best by questionnaires. For example, in the case of this survey, the decision to use questionnaires only may not have been the best to gather information from the young school children. It might have been more beneficial, if resources had permitted, to interview some children of different ages so as to allow for a better understanding of their views and desires. Likewise, behavioural mapping in play areas might have been beneficial to understand the children's use of play spaces and environments better. The point is that the use of different methods and techniques in a research project should be employed when resources allow. Their use will give a better understanding to the research topics and/or issues, as well as providing a more concrete basis for action (See Chapter VI).

The question of distribution within selected respondent groups is an important and complex one. On the one hand, one must ensure that the sample is representative of the population so that the different characteristics of the population are proportionally represented in the sample. In the case of Jeddah, research into this topic and/or field must be undertaken to truly understand the different characteristics of the population and their proportions relative to each other before any sample in a research project can be truly representative of the population. At present in Jeddah, as is the case in many developing nations and/or cities, there are few sources of reliable information concerning this topic. On the other hand, if one is to divide the sample into different groups (for the above mentioned reasons) then true proportionate representation of the population is inevitably affected. In dividing a sample, for example, into three social classes and thereafter distributing an equal amount of questionnaires to each class, one will not have a proportionate representation, because it is very unlikely that a population is divided into three equal parts in terms of numbers. However, this approach will still provide some valuable information, even though it may not be proportionate to the population. The dilemma is which one of the distribution possibilities should one follow in a research project? The answer to the question is not a definite one. However, the goal of the research should play a part in the decision. This is to say that one must look carefully at what the research project aims to accomplish and the resources that are available and



thereafter choose the distribution scheme that best serves this aim and resources.

### **VIII.B.ii. Sampling Frame and Timing of Research**

Simple random methods of establishing a sample for a research project is praised by many statisticians as being the best possible method for establishing a non-biased sample. Perhaps it is, if one had a sampling frame from which one may draw the random sample. However, in most developing nations this method of establishing a sample is almost impossible. The criteria of random sampling is that every person in the population has an equal chance of being in the sample. This criteria will be very difficult to meet unless one is dealing with a small population (i.e. college students, people earning a million dollars annually, etc.). When dealing with a city of more than one million people, it is nearly impossible to meet even for more developed nations (Healey 1990).

The method of establishing the sample for this research, combining clustering and random methods, seems to function well for the case of Jeddah. This however, does not mean that the method is ideal or cannot be improved. For example, the number of assumptions concerning the population can and indeed should be reduced. The only way to reduce the number of assumptions made in establishing a sampling frame is replacing assumptions with facts through research into the population spread of Jeddah.

The time of carrying out a research project is also very important as it has serious repercussions on the nature of responses and their meanings. In the case of this survey, timing played a part in the nature of the responses received. For example, children in this research felt that one of the main limitations to their outdoor play was the lack of time available to play. This response, however, might have been very different had the research been carried out during a time when children did not have school exams approaching. To truly gather information that is of substance, future surveys in this field should be done at four different times of the year in Jeddah. The reason for this being people's attitudes to the outdoor environments would appear, from observation, to change during different times and seasons. Possible target times may be:

- i) Autumn school session
- ii) Mid-year school holidays
- iii) Spring school session
- iv) End of year school holidays

While these times are designed to gather solid information that is not influenced by periodical or seasonal changes, there are issues which one must keep in mind if this approach is to be implemented in research projects. One very important issue is that the higher income groups in Jeddah tend to travel out of the country during the end of year



school holidays. This would mean that this portion of the population could not have the same level of input into a research project carried out during this time as other groups of the population. Another issue that has to be addressed is the presence of tourists in Jeddah during the mid-year holidays. With the decline of the nation's revenues from oil, it would seem that people from the Kingdom and the Gulf do not have the affluence they had during the late seventies and early eighties. This would perhaps explain why more and more people are opting to travel to Jeddah for their mid-year holidays instead of travelling out of the region (Hazza 1989). Hence, if this time is to be designated as a time to carry out a research project one must ask the following questions: Are the tourists to be included in the sample? If they are, then one must make provisions for it. Furthermore, will the opinions of tourists be taken and pursued as vigorously as those of residents? Choosing a time(s) to carry out a research project is a tricky business. Many issues and topics must be dealt with and addressed. However, one must always keep in mind the aim of the research, for it will make certain decisions easier.

### **VIII.B.iii. Levels of Measurements**

The levels of measurement used in a questionnaire and/or other information gathering methods has a direct influence on the tests that can be done in the analysis of the information. The level of measurement used in this research was basically nominal. While other levels of measurements would have provided a wider choice for statistical tests and analysis there are other issues that have to be considered. First, one must consider how much analysis and testing is required to achieve the aim of the research and answer the research questions. In choosing a level of measurement, one will have to make the format of the questionnaire or the method of enquiry suitable for it. The reaction of the population to the method and the complexity of the format of enquiry must also be considered carefully, for what good is a very complex mode of enquiry if the sample cannot answer or understand? On the other hand, the research might require complex statistical methods of analysis and as such, might require a higher level of measurement. The choice is left to the researchers, however the points mentioned above are ones which need to be kept in mind. Furthermore, the more complex the format of enquiry is, the more likely the researcher will have direct contact with the respondents. Interviews, for example, provide a much richer source of information than questionnaires, but require a greater amount of time, money and personnel to conduct and analyse.

In the case of Jeddah, it seems that the more indirect and simple the format of enquiry, the more likely the research is to be successful. The reasons are that the Saudi society is still a society not accustomed to people enquiring on matters which they do not think is any of their concern. This fact is of greater significance when one is addressing personal traits of the respondents (i.e. number of children, the gender of children, income level, etc.).



There still remains in the society an attitude of secrecy for the fear of other people's envy and gossip. This is one of the reasons why researchers intending to carry out research in the Saudi society have to be more patient than in societies where people are accustomed to enquiries and are willing to aid the researchers to the best of their abilities.

In keeping with the patient attitude needed towards research in Saudi Arabia, it is highly recommended that a research project should be divided into many sub-projects. Perhaps if one was to address every issue of a research project separately (both in time and enquiry) in Saudi society, one will make up for the effort and the duration the research is likely to consume with information and responses that benefit the project more. As an added feature to this approach, the research team might gain the respect and trust of people which might benefit the research in terms of finding out the kind of information that the respondent might be reluctant to give if there was no relationship between them.

### **VIII.C. Case Conclusions and Indications of Findings**

The conclusions to this pilot study into the field of children's play environments in Jeddah are many. Some of the conclusions will lead to suggestions for future work and research. Others will lead to more questions being asked in new areas of the topic. None are conclusive; for the subject matter is very dynamic and requires a constant effort in research and physical plans and concepts. The conclusions that are put forth here aim at providing a spring board from which future research might be started in Jeddah.

The results of the study indicate that the people of Jeddah have a positive view of play. This is to say that people in general think of play as a serving a developmental need in childhood. However, how does this attitude compare with other societies such as western nations? Furthermore, what is the appropriate attitude that people should have to benefit children's play? These questions have significant value when trying to establish the attitude of a society and determine a course of action based on these attitudes. For this reason, the attitudes of people need to be measured by an attitude scale which has been tried and tested by environmental psychologists to better understand the traits that may lead to attitude differences. Furthermore, by establishing a scale, comparisons between different societies can be undertaken and a greater understanding of a healthy attitude that supports play may be established. This was beyond the scope of this research but could be the basis of future research projects. Establishing a scale of attitudes does not, however, mean that there is an ideal attitude towards play. The nature of play does not allow for such a conclusion. It is an expressive behaviour amongst other things, and as such by establishing an attitude that is "correct" one is ultimately limiting play. The point is that one attitude towards play may be better than another. The attitude that a certain society is likely to adopt is very much linked to that society's conceptions of competence in



the adult (Bronfenbrenner 1979).

The process of child-rearing in any society aims at making the child a competent member of that society by adulthood. This task is a great responsibility for both parents and the society in general. There are many issues involved in rearing a child to be a competent adult. Play in childhood is perhaps not the most significant issue facing child care and development, however it is an important issue and reflects that society's optimism and attitudes. A society which caters for its young, providing the best possible facilities (not only play facilities) within their limits is a society that has faith in its young. It is a society that believes that the future holds promise. However, if a society does not believe that the future is full of hope and the promise of improvement, that society will never provide the best for its young population. It will blame its young rather than having faith in them, it will rob the young and itself of a future.

Changing a society's points of view and attitudes is a sensitive issue and requires time. Having said that, the situation in Jeddah requires such an undertaking - not to change the attitudes completely, but rather to capitalise on the positive attitudes that exist and refine some of the misunderstood issues and/or topics concerning play. For example, in this research people viewed play as assisting the child's physical, cognitive and emotional development. This attitude is indeed a very healthy one and through effort people will come to realise how play areas could assist in such developmental tasks. Such an undertaking will require the efforts of many people from many agencies and institutions. While people's attitudes in Jeddah need refining, there are other concerns that must take priority to it. Perhaps the most important of these concerns is the establishment of a comprehensive plan of action that addresses the problems of play provision facing children's play areas in Jeddah.

A plan of action is desperately needed for Jeddah's play environments. This is very evident from the responses to this research. The plan of action should consider children's play in the wider meaning of the term, rather than the approach that is prevalent at the moment where children's play is limited to a few scattered areas with swings and slides. To truly alleviate the problems that face children's play environments, the plan must aim at tackling the problem on many scales within the city. The provision for play and recreation along the Cornice have been based on good intentions, however they do not allow for the variety, quantity nor quality of play provision that a city of Jeddah's size should have. The issue is no longer one of compromising between quantity and quality, both are needed. The question now is one of creating a network of play environments that serve the many scales in the city. Such a plan of action must address some of the concerns and issues that have been revealed in this research. These can be summarised in the following points.

- 1) The need for play areas within a safe walking distance from the child's home.



- II) The need to provide different play areas for the different ages and developmental stages of childhood.
- III) The need to make neighbourhood streets pedestrian friendly.
- IV) The need to provide varied types of play experiences in the different scales of the city.
- V) The need to plan and design public parks so as to allow for access and use of these spaces.
- VI) The possibility of establishing supervised play areas in the inner city areas.
- VII) The need to design play facilities and/or environments with a consideration of the prevailing physical and climatic conditions of Jeddah.
- VIII) There is a vital need to cater for the activities and play of female children.
- IX) The need to co-ordinate public and private efforts so as to allow for maximum gain to the society.

Although this research has identified these points of concern, there is a need to carry out more research in the subject to ensure the soundness of the findings and the possibility of finding new issues worth further thought and examination.

Any action plan and/or future research must also address the point of the strong association that seems to exist between recreation and play facilities. While the sample in this research did not seem to consider play in a negative sense, the close association that seems to exist between play and recreation could be seen as indicating something. The existence of play areas mostly in recognised areas of recreation throughout the city (i.e. the chalets of Obhur, the Cornice) is an indication that the planning agencies, and indeed private developers, tend to think of the two activities as being linked. This close association of the two activities may have played an important role in limiting the proper provision for play within residential areas, schools and non-recreational areas throughout the city. To the adult, play and recreation in many instances are linked, however to the child it is a different matter. Play to the child is an integral part of his overall development and must never be confused with recreation.

Play, which is the activity children engage in most while young (with the exception of sleep), is not viewed as a need for children's well being. Instead, as is the case in many countries around the world, play is viewed as an activity a child engages in to recreate, have fun, blow off steam, and so on. Formal education and the pressures exerted by the society as a whole towards academic achievement, has in some way forced many of the children of Jeddah to concentrate on school and/or formal work. Play, as an aid to the integral or complete development of the child, has been neglected or misunderstood. Hence, there is also a need to stress to the society the importance of play to the child as well as identifying the differences that exist between recreation and play so as to assist people in understanding both activities and hence the disassociation of the two.



From this research one is able to come to a basic understanding of what a successful play environment should have. These needs will be listed shortly, but before doing so there are some points that the reader might want to keep in mind when looking at the suggestions of the essential features of a play environment. One point is that cities and societies differ, with this comes different priorities that a society or city might have for certain features. Another concern is that the features of a play environment are dynamic, meaning that what is currently a desired feature may become undesirable in the future. The only means of ensuring the continued success of any play area is to employ continued research in the subject and a continued feed-back from the users of the play environment of concern. This requires of designers and management professionals an attitude that provision for children's play does not end when the construction phase is completed. Keeping these points in mind, the basis of a good play environment is as follows.

- I) The play environment must attract children to it.
- II) The location of the play environment must allow the child access with minimal effort and minimal danger.
- III) The size of the play environment should be proportional to the number of children that will use it.
- IV) While safety is of concern when dealing with children, a play area should not be isolated from other activities that are nearby (i.e. street life, adult recreational areas). Children want to be where the action is.
- V) The play environment must offer variety and challenge according to the child's abilities in order to sustain the play arousal level and hence continued use.
- VI) The play area must provide for the play of different age groups and developmental stages. While the activities for the different ages and/or developmental stages should be separate, they should not be segregated from one another so as to allow a sense of oneness in the environment and facilitate ease of supervision.
- VII) The play environment should be overlooked by adjacent land uses so as to allow for defensability against possible intruders or possible trouble.
- VIII) The play environment must be designed so as to allow for manipulation and minor alterations by the children. This benefits the child's sense of control of the environment amongst other things. The use of natural materials such as sand, water, plants, etc. are the simplest design elements that allow for this manipulation. However, the manipulation and alteration of the play environment could extend to the rearranging of equipment and the establishment of new features in the play area.
- IX) The play environment must take into consideration the prevailing climatic conditions and create micro-climates that are pleasant. In cases where the climatic conditions are severe, the inclusion of sheltered or indoor play areas might be



considered.

x) Play areas should not cause a nuisance to adjacent facilities and/or land uses in the form of messes, noise, etc.

To this list can be added features which are specifically applicable to Jeddah. These added features are as follows:

- I) Consideration should be paid to the time of day that play occurs most frequently and adequate lighting should be provided for play areas.
- II) Play areas for females should be designed with privacy as a major concern in the design of these areas.

As was stated before, play environment provision is a complex issue and a costly one. Providing for children's play needs is expensive, but from Western experience, not providing for children can be even more expensive as vandalism and crime levels rise. The need to research many of the issues that have a direct and indirect impact on the planning and design of play environments cannot be stressed enough, especially in the case of Jeddah where, from this research and observations, the situation is increasingly deteriorating with the growth of the population and ever decreasing resources.

Twenty years ago, Jeddah had problems with providing a stable water supply to homes, electricity all of the time, and more significantly, homes for the large influx of people. Today, water, electricity, and housing are not a problem, neither are most of the essential needs of urban living. For these achievements to have occurred in such a short period of time, the city of Jeddah and all involved in achieving them are saluted. However, in achieving so much, people's expectations for future achievements are heightened. This is the dilemma the city of Jeddah and its officials must now come to terms with. They must realise that having provided the essentials they now must provide some of the "luxuries". It is the predictable human trait of striving for improvement that is at play here. The obstacle that officials run into is one of a financial nature. While money was not a problem in the accomplishments of the previous two decades, today money in the Kingdom is not as plentiful as it once was, especially in the public sector. Hence the problem is amplified, people are expecting authorities to provide as they always have which authorities can no longer achieve. It is indeed not an enviable situation that the authorities find themselves in. These facts signify the need for attitude change in the planning and design approach being followed at the moment by city officials. It is no longer justified to follow the trial and error method once used. It is no longer justified to use the method that implies that planning officials, business men, developers, and professionals know what is best for people and what they want. The time has come to follow a different, more resource efficient approach.



The planning approach that is being suggested here is one of logic. While professionals and officials have, through the years, gathered a significant amount of information concerning planning and design, this information on its own is not really enough to plan and design for people - especially not on a city scale. There is a greater need to better understand the human being that lives in the city: Understanding how the environment that is being built is to affect them and their behaviour. Furthermore, there are many issues and concerns that must be dealt with in any plan and/or design, perhaps most important of all is the involvement of people in planning and design decisions. Spending more money and time in the earlier stages of the process to facilitate investigations into people's needs and/or public participation may save a great amount of money in the long run. Projects that work well should now be the objective of planning officials and professional designers, and projects only work well if the people that are to use it are consulted with. The approach of provision without consultation has failed, the empty and deteriorating residential towers in almost every city are but one example of its failure.

#### **VIII.D. Issues and Questions for Future Considerations**

The city of Jeddah, as is the case with many of the cities in Saudi Arabia, has gone through many changes in a very short time. The physical, cultural and attitude changes that have occurred are remarkable. However, these changes have given rise to many problems, many of which have affected the outdoor play of children in Jeddah. It is intended in this section to highlight some of these issues and concerns for future consideration and possible research.

The physical changes that have occurred in Jeddah to accommodate for a population that has gone from under 50,000 to well over a million in a time span of 45 years are many and overwhelming. The people in Jeddah have yet to come to terms with all these changes. In the early seventies, severe housing shortages brought about by the population explosion was the main problem facing the planning agencies and people of Jeddah. The solution to this problem was to adopt a method of planning that provided housing in a very short period of time, namely the grid street patterns/layouts and planning codes that allowed for quick construction. The initial results were very favourable in that people had housing and were happy. Since then, however, people have come to question the success of this solution in terms of its contribution to the quality of their lives.

The shortage of time the planning agencies of Jeddah had to find a solution meant they could not examine the benefits and drawbacks associated with their adopted planning answer. Furthermore, the emphasis at that time was for the private sector to provide subdivisions that offered building lots to the public upon which the individual could construct a



house with the financial aid of a special fund founded by the government. While some public housing projects were developed, the policy was clearly based upon economic stimulation via the private sector. These points are the main issues of concern in viewing the existing situation.

While the intentions were honourable in allowing the private sector freedom to assist in the development of the city, it did not aid in providing a good environment. Businessmen have one main goal in any venture they undertake: to make a profit. As such, the sub-divisions that the developers were asked to develop were very basic in that they provided streets, lots of land, services, and open spaces. However, these open spaces were basically spaces that could not be utilised for any other purpose: S.L.O.A.P. spaces (spaces left over after planning). Such development plans would have been rejected by the planning agencies if they had a system of evaluating submitted plans for approval, unfortunately there was not such a system. Furthermore, the policy for the design of the few open spaces provided by the public sector had one aim, that of making Jeddah green and beautiful. The result is modern Jeddah: A city with many trees and plants but minimal usable open spaces. It is not surprising then that the Cornice is truly the only open space offered to the population of Jeddah for play and recreation. While many academics and officials have pointed out some of these issues, the practice described above is still the practice being followed in the planning of the city.

Another issue that needs to be addressed in Jeddah's case is the pattern of development. While the grid pattern is very efficient in providing services (i.e. water, electricity, etc.) it is not the ideal pattern of development for people. One of the main drawbacks of the grid pattern is that it gives the automobile the right of way on the streets. This fact, coupled with the fact that the population of Jeddah in general have a different attitude to driving than might be the case in the West, has had a disastrous effect on people's lives. The people of Jeddah, from observations, seem to treat the automobile as an extension of their own being. They do not treat the automobile as a machine that can possibly injure or harm others. In a sense, the majority of people in Jeddah still have the pedestrian mentality in driving in that treatment of the car and the way it is driven is, in many ways, the way a person walks: When turning, signals are rarely used, lanes on the road are not always respected, and so on.

Perhaps some of these attributes could be due to the village ways of life which is still prevalent in Jeddah society. In addition, the grid layouts of streets have made it possible for people to increase the speed of driving even in neighbourhoods. The results are disastrous and in some cases fatal. The many intersections that are present in a grid layout, coupled with the attitude and speed of driving, has led to many accidents, injuries and in the most unfortunate cases, deaths. The effects on families and children has been



the increasing avoidance of the street as a possible space for their play and/or recreation, especially in the sectors of the city with grid layouts.

This avoidance of the streets by families and children is understandable. However, it has only served to completely surrender the streets to the automobile. Drivers in Jeddah now do not expect to encounter children or pedestrians on the streets. As such, they do not pay as much attention to the possibility of children running on to the street as, perhaps, thirty years ago. The streets of Jeddah now are truly the domain of the car. This fact must be addressed and altered in the very near future. There is a need to research traffic in the city of Jeddah for the purpose of establishing a planning policy that deals with limiting its effects on people throughout the city, especially in residential precincts and any area where pedestrians should reclaim their rights as the primary users of space. A route of action must be quickly established and decisively implemented. Unless the perceptions of the young generation is changed regarding the relationship between people and automobiles now, it may never change - to the great detriment of the quality of life in the city.

The physical changes that Jeddah has gone through over the past 45 years are by no means the only changes the population has had to contend with. Social changes that have occurred are just as great and perhaps more influential than the physical changes when it come to children's outdoor play. Throughout its long history, Jeddah has been a melting pot for different cultures and peoples. With the boom in oil prices that occurred in the seventies, this situation was intensified. People from all over the Islamic world, the Middle East, and the world flowed into Jeddah and Saudi Arabia to assist in the development of the nation and/or the city. With this large influx of people, the people of Jeddah were exposed to many cultures and values literally over night. The full effects that this exposure has had and indeed, is still having on the people of Jeddah, only time will tell. From this research one can only speculate on some of the effects that seem to be occurring.

Fear was an often mentioned concern parents and people in general seem to have with the outdoor play of children. The people of Jeddah, especially Saudis, are fearful of their social environment (i.e. neighbours) for they do not really know them. In the past, people would know everyone that was within a reasonable distance from their homes. Also, with extended families residing in the same house, changes in neighbours was almost unheard of. However, with the expansion of the city and the new life styles that are being adopted (the rise of the nuclear family and the influx of so many foreigners from the different parts of the western region of the Kingdom and abroad), no one knows or is concerned who their neighbours are. However, as growth stabilised, the dust of the stampede began to settle. Environments were more of a concern to people, for those who could afford it they



went on to build their own detached units (villas). Others that could not afford this, settled for moving to better accommodation where they might know some of the people that lived there. The constant moving (coupled with the layouts of neighbourhoods) never allowed neighbourly relations to form. This, coupled with the news of the many problems that accompany urban life (i.e. violence, drugs, etc.) frightened the simple and honest people of Jeddah. To them, these things were novel and to be feared. Some even went as far as becoming fanatics and denouncing every thing that is new. For the majority however, it was a matter of hanging on in quiet desperation and having to live around these fears. The only way they could do this is to isolate themselves from the cause of the fear: the urban environment. They live, recreate (on most days), and interact with family and friends in the confines of the only urban feature they have control over: their own home(s).

A solution to this problem is very difficult to identify. Nonetheless, the fear that is evident in the attitudes of people in Jeddah could well be the fear of the unknown. While it is true that the social environment has changed considerably, many of the traditions and traditional codes of conduct are still practised by the people of Jeddah. The problem may lie in the physical environment in that it no longer supports social contact and activities on the neighbourhood scale. The lack of open spaces in the neighbourhoods, as well as the lack of consideration for pedestrian use of the outdoor environment, has in a sense eliminated the natural means of neighbours meeting. As Jacobs (1961) points out, people get to create a relationship in stages: The passing by of a person while walking to a shop (i.e. familiarisation of face), the greeting of a person by a simple hello; these, in turn, lead to a web of social contacts and acquaintanceship. Hence the physical environment has a role to play in limiting and reducing the fear of people towards the environment. The basic unit of a society is the family and the basic unit of the city is the neighbourhood. If one aims to establish a good urban social fabric one must start with establishing a good social fabric in the neighbourhood.

There is a desperate need to provide an alternative to the present planning practices and methods. The traffic and open space problem facing Jeddah needs to be tackled by means of research and action. With the resolution of these greater issues, people might find it easier to reclaim their streets and establish social contact with neighbours. Children at play in the neighbourhood can play a major role in assisting this process, for how many times has neighbourly relations started by one's children playing with the neighbours' children and parents meeting as a consequence? One could only speculate on the results of opening up the neighbourhood to pedestrians, nonetheless some of the results could include the frequent engagement in play activities near the home by children on a day-to-day basis. Further, perhaps the elderly would be encouraged to go out more and use neighbourhood spaces, benefiting from the fresh air, remembering their own youth and passing on their values and beliefs to the younger generations. The benefits could be



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many, the disadvantages are almost certainly less than the existing ones!

Another very important issue to influence the provision of open spaces in Jeddah is that of land value. The fact is that the majority of land to be sub-divided and sold on a retail level is owned by a few developers in Jeddah. The result of this monopolisation of land is a mark-up in property values as well as development (See Chapter IV, Section IV.D). With the control over prices, the profit to be made in this sector of the economy is great. As such, the land developers that sub-divide the districts and neighbourhoods of Jeddah will not sacrifice land for open spaces that they can get good money for. However, it is the responsibility of the planning agencies of Jeddah to control this situation. It is their responsibility to ensure people get the best possible environments. While they must uphold the rights of the developer, they must also remember their obligations. The standard that the planning agencies have for open space provision within a sub-division is ludicrous. It states that any subdivision shall have 33% of the subdivision land designated for open spaces, which may seem like a very considerable percentage, but it also includes the streets within the sub-division! The standard also does not address the quality of spaces that are being provided. To this issue, and that of land value control, future research, thought and policy must be focused.

While the above problems are the main issues that could be researched and analysed in terms of improving the situation of children's outdoor play and neighbourhood spaces in Jeddah, there are other issues which might benefit the overall outlook on the topic. These issues and points are significant in that they might affect the use of outdoor play environments and/or people's attitudes towards play.

To begin with, research into the what causes people to change their attitudes concerning a topic might benefit research in this field as well as other fields. This issue is of significance because of the relationship between attitudes held concerning play and the actual use of play environments by children and adults. Furthermore, identification of the variables that might influence the attitudes of people is essential in understanding and altering those attitudes. One expected variable that will affect the attitudes of the people of Jeddah towards play, play environments and activities regarded as play is the amount of exposure people have had to Western cultures and environments. There are considerable differences between the ideas and attitudes of Saudi society and those of Western societies. The more exposure a Saudi person has to the West, the more likely his attitudes and beliefs will be a compromise between the two. In terms of play and play environments this could be very beneficial. Although Western societies and nations have problems with play environment provision and differ in cultural aspects, from observations they do appear to have more favourable attitudes towards play and child development in general. As such, the play environments to be found in these societies and/or nations are much better than



those found in Jeddah. By exposure to the West, the Saudi person might be favourably influenced in terms of attitudes toward and expectations of a play environment. However, if people have nothing with which to compare Jeddah's play areas and facilities, the result might be that people believe they are satisfied because they do not know any better.

The second point that needs researching is people's lifestyles. In Jeddah some people tend to be very passive (i.e. engage in passive activities) where as some are very active. The question that arises is whether the passive people do not engage in activities just because of the lack of desirable activities provided for. The relevance of this fact to children's play areas and facilities relates to the question of whether children would use any play facilities that were provided or simply remain passive as a reflection of a general level of apathy and passivity in the family. This has implications for the way children might be informed about play choices, as well as the provision of play facilities and areas.

Future research must also address the latent demand of the population of Jeddah. What is meant by latent demand is to identify the activities that people would desire to engage in if they were offered or were available. This issue is, however, very complicated in that what people say they desire may not truly be what they desire. Hence a word of caution should be given on providing what people say they would like. The best approach to ensure the desirability of an activity and/or facility is to have a trial period with minimal provision to support the activity. From observations and research during the trial period, one can come to a much better and clearer understanding of desirability, use and the facilities and/or support services the activity requires.

### **VIII.E. The Way Forward for The Planning and Design of Play Environments**

This research aimed at establishing a planning and design approach to ultimately establish planning and design guidelines for children's play environments in the city of Jeddah. The first step in any approach has to be more research in the topic of concern. Furthermore, future research projects in Jeddah must consider the points and issues listed earlier. As for what is to be done in the future in Jeddah to improve the approach to planning and design of play environments, this section will aim to provide some suggestion for this purpose.

The first change that has to be made is the restructuring of the departmental duties in the municipality of Jeddah. At the present time, issues concerning recreation (children's play included), parks and open spaces are dealt with by the Parks and Beautification Administration. On the other hand, research and building permits for projects are in the domain of the Planning and Development Administration of the municipality (See Diagram VIII.E.1). This structure of responsibility is not very beneficial for children's play in Jeddah.



The reason for this is that it causes confusion and some waste in effort and resources. Furthermore, any co-operation between the many departments inevitably create the possibility of administrative difficulties.

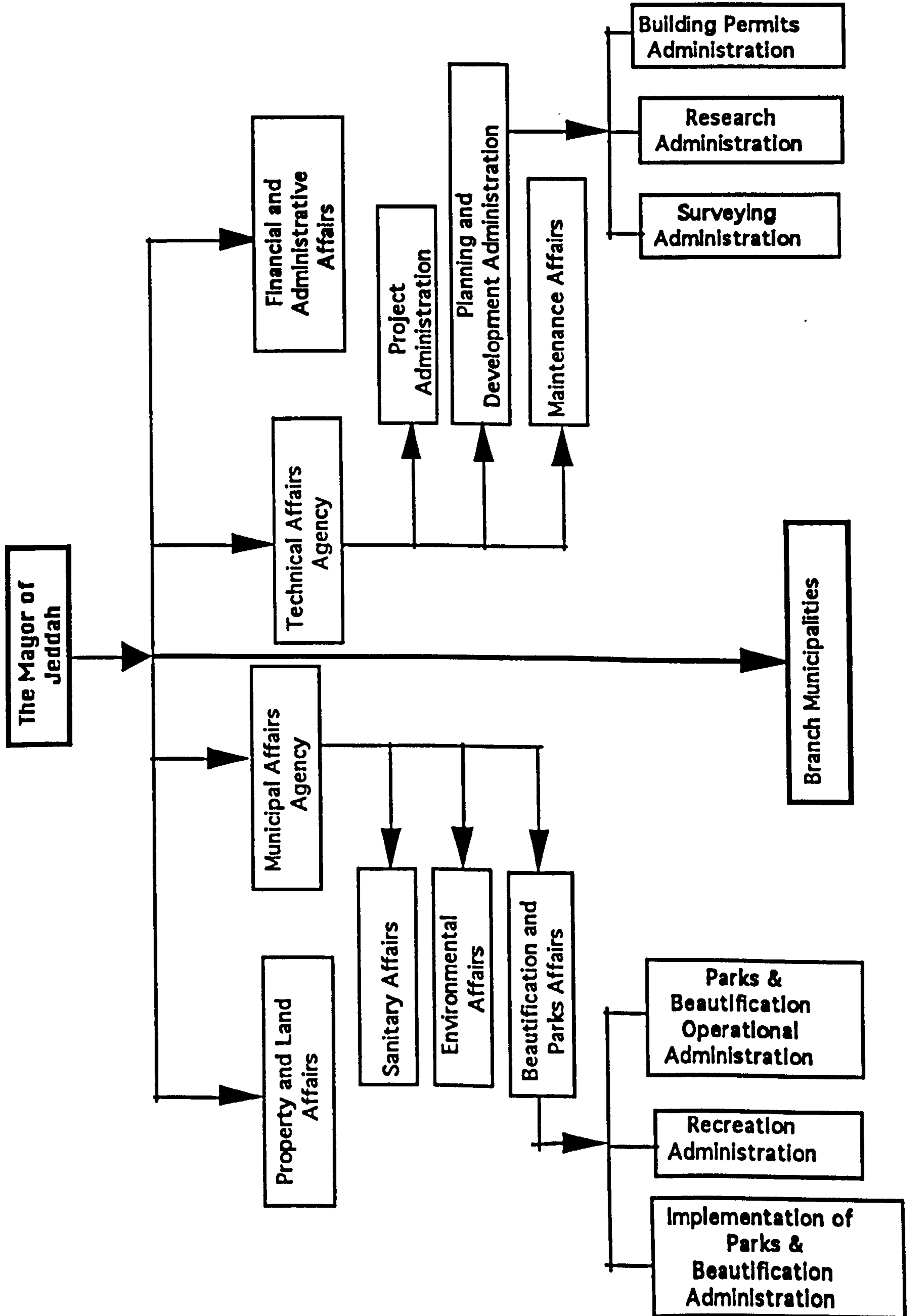


Diagram VIII.E.1. The Existing Administrative Structure of The Municipality of Jeddah. [Taken from M.o.M.R.A. (1990)]



The existing structure in the municipality indicates the lack of an overall perspective concerning planning and/or design. This is illustrated when one considers the matter of children's play environment provision in Jeddah. The Parks and Beautification Administration will be the administration within the municipality to make sure children's play is catered for in parks, city scale open spaces (i.e. the Cornice) and recreational projects. However, when it comes to ensuring children's play is available and catered for in residential areas, the responsibility will shift to the Planning and Development Administration. This makes it extremely difficult to develop a co-ordinated approach to play provision. Therefore, the existing structure to benefit the play of children in the city and the environment in general, the existing structure will have to change.

Radical change to the administrative structure may harm more than benefit the situation. What is being suggested here is minimal restructuring that will have the most significant effect on improving the situation of children's play environment planning and design. The first step in this restructuring is to establish an administration that is responsible for researching, planning and permitting projects in the city. The suggested scope of responsibilities and issues this administration would deal with are as follows (See Diagram VIII.E.2).

- I) The suggested administration would be made up of many disciplines to ensure an interdisciplinary approach to decision making.
- II) The suggested administration would be responsible for all building permits to come out of the municipality. This will ensure that all construction and designs conform to the overall plan of the city. In addition, this will provide a greater control over developers and the private sector.
- III) This administration would be very closely linked to the School of Environmental Design in King Abdul Aziz University to benefit from the experiences and views of staff members and students. Furthermore, co-operation between the two institutions would be very important, especially in the fields of research and future planning strategies.
- IV) Furthermore, this suggested administration would only be answerable to the Honourable Mayor of Jeddah to ensure its effectiveness and reduce the bureaucratic delays that might develop.
- V) The suggested administration would take into account the many needs and issues of the other administrations in the suggested structure of the municipality. In turn, the suggested administration would have a direct influence on the other administrations and would have a responsibility to supervise the other administrations preceding any actions by the Mayor of Jeddah.
- VI) The sub-administrations to the suggested administration would be specialised in different areas of urban planning. These sub-administrations would be responsible for developing planning and design guidelines for the different activities and/or



developments in the city. To ensure that the planning and design guidelines derived at are sound, it is suggested that these sub-administrations are formed with many disciplines involved. Furthermore, due to the nature of planning and design, some activities and/or land uses are inter-linked, therefore it is recommended that the sub-administrations work in close concert with one another. In addition, there would need to be close association between the sub-administrations and the Branch Municipalities. This will ensure a better understanding of what each part of the city is going through as well as providing valuable feed-back to improve upon the planning and design guidelines.

While the restructuring of the municipality is a very difficult concept to accept without giving it very careful thought and analysis, the author truly believes that for the benefit of the public and the environment, it must be seriously considered.

How will the restructuring of the municipality of Jeddah aid the proper provision of children's play environments? Within the municipal structure suggested, it would be possible to establish a sub-administration responsible for establishing planning and design guidelines for children's play environment and follow up research. This sub-administration would then provide other sub-administrations with the guidelines that concerns them. However, this approach would be a costly thing for a single municipality to operate.



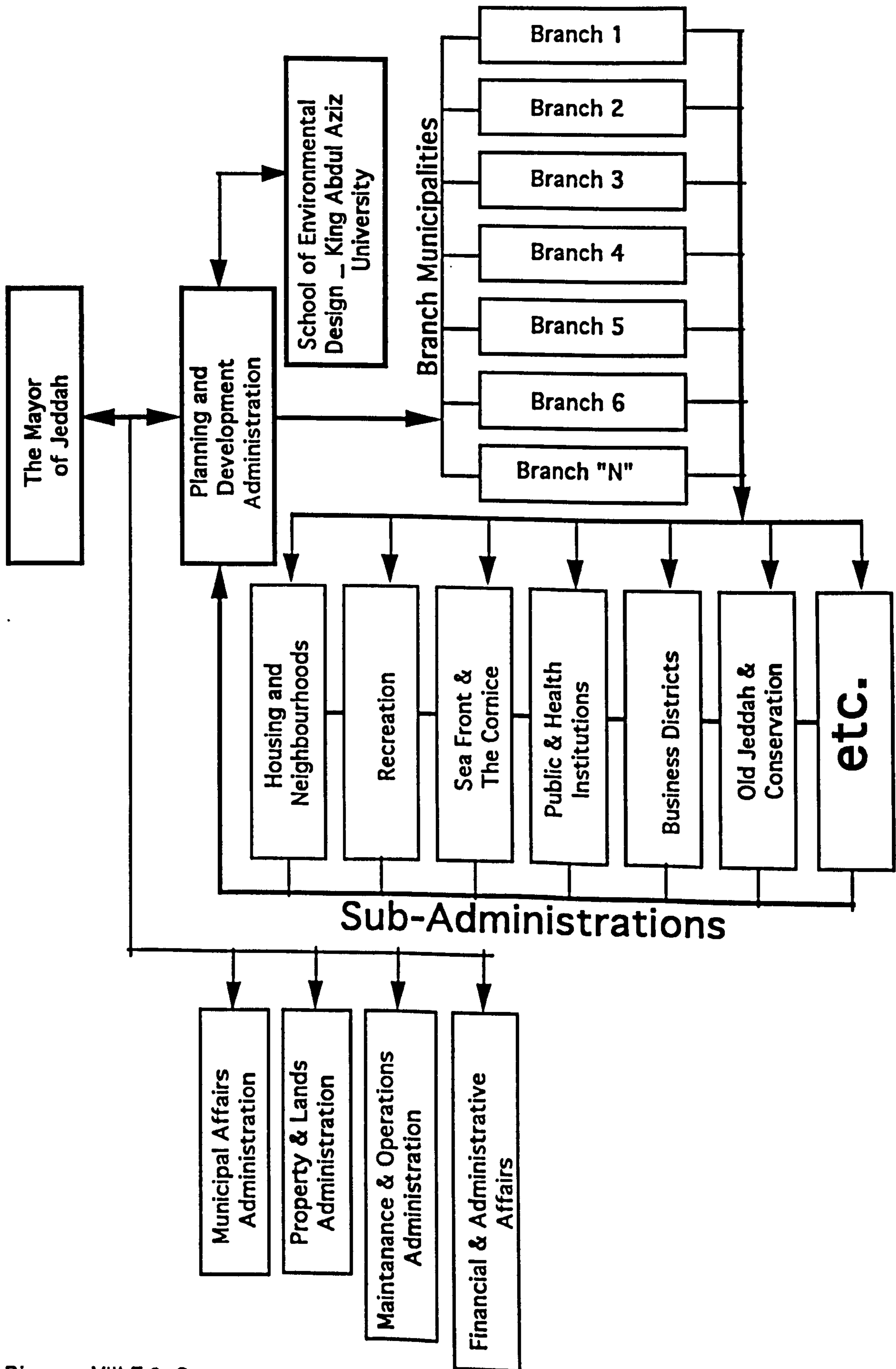


Diagram VIII.E.2. Suggested Administrative Structure for the Municipality of Jeddah.



While there are some social and physical differences in the many parts of Saudi Arabia, the differences are minor. As such, to establish a sub-administration in each city of the Kingdom concerned with establishing planning and design guidelines for children's play environments would squander resources and in many cases would lead to redundancies in the guidelines reached. A more reasonable approach would be to establish a national agency concerned with establishing planning and design guidelines for children's play environments in general (See Diagram VIII.E.3). Thereafter, each municipality would be left to its efforts and conscience to make these guidelines acceptable and compatible with the sub-society within each city. After minor alterations to the national guidelines, the guidelines could then be distributed to the Planning and Development Administrations of the municipalities for enforcement. This agency could fall under the administrative control of the Youth Welfare Commission. Furthermore, contributions from the different Ministries would be recommended. The participation of the many Ministries would aid in the development of more practical as well as better guidelines. In addition, the different ministries could aid in the promotion of play in a non physical fashion, thus enabling attitude change on the part of the society towards this activity. The information on which the suggested agency would base the decisions concerning planning and design guidelines for children's play environments, would be derived from research carried out by the research departments in each municipality, thus ensuring the relevance of the information and providing an important feed-back mechanism.

Besides researching and establishing guidelines for play environments development, the agency could examine some of the related issues stated earlier (See Section VIII.D). Of prime concern should be an examination of traffic in the urban areas and ways to reduce the speeds of automobiles and reduce the effects it may have on the life of the population especially in the residential areas. Furthermore, some attention should be paid to making public transport more accessible to children in the urban areas, especially in inner city situations and/or heavily developed areas within the city.



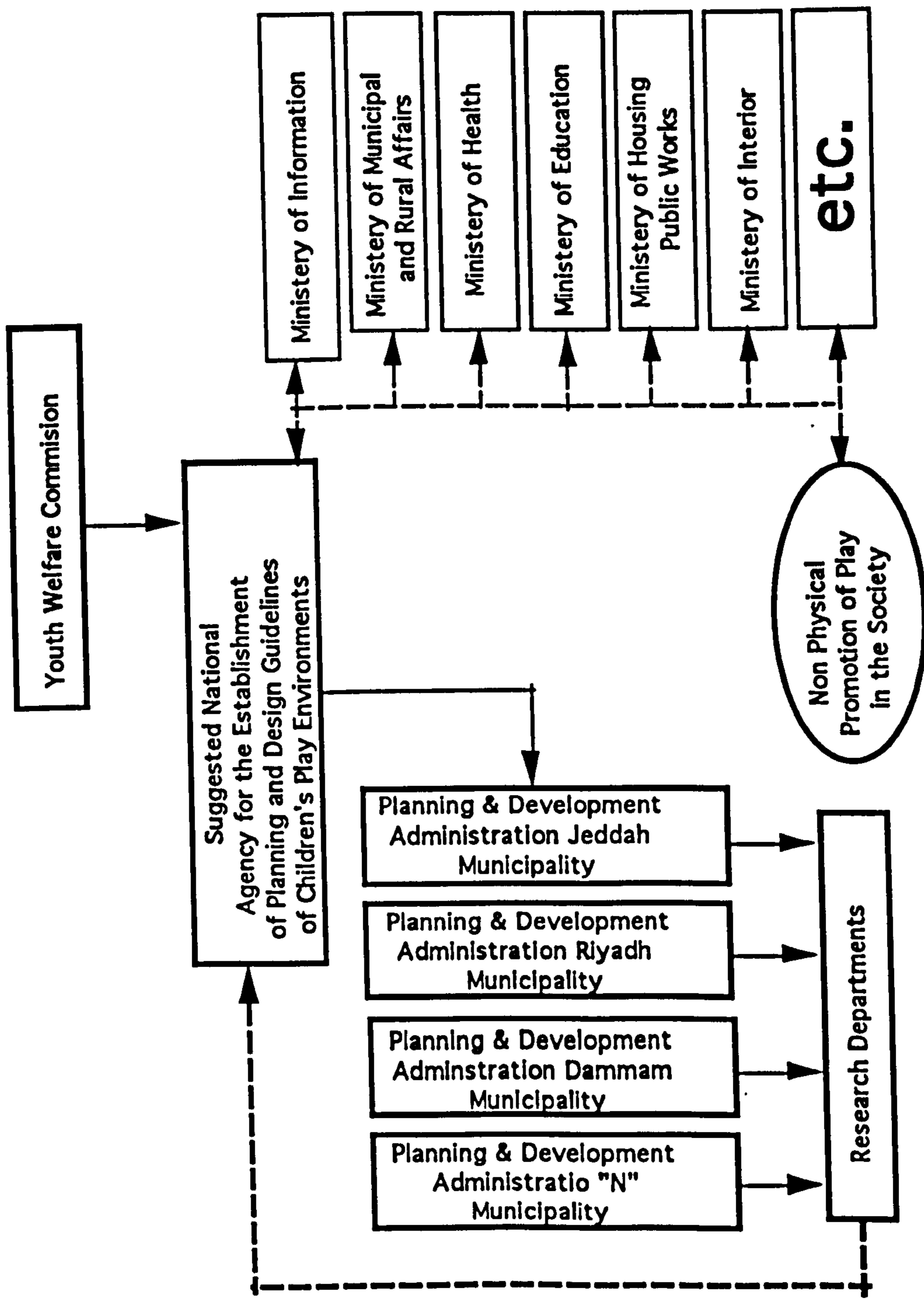


Diagram VIII.E.3. Suggested National Agency for the Development of Planning and Design Guidelines for Children's Outdoor Play Environments.

Another change to the planning and design approach for children's play environments in Jeddah could be the promotion of large developments in the residential areas. At the present time, as mentioned before, residential developments are for the most part developed by individuals who own lots of land. While this approach allows people the freedom to develop residences as they would like, it does not allow for the control required to develop an environment supportive of play, nor is it an approach to develop an aesthetically pleasing environment. However if large developers and/or an agglomeration



of land owners were provided with incentives for developing property following a specific development plan, this plan would be much better controlled by the planning agencies and the end result would be a more harmonious environment.

This approach requires very meticulous consideration and thought. One of the main problems it is likely to face is the rejection of the idea by the people of Jeddah. This rejection is likely to stem from the need that human being seem to have to have homes which are different from others (Hall 1988). However, if the planning agencies set guidelines for such developments ensuring that individuality is preserved whilst maintaining harmony on the whole, this approach is likely to be of great benefit to all. Another consideration that must be addressed is the slow phasing-out of individual developments. Planning agencies need to establish a minimum area of land for the individual developer to ensure the freedom of the private developer, whilst maintaining a mechanism that better serves the population and the environment.

Planning and design approaches that are prevalent in Jeddah at the moment are out dated and no longer serve the needs of the population or the environment. There was a time when quantity in provision was of primary concern. That time has long passed, however, the planning establishment and the mechanisms installed to ensure the provision of that time have not. A fresh approach to planning and design, one that promotes quality is now called for. The suggestions put forth here do not aim or claim to provide all the answers for planning the city of Jeddah. What they do is suggest some possible approaches to planning and design to benefit children's play environments. The point is this, it is time for the officials that plan the city of Jeddah to reconsider all the present approaches to planning and concentrate on quality in provision and environments.

The task is a great one indeed, and requires the effort and expertise of all. From observations, the author has deduced that the prevalent attitude seems to hinder any improvements. This attitude which is held by many officials is one of passivity. No one really wants to make any significant changes, neither to the system nor to the environment. While many problems of the city are recognised and understood, for some reason no action(s) is taken to solve the problems. Whether this is a personal attitude or a fault in the planning system, it is not clear. What is evident is that officials that are responsible for providing the best possible solutions for the public are not doing so. Furthermore, co-operation between the many public agencies and departments is almost non existent in Jeddah. Again, the reasons for this lack of co-operation between the public agencies and departments is not clear. However, if any improvements and progress is to occur, the co-operation of all is required and indeed needed. The municipality of Jeddah can accomplish a great deal, however this would be greater and better if other agencies and departments contributed to the goal of providing people with the best city within their



capabilities and means.

Improvement should not be limited to the agencies but should extend to the individual within the agency and/or the different professional firms in the city. The education of the individual planner and environmental designer should improve. Perin (1970) has pointed out that architectural and/or planning students' education follows a scenario of being given a design or planning problem and told to solve it. The staff members will aid the student in reaching a solution, providing them insight into the many different issues that might be involved as well as providing them with reference materials that deal with that particular problem. However, rarely are the students exposed to specialists in different fields to get first hand information from them. Another factor that seems to affect the education of the environmental designer and planner is the small number of courses or credit hours offered within the curriculum for other fields such as social sciences, humanities and visual arts/sciences.

The individual that has an interdisciplinary outlook and training is an individual that is of great worth to the city and society. The education of future environmental designers and planners should strive to offer the society this type of architect, landscape architect, planner and engineer. As Vitruvius says on the nature of an architect,

Let him be educated, skilful with pencil, instructed in geometry, know much history, have followed philosophers with attention, understand music, have some knowledge of medicine, know the opinions of jurists, and be acquainted with astronomy and the theory of the heavens. (Broadbent 1988; p.4)

Finally, the planning agencies must involve people in the planning and design process. The form of involvement that people can be involved in could extend from research into a certain topic or issue to full participation in every phase of a development and/or project. Not involving people in the planning and design process has proved in many instances to be regrettable. In Western countries the lack of truly involving people in developments has either led to the ultimate destruction of the development and/or the deterioration of the quality of life within the development to a state of chaos (Coleman 1985). Involvement of people in the process will aid in the understanding of the many behaviours and activities that are likely to occur within a certain environment. However good an environmental designer or planner is, s/he will surely overlook some aspect in the plan or design (Broadbent 1988). When there are people around to point out the way the environment is likely to be used and the true desires they have, the risk of overlooking an issue and/or concern is reduced.

The way forward in planning and design in Jeddah is to truly make an effort in the many aspects of planning and design: An effort to ensure a system of planning and design is



there for the benefit of people and the environment; an effort by officials to make sure they are not caught up in political and special interests; an effort by individual planners, architects and landscape architects to put their own pride and success second to providing the best for the people; an effort by the educational institutions to provide the society with capable individuals that are well educated in all aspects of environmental planning and design, including an interdisciplinary training. Individuals that want to make a difference, individuals that want to benefit people; an effort by planners, architects, officials and landscape architects to accept that they do not know everything about planning and design and that people need to be involved in decision making if there is to be progress and improvement in the environment.

The government policy of reliance on the private sector for provision of facilities and services to the public may be a very good policy to follow from an economic perspective, but is proving disastrous in terms of provision for children's play. Children's play is a matter that must be dealt with not for financial gains. One can only speculate on the ill effects that might arise if the play of children in a society was made a commodity in the economy. The private sector do have a significant role to play in the provision of children's play environments, especially in the case of Jeddah, however the private sector should never be allowed to govern policy or provision practices. Their contribution must fall under the greater umbrella of the public good and benefit. The public sector have an obligation to the population to control and guide the private sector. Furthermore, the public sector must ensure that the private sector, no matter how powerful it may be, must abide by the greater plan of provision and planning principles. If the public sector does not, damage to the best laid out plans may be the result. In addition, the private sector itself may be harmed if it is allowed to venture with no guidance and control. Finally, the public are perhaps the ones to suffer most from allowing the private sector to do as it pleases, for example in the case of Jeddah, where the private sector were not guided and controlled for so long, variety in the provision of children's play environments from the private sector is minimal. Indeed, the lack of surveillance and the absence of a holistic plan for the provision of children's play environments and facilities by the public sector, has rendered the Cornice of Jeddah as a fairground reservoir consisting of more than eight fairgrounds, all having basically the same equipment and thus experiences to offer to the children, lying side by side.

The public sector must act as a force that is friendly to both the private investor and the public. The emphasis, however, must be placed on the benefits to the public, including the child. The relationship between the public and private sector could indeed benefit all involved. With the proper set of plans and proper mechanisms of guidance and control established and continually refined, the public, and most importantly the children of the society, will eventually be pleased. The private sector will benefit from the direction and the



sincere concern the public agency(s) shows towards their prosperity and continual growth. In this way, the society as a whole will benefit. However, the existing situation of the private sector governing and providing what they see fit, where they see fit and the public sector only acting as a building permit establishment must be discontinued if the children of the society and the society in general are to benefit from the activity of play.



### **VIII.F. Conclusion**

When this research was undertaken, the author believed that the situation of children and their play environments in Jeddah to be bad. Having completed this research, the author is convinced of this fact and hopefully the reader finds some of the conclusions derived at to be supportive of this claim. Perhaps this research did not arrive at conclusive answers, perhaps it did not provide statistical solidity, however it does provide a starting point to try and solve the problems that the children of Jeddah face: Problems that are in some instances beyond the scope of environmental planning and design. This research has also pointed out the need for some changes in people's and official's attitudes towards the topic of children's play provision in Jeddah. Perhaps the most important points reached in this research are:

- a) The dire situation the female children of Jeddah find themselves in. The lack of opportunities they have in both their physical and social environment to indulge in play is indeed a frightening thought and may have serious consequences and/or effects on their physical, mental and social development.
- b) The dominance of the automobile in Jeddah. While the author is not an anti-automobile advocate, in Jeddah the situation has gone out of control. There is a place for the automobile within the city, indeed the automobile has given mankind mobility and freedom that was not imaginable. However, when the automobile threatens the people it was aimed to serve, and when the over dependence on it endangers the pedestrian and the child in the neighbourhood and when it generally compromises the quality of urban life, then the problem must be dealt with and the automobile restricted.
- c) The lack of usable open spaces in Jeddah. With the exception of the Cornice, the city of Jeddah has little to offer its one million plus population in terms of public open spaces and/or areas for recreation or play. This fact surely indicates a lack of good planning, which needs to be reversed.
- d) The effects of the physical and social changes that have occurred in Jeddah over the past decades are still having an effect on the population. This is evident from the differences in play behaviour and experiences offered to the present generation and those offered to the previous generation.

The development of the child is a very important issue not only to child developmental psychologists, urban planners/designers and parents, but to society as a whole. In a sense it is an investment in the future. If society does not make child developmental issues amongst its most important concerns today, then the society of tomorrow will not. Man kind in general will then be the loser. While children's play is only part of the child's development, it is an important part. Its importance is recognised by psychologists, educationalists, doctors and, increasingly, city officials. However in Jeddah, play, contrary to



people's attitudes found in this research and observations, is not considered to be of importance. "If play occurs then that is good, if it does not then it does not", seems to be the attitude of the general population and officials. Furthermore, the quality of the play experience and/or environment is not a concern at all. On the Cornice play equipment is scattered in fields of sand, in neighbourhoods little if any spaces are to be found which cater for children's play, and even in schools where children are the primary users of the environment nothing besides a few pieces of equipment on asphalted surfaces is to be found. One only need to look at a usual day in the life of a child in Jeddah to recognise the poor situation they encounter.

I wake up, wash, get dressed for school and my father takes me to school in his car. After school I go home, relax, pray and watch television. In the afternoon I do my homework, watch television and at about nine have dinner and go to bed. (No.047, 12 year-old Boy)

I wake up, pray and go to school. When I return home at about two in the afternoon, I wash up, have lunch and have a nap. I get up at about 4:30 P.M., pray and do my homework. By the time my homework is done it is early evening. I sit with my family, watch television and talk until it is time to go to bed. (No.060, 17 year-old Boy)

After waking up I go to school. After school I come home, have lunch and take a nap. In the afternoon, I do my homework, watch television, have dinner and then go to bed. (No.067, 12 year-old Girl)

I go to school early in the morning and return home at about four in the afternoon. I then relax in front of the television and after a while do my homework. When I finish my homework I play with the Atari for a long time, then I have dinner and go to sleep. (No.120, 12 year-old Girl)

The consistent item that appears in all these children's daily lives is television. Whether television is a positive thing in children's daily lives is not really clear. However, in most cases television, and especially televised violence, is linked to aggressive and violent behaviour in children (See Appendix II). Outdoor play was not mentioned once in the everyday activities of children in the sample of 121 school age children, whereas television viewing was mentioned consistently.

The question that must be addressed and looked at very carefully by society is what are the consequences of this negligence? While there are no direct links between improper provision for play and vandalism, aggressiveness in the child, crime and other anti-social behaviour, it has been suggested by many. It is ironic that anti-social behaviour might stem from the neglect of a society towards its own. The problems facing children and their play in Jeddah cannot and indeed should not be viewed as an expense, a problem or a planning and design issue. It is an issue for all of society to deal with in the light of making an environment that is habitual: An environment in which security and resources are available to provide a place that is supportive of human activities and child-rearing.



The Honourable Mayor of Jeddah in a recent publication claims that Jeddah is almost an ideal city when he states,

The Jeddah we live in today has reached a very high state of civilisation. A level that we can compete and compare to the greatest cities and urban areas in the world. (M.o.M.R.A. 1990, p.15).

If the Honourable Mayor is speaking of the diverse nature of developments and the level of sophistication in building techniques, then he is correct. Jeddah is a modern city and, technologically, can be compared with most cities in the world. However, if he was comparing Jeddah to the rest of the world's cities in terms of the activities and facilities available to the public, then the statement could be exaggerated. This research is proof of this fact.

In the past five decades Jeddah has come a long way, the efforts of all that were involved are truly appreciated and respected. However, to relax and say nothing more can be done is always the first step in failing oneself, society and the establishment of environmental planning and design. Throughout history, children at times of physical and economic growth have been the neglected part in society. The industrial revolution and the cities which were established as a result of the economic growth of this age are the most recent example of this phenomena. Although the Saudi experience is very moderate in comparison, some neglect of children and their environments has occurred. Evidence of this neglect can be seen in the differences in the play experiences of this generation and the preceding generation(s) (See Chapter VII). The time has come to recognise and alter this fact.



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# Appendices



## **Appendix I : Play in Islam**



### **A.I.A. Introduction**

Childhood is one of the phases in human development, and play is one of the activities of childhood. It may sound trivial but every human being must have played in their childhood. As such, play as an activity seems to be a natural activity or behaviour for humans (especially the young of the species) to engage in. The Islamic faith claims to be the truth that is for all mankind. Thus, Islam will never contradict human nature or what is natural for humans to do, for the simple reason of it being God's word (Ghazali 1987; Qattan 1988). Accordingly the Islamic faith is a very sophisticated set of laws (Shariá) that encompasses all of life's details from laws concerning subjects or behaviour to laws concerning every day actions. Hence, Islam to Moslems is more than a religion, it is a way of life with the Shariá as guidelines for Islamic life.

The Islamic Shariá is based on four sources. The primary source is the Quran, which Moslems believe to be the untainted book of God, revealed through his prophet Mohammed (peace and blessings be upon him (P.B.U.H.)). The Quran is the ultimate power in the Shariá. This means that what the Quran states to be prohibited is unquestionably prohibited and vice-versa. The second source of Islamic law is the Prophet's (P.B.U.H.) sayings, actions, and life: The Sunnah (the way of the prophet). The Sunnah is in simple terms, the practical application and clarification of the Quran. The third source that the Shariá gains its laws from is called Ijma'a, which is the agreement and/or consensus of the Ulama'a (religiously knowledgeable people of the Islamic Nation) (Almubarak et.al. 1989). Finally, the fourth source is Ijtihad which is the individual effort of a religiously knowledgeable person on a certain issue or matter. The third and fourth sources of Islamic Law (Ijma'a and Ijtihad) must never contradict the Quran and the Sunnah, for these two sources are unchangeable. Likewise, Ijtihad must keep in line with the other three sources of The Shariá (Almubarak et.al. 1989). Hence, in establishing a new law today, one must research what has been stated on the issue or matter at hand in The Quran, The Sunnah, Ijma'a, and Ijtihad.

In this short essay the Islamic view of play will be examined by looking at the four sources of Islamic Law and their viewpoints on play. A conclusion concerning Islam's tolerance (or lack of it) of play and playful activities will hopefully be achieved from this review. However, if one is aiming to find all the incidents of play and leisure in Islamic History in this essay he/she will be disappointed. This essay is concerned more with establishing whether or not playful activities (especially children's) are permitted in Islam. An understanding of the religion's point of view on the subject may provide insight into some issues which may prove to be substantial in understanding people's (Saudis') attitudes and acceptance of certain activities and behaviour.



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To understand Islam's points of view on play, an understanding of the objectives of childrearing and of Islam's broad goals is required. This understanding is beyond the scope of this modest paper. However, major points should be addressed in order to grasp or perceive Islam's conceptions of play and playful behaviour. Hence, preceding the concise examination of Islam's views on play and leisure, a brief review of Islam's goals in life and its recommended childrearing practices will be briefly discussed.

### **A.I.B. Islam and Child-rearing**

Every society rears its young to become competent members of that society in adulthood (Ogubu 1984). Similarly, in an Islamic society children are brought up so as to function well in an Islamic way of life. The Islamic way of life has a central core from which all other matters stem. This core is the religion of Islam. The religion states many codes, behaviours, principles, and acts of worship which the individual must abide by. However, just as the religion is the core of Islamic life, there is a core to the religion itself. This core may be summarised in the following:

There is one, and only one God, who created all things; and Mohammed (P.B.U.H.) is his (God's) final apostle. Human beings are God's unique creation, for unlike any of the other creations, they have the choice of refusing or abiding to God's laws. On the day of judgement all will be held accountable for their actions and justly rewarded or punished.

As such, childrearing in Islam aims at making the child a good Moslem, and to Moslems this means making the child the best human being possible. The means to reach this goal are varied and complicated to say the least. Islamic childrearing, according to Qutb (1989) and Ulwan (1985), aims at four main developmental objectives.

- i) Developing the child's spiritual beliefs.
- ii) Developing the child's intellectual and mental abilities.
- iii) Developing the child's physique and physical abilities and,
- iv) Developing the child's love and respect for others and society as a whole.

Hence, developing the child in spirit, mind, body, and social responsibility and/or love is what Moslem parents and societies hope to sow in the child. Such a task is one of enormous weight, however, by employing some of the techniques the Prophet (P.B.U.H.) used in rearing the young Islamic Nation at the dawn of Islam this noble goal may be reached. Qutb (1989) points out a few of these techniques which include,

- a) The setting of an example in one's self for others to follow (role-model).
- b) The use of stories, events, and other means available to communicate a message.
- c) The use of traditional methods of childrearing (or their principles/concepts) as



long as they do not contradict Islam's teachings, and  
d) The use of punishment when all else fails.

### **A.I.C. Play In The Quran**

In the Holy Quran, play, sports, and leisure were mentioned several times. However, the context in which they were mentioned differs from one verse to another. Prior to giving examples of how play and other pastimes are mentioned in the Quran, several important points need to be pointed out to the reader. First, the Holy Quran is a book of faith: a religious book. This means that most of its content is geared towards pointing out signs in the creations of God (and hence God's existence), descriptions of actions and their rewards and/or punishments in life and the hereafter, stories of previous (before Mohammed (P.B.U.H.)) prophets and peoples, and a wide range of subjects concerned with the establishment of belief in God's existence and the way he has chosen for mankind to follow if they believe in his presence (Almubarak 1989; Qutb 1988). As such, the Quran deals with many abstract concepts, intangible events and times, and inconceivable (to the mind) descriptions of heaven and the hereafter. Therefore, a full understanding of the Quran could never be attained, not even by the wisest of the human race (Qutb 1983). Hence, the examples of the Quran's mention of play and/or leisure are limited to those in which the words (rather than the meaning) are stated plainly, for if one embarks on finding out the verses in which jest and play are "meant", one shall run into two main problems.

I) The research would require in depth understanding of all the attributes and circumstances connected to that verse (e.g. when the verse was revealed, the purpose of revelation, and previous scholars interpretations).

II) One person's understanding of what is "meant" may differ from another's.

There is also the fact that such a venture will require immense concentration and contemplation. Had the Quran been a few verses it might be a very interesting and beneficial task to undertake, however, the Quran is approximately 6,200 verses and such a venture is not a profitable one in terms of time nor in terms of contribution to the profession of Environmental Design.

As mentioned earlier, the Quran aims at directing people to God and his way. As such, the subjects most discussed are ones that aim to direct adults to proper behaviour, actions, and attitudes. This perhaps explains why play and other frivolous activities are stated in the context of purposeless activities. For example, it is stated in the Quran,

*It was not in sport that we created the heavens and the earth and all that lies between them. Had it been our will to find a pastime, we could have found one near at hand. (Quran 21:16&17)*

These verses as Ali (1938) explains, mean that God has a purpose in and for his creations,



and that "he does not jest nor play with his creatures" (p.825).

In another instance the Quran states,

*The life of this world is but a sport and pastime. It is the life to come that is the true life : if they but knew it. (Quran 29:64)*

On the surface this verse may be understood as this life we are living is fun and for enjoyment, and the hereafter is the real or true life. However, Qutb (1986) argues that what is meant is that if all of this life, with all its riches, attractions, and glamour, was compared to the life to come (the hereafter) it would amount to very little, and if one does not seek the hereafter in this life, life indeed would amount to a little more than a pastime. The above examples illustrate the Quranic use of the words play, sport, and pastime to mean a waste of time or purposelessness. However, the verses are communicating in the context of people's general view towards life rather than stating plainly that play, sports, and pastimes (as activities) are frivolous or useless.

In the Quran's telling of the story of prophet Joseph (Yosuf) (P.B.U.H.), the word "play" surfaces once more. Joseph's brothers asked of their father to take young Joseph (P.B.U.H.) to play with them, as the Quran tells it:

*They said to their father : "why do you not trust us with Joseph? surely we wish him well. Send him with us tomorrow, that he may play and enjoy himself. We will take good care of him". (Quran 12:11&12)*

The two verses are taken out of context, for the objective of the story is to indicate that righteousness will prevail over evil (See Quran 12:7-101). However, for the purposes of this work, the two verses show or indicate that the young prophet Joseph (P.B.U.H.) played and enjoyed the activity and himself.

Hence, a conclusion may be reached on the Quran's views on play and other pastime activities. Play is recognised as a natural human activity for all humans but especially so for the young. Furthermore, in all the instances play or a derivative of the word was mentioned (approximately six), never was it forbidden or treated as a sin. Hence, play and leisure are activities that are recognised to be human by the Quran. As such, play is (in Islam) a part of human nature and more specifically a part of young human nature, where upon maturation certain other activities (e.g. work and worship) should take priority to play and leisure (Ulwan 1985).



## **A.I.D. Play In The Sunnah of The Prophet (P.B.U.H.)**

The Prophet Mohammed (P.B.U.H.) was chosen from all human beings of all times by God to deliver the message of Islam. This responsibility is great and pain staking. However, God almighty directed the prophet (P.B.U.H.) through out his life and especially after the first verses of the Quran were revealed upon him. The prophet's life (P.B.U.H.), his sayings, actions, and everything connected to him is part of Islam's teachings. The Quran states:

*He [the prophet] does not speak out of his own fancy. This is an inspired revelation. He is taught by one who is powerful and mighty. (Quran 53:3-5)*

Furthermore, the Quran states,

*Whatever the apostle gives you, accept it; and whatever he forbids you, forbear from it. (Quran 59:7)*

Hence, the prophet's way (P.B.U.H.) (his Sunnah) is given authority by the first authority of Islamic Shariá: the Quran.

In the prophet's life (P.B.U.H.) there are many instances where children and their activities (namely play) are well documented. In the few pages to follow some of these scenes will be viewed and examined to find out which types of play are permissible in Islam and which are not. Hence, the examination will be put forth to find whether practice (mastery), symbolic, games with rules, social, and rough-and-tumble play are considered in Islam, and if they are, how?

Although in the Quran play and leisure activities were not prohibited, it was not clearly stated that these activities are permitted. In the Sunnah of the prophet (P.B.U.H.) such an affirmation is stated on several occasions. One of these occasions is as follows,

Hunzullah [one of the prophet's (P.B.U.H.) companions] said : Abu Bakr [the prophet's (P.B.U.H.) closest friend] asked me how am I, when we met once. I replied : Hunzullah is a hypocrite. Abu Bakr was surprised by my answer and asked : why? I replied : when we are at the presence of the prophet (P.B.U.H.) he reminds us of hell and paradise, so we feel so taken by the words of Allah [God] and his prophet (P.B.U.H.), and then we go back home to play with the family and children and forget how close we were to hell or paradise. Abu Bakr said : by god we feel the same [meaning himself]. So I went with Abu Bakr to the prophet (P.B.U.H.) and told him what I told Abu Bakr. The prophet (P.B.U.H.) said : *"By the one who has my life in his hands [God], if you were to proceed along in life with the same emotions that you experience with me and when the Quran is read, you will find the angels shaking your hands in your paths and in your bed. However, O'Hunzullah an hour like this and an hour like that."* (Narrated by Muslem - Utwan, 1985; p.935)

From the above Hadith (saying of the prophet (P.B.U.H.)) many lessons and issues might be learnt. Concerning the subject of play, however, two main points may be deduced.

- I) It is natural for humans to play.
- II) There is no penalty for doing so, even though for adults there are activities more worthy of their time.



Archery is an activity that takes practice (repetition) to be mastered and enjoyed. Furthermore, if one takes the view of Parker (1984), one will find that most sports today utilise the concept of archery; which is directing a missile towards a target. Football, basketball, volleyball, and many other games or sports direct a missile (ball) towards a target (a goal, opponent's territory). Although these games and/or pastimes are more sophisticated than archery, the principle is there. One could argue that in time man has evolved (became more sophisticated), and with this evolution his activities have evolved to suite the new time and life style.

If all of the playful activities thus far discussed are tolerated or acceptable in Islam, the question of what exactly is prohibited in Islam arises. The answer to this question lies mainly in two areas backed by Hadiths. First, any damage (whether physical, emotional or otherwise) to another person, property, and beast brought about by playful activities (intentionally) is prohibited. As the prophet (P.B.U.H.) says,

*"There should be neither harming nor reciprocating harm."* (Ulwan, 1985; p.938)

Furthermore, the prophet (P.B.U.H.) forbids stone throwing (at things such as property) and taking animals as targets for pleasurable pastimes (hunting where the animal will be used to the benefit of the hunter is allowed). The other area of forbidden activities is the one of leisure without a purpose. He (P.B.U.H.) states,

*"I am not for playing wastefully or meaninglessly, nor they are of me."* (Ulwan, 1985; p.442)

Hence, prohibited leisure activities are limited to two,

- I) Damage of any sort brought about by a leisure activity intentionally; and
- II) Play without a purpose.

The second point almost makes all of children's play permissible. To the child at play a purpose exists in some form even if this purpose is not evident to the adult (See Chapter II). Whether it is physical, emotional, social, or symbolic; the purpose exists. Our understanding of these purposes are not fully known, however with more effort and research, they may become clearer.

Hence, one may conclude from the review of the two main sources of Islamic Law the following:

- A) Play and playful activities are part of the natural "built in" repertoires of mankind. They are accepted behaviours as long as no harm (intentional) results from their practices to anyone or thing, and as long as they have a purpose (for the child almost all scenes of play). While play is accepted and tolerated throughout the different stages of life, it is more so in childhood.
- B) The main types of play recognised by most people connected to the study of



play and/or play behaviour (i.e. sensory-motor, symbolic, rough-and-tumble, etc.) are recognised and accepted by Islam.

### **A.I.E. The Other Sources of Islamic Law and Play**

Since so much is provided in the first two sources of Islamic law (Quran and Sunnah) about play, the remaining sources (Ijma'a and Ijtihad) are left the responsibility of recognising, analysing, and researching leisure activities that are not quite accounted for in the Quran and the Sunnah of the prophet (P.B.U.H.). Unfortunately, this has not happened. People that are knowledgeable about Islam (Ulama'a) have concentrated their efforts on what they believe to be more important/serious matters of life. This fact coupled with the more conservative view of the religion has led to Moslems and Islam to stagnate rather than move ahead to face the challenges of a fast moving world (Qutb 1989). Perhaps there are more important issues to tackle in Islamic societies today than play. However, play is so very important to the child of today, the adult of tomorrow, and the nucleus of society. In this context play and play provision is a very serious matter to all societies interested in persevering and prospering, more so perhaps for those societies that are developing. There have been in recent times an effort to put forth such arguments in Islamic societies as is illustrated by the example given by Suwayid (1988):

Play is a leisure pastime for adults, but an important activity for children. By playing the child develops his body and mind. While engrossed in play, he is developing the harmony between his social interactions and his intellectual [mental] functions that include : thinking, imagining, and mental judgement.....

The pre-school age is a vital stage for the child's mental growth through play, which enables him to reach the peak of awareness for that age. Also, through play, the child re-enacts and relives previous experiences so he can absorb them and for them to become part of his personality and character. Play conditions the child to cope in the future by responding differently to different situations. Hence, play must not be seen by parents as time wasting, but as an important activity in the process of growing up. Parents preventing their children from playing at home or with neighbours and friends are blocking essential needs of that process. (p.215)

### **A.I.F. Conclusions**

Although Islam does not answer all the questions connected to or related to the field of play behaviour, certain questions that this essay aimed to find answers to were answered. The fact that the prophet (P.B.U.H.) used to play and engage in leisure activities indicates the tolerance and acceptance of play and leisure in the religion. Throughout the examples put forth in the essay, play behaviour and many of its forms have been illustrated to be permissible in Islam. Hence, it is up to each generation in a Moslem society to reach conclusions regarding what play and leisure activities they participate in or practice, so long as the activity does not contradict any of Islam's other teachings. The field of play behaviour is a very large one, had Islam answered all the questions in this field it would not



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be a faith or a religion but rather a theory of play.

It has been stated by Islam that a child is born with a set of natural instincts or repertoires, and that it is the environment (social and perhaps physical) that shapes him/her to what they become (Ulwan 1985). Furthermore, Islam holds people with knowledge responsible for this knowledge, what they do with it, and the effects their actions, attitudes, behaviour, etc. have upon others even after their death.

*It is we who will resurrect the dead. We record the deeds of men and the marks they leave behind : We note all things in a glorious book. (Quran 36:12)*

Environments in urban areas affect the urban child's development. The form in which they do so is still debatable. However, many indicators show that play, in its many forms, aids in developing a more complete human being. Play environments cater for or limit the type(s) of play they may facilitate. Hence, play environments indirectly are connected to the goal of childrearing in Islam (See Section A.I.B.), and the development of future generations. As such, in Islam the provision of proper play environments is not only a societal or professional obligation, it is a moral one. For the scenario put forth by Ulwan (1985) could be one of the results if children and their needs continue to be neglected for the "more serious" matters of environmental design.

If facilities to practice clean and innocent fun such as recreational areas, sporting clubs, swimming pools, and areas to revive their [children's] vitality were not provided, they are likely to turn to mischief and bad company which almost definitely will lead to their downfall [and perhaps society's] (Ulwan, 1985; p.130)

The responsibility is great, now is the time to act and provide for our young so that tomorrow they will thank us and not damn us.

Finally, the author wishes to state that this essay may not be as objective as he would have wished for, to be a Moslem and write about Islam one will tend to get subjective. However, this essay was prepared with the above point in mind. The author hopes that he was successful in being subjective only to the extent objectivity was not sacrificed.



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## **Appendix II : Children and Television**



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### **A.II.A. Introduction**

Let us assume that children are limited to the indoors, is this such a bad thing? The indoors protects the child from extreme climatic conditions, undesirable socialisation and perhaps most important, the dangers of the automobile and the street. However, beside limiting the child's natural experiences whether they be in the social or physical spheres which are crucial to the cognitive and mental development; a vital question must be dealt with in this debate. Will the child benefit from remaining indoors? or will he be at a disadvantage? Will the indoor environment and the activities it supports be beneficial to the child's development? Many questions could be asked and at the same time no one conclusive answer can be reached. Nonetheless, children remaining in the indoors tend to engage in an activity that occupies most of their time. Watching television is beyond any doubt the activity that children enjoy most while indoors (Murray 1976, Wilkinson 1980, M.o.H.L.G. 1970). This essay is concerned with finding some answers to several questions and issues revolving around the subject of children's use of television. For example, why do children find television so attractive? Do all children find it attractive or are there individual variations? Is there any harm from prolonged television viewing to the child and/or society? What can we as adults do to alter the effects of television and the mass media? These are but a few of the more important questions that the few coming pages will aim to answer and address. However it must be pointed out at this point that the following pages are by no means an exhaustive review of the field of the effects of the mass media on children, but rather a representative look at the subjects.

The subject of children watching television may seem very distant from planning and designing children's outdoor environments nevertheless, it is precisely planning and design (or lack of) that has forced children to retreat to the indoors. Children are continuously watching television and engaging in activities that are of less benefit to their overall development than those they would have been engaging in and enjoying had planners and designers provided the appropriate spaces and designs. Hence, it is important for us as designers and planners to see the consequences of our misdeeds; and perhaps this would in the end make us more perceptive when planning and designing in the future.



### **A.II.B. Children's Attraction To and Use of Television**

The little box in the living room which transmits both picture and sound attracts the young of our time from a very early age. The reason for this attraction lies in many of features and/or properties of television (Brown 1976a, Greenfield 1984). Because television utilises the viewer's audio and visual receptors, it has become the most widely used form of mass media throughout the world (Brown 1976a). Other media devices and forms (such as print) have become very specialised in content and function, while television has become the device most used for information gathering, entertainment and social functions (Dembo and McCron 1976, Von Feilitzen 1976). The attraction of television is not limited to only the young but also to adults for the same reasons mentioned above (Von Feilitzen 1976).

Another of television's attractions or functions is that it provides the child with many social functions (Von Feilitzen 1976). Television is used by children as an aid in social recognition. For instance, school aged children discuss certain television programs as a means of socially belonging to the group. Furthermore, television is a medium in which many indigenous and foreign social and ethnic traits are seen, heard and in some cases learned (Von Feilitzen 1976). Hence, there seems to be a general agreement that television's attraction is due to three main properties:

- I) Information supply and/or accumulation.
- II) Entertainment.
- III) An aid in socialisation and/or understanding of social events and practices.

A fourth function or attraction of television to children is what researchers in this field call "Non-Social Escapism" (Brown 1976). Meaning that children (and adults) watch television in an attempt to escape reality (as is the case with daydreaming) and/or to get away from people in general and be alone in their own minds (Von Feilitzen 1976). This fourth function or capacity of television is perhaps one of the most debated topic by people concerned with television's effects on children and their development. It is not surprising that such a topic would receive much debate because of the topic's serious implications. If children (and even adults) are turning to television and away from society then it would be television and television programmers that shape the future generations and not society as a whole and parents. Furthermore, from a sociological point of view one must consider why the individual senses isolation and as such distances himself from society. Could this be due to society itself being so threatening that the young child feels unable to cope with it? Perhaps it could be due to society's expectations of faultlessness that forces the child to doubt his own abilities? Furthermore, and more in the confines of the built environment, the child may feel isolated because the physical environment surrounding him is a very inhumane one? The questions posed above are all very interesting ones however, for the purposes of this modest effort, the discussion will be limited to the effects of television: the most powerful invention in the mass media: on children, their attitudes, behaviour and



psychology.

### **A.II.C. The Effects of Television on Children**

In the 1950s and 1960s the concern about the effects of excessive television viewing by children began in the more developed Western nations (Murray 1976, Cramond 1976). At first, the concern in these countries which included the United States and Britain was limited to the effects that prolonged television viewing had on the vision of youngsters. With time however, the concern began to encompass new territory such as the effects of televised violence, the imitation of television characters and the effects of television advertisement. The concern was so great that in countries throughout the Western industrialised countries private and public agencies began to search for and research the effects of television on children (Murray 1976). A review of some of the findings of some of these efforts will be illustrated in the following sections so as to allow the reader a general view or understanding of the subject of television and its effects on children.

#### **A.II.C.I. The Imitation of Television Characters**

One of the main traits of childhood is mimicry or imitation. This behaviour has received a great deal of attention by child psychologists and developmental experts such as Piaget and Freud (See Chapter II). Yet recently we do not see children mimicking doctors, mothers and firemen but rather they are imitating Rambo, Ninja turtles and a host of other television characters. The shift in the imitation behaviour of children suggests that television, cinema and other media mediums have a great deal to do with it. Why do children imitate the behaviour and/or the actions of another individual or model? Kniveton (1976) states in his attempt at answering this question:

For an individual to change his own behaviour to coincide with that of some one else there is a need for him to feel that the change is worth while. This is only likely to occur if for some reason the actions of the person being observed are more attractive to the viewer than those he can think of for himself. (p.237)

Besides hinting at the lack of imagination of today's children, the above statement implies that the behaviour of imitation is in many ways down to the individual. However, the model (person or character being observed) and the way it is presented on television effects the degree and type of imitation that might occur. For instance, when a model or television character is rewarded for his/her actions there is a greater possibility that the child will mimic their actions and/or behaviour than if the model is not. Furthermore, when the model is punished for a certain action, imitation decreases a great deal (Bandura et.al. 1963, Kniveton 1976). Beside the reward/punishment variable there exists a great deal of other variables that play a role in children's imitation of televised characters and personalities. Amongst these variables are the gender of viewer and person (character) viewed, duration



of exposure to the model/character, the type of model (i.e. real or animated) and many others. The fact remains, while it is the child that imitates the behaviour, attitude and actions of the model and the way the model is presented on screen can promote or hinder imitation.

Imitation seems to be more attractive to some children than others (Kniveton 1976). For example, children belonging to different social classes imitate differently; with working class children imitating television models much more than middle class children (Kniveton 1976). However, the fact is that children that imitate television characters or models are "children with few interests of their own" highlights some questions that need to be addressed (Kniveton 1976, p.246-7). For instance, could the child's environment be so deprived that interest only comes from television? Could the child be so constrained that the only escape is through television and television characters? Could it be that television is one of the few remaining things that captures and unleashes the child's imagination? These questions are very important if not critical in the study of children in general and in the study of the provision of children's play environments in urban settings.

The child's mental capabilities need to expand just like his physical being. By being limited to mainly indoor activities and environments, the child very quickly exhausts this environment, with the exception of one device: television. For this device is forever changing in content. In this capacity, the child instead of creating, imagining and working things out for himself becomes a slave to television and the many messages it transmits. If it is assumed that the above is true or a valid argument, then one can debate the hypothesis that imitation of television models, characters and their actions and/or behaviour is dependant on the variable of the diversity the environment offers to the child. Although the hypothesis requires research, there seems to be a hint of truth in it.

### A.II.C.II. The Effects of Television Violence

One of the issues that concerns people most about children's mimicry of television characters is the violence some of these characters portray on screen (Brown 1976). The presence of violence in all media types is increasing at a very noticeable rate. If this violence which is on the screen, on stage and in print finds its way to society through imitation or acceptance; surely this will lead to a society where crime, violence and even murder are everyday occurrences and facts. It is interesting to point out that in the United States the average crime rate is the highest of all developed nations, and at the same time the United States is the world leader in television and cinema productions (Murray 1976). The above is not suggesting that because of the media alone the crime rate is what it is however, it does suggest that the mass media and especially television has a role to play in the statistics. This was even emphasised by one United States senator (J.O.



Pastore) when he claimed (in 1969) that television violence is as harmful to public health as is smoking (Murray 1976)!

As was illustrated, the way in which the model is presented to the viewer will in many ways effect the viewer's imitative behaviour. Furthermore, there have been suggestions that violent behaviour is a behaviour dependant on several individual traits such as the degree of aggressiveness the individual usually exhibits, the individual's moral or social constraints and many others (Kniveton 1976). Having said that, "there are a number of studies which point to the conclusion that viewing televised violence causes the viewer to become more aggressive" (Murray 1976, p.294). Televised aggression is not the only televised behaviour that sparks off aggression in the viewer. Bandura et.al. (1963) found that material containing action and suspense triggered aggressive behaviour in children, although to a lesser degree than actual aggressive material. Furthermore, Bandura et.al. (1963) found that real models of the same sex as the viewer were more likely to initiate aggressive behaviour in children than animated characters or models of the opposite sex.

There have been arguments suggesting that televised violence has a therapeutic value (Kniveton 1976). Many psychologists promote the Catharsis Hypothesis in which:

The involvement in fantasy aggression may serve a "displacement", providing a harmless "release" for children's hostile impulses, thus reducing the instigation to overt acts of aggression. (Kniveton 1976, p.253)

However, if the individual or child does not engage in fantasy aggression when the film or program is being watched, the exposure to the film or program will only cause an increased aggressive response in them (Kniveton 1976). Although the hypothesis is worthy of further research, it is very difficult and risky to conclude that televised aggression is a "displacement" for real hostile or aggressive behaviour and thoughts, especially with the vividness of today's films and technology.

#### **A.II.D. Television Connected Pastimes**

Children the world over are becoming familiar with television and the screen format. Capitalising on this familiarity, new pastimes have emerged. These new pastimes have proved to be more popular and enjoyable to the child than television (Greenfield 1984). Video games and computers are quickly becoming the child's preferred indoor activity when available (Greenfield 1984). Do these new (relatively speaking) innovations carry bad side effects? As far as research into this field goes, there is little evidence to indicate a great deal of harm will come from exposing children to these pastimes (Greenfield 1984). However, it should be pointed out that research into this field is very small in quantity due to the relatively recent appearance and wide distribution of these pastimes. These



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pastimes differ from television in many ways and any conclusions arrived at by comparing the two is unwarranted and unwise.

Video games are attractive to children (and adults) because of several reasons. The most important is perhaps the child's active involvement with the game (or screen) (Greenfield 1984). Unlike television, where the child is passive and only receives the content on the screen, video games allow the child to affect the content on the screen and the consequences of his actions are shown (through animation) on the screen. This interaction between child and machine is what television lacks (at the present time) and video games and computers possess. Another attraction of video games and possibly computers is that they have a goal or an objective. The child is actively playing or using the machine to achieve a recognised or a pre-determined goal or objective (Greenfield 1984). The concept of gradual challenge is also witnessed in many of the video games where the child/individual moves from one stage of the game to the next (more difficult) one. If these attractions are added to a screen in which visual imagery, dynamics, sound effects, speed, parallel processing (the mind taking in and processing information coming from different receptors) and automatic score keeping, it is only natural that video games and computers are more attractive to children than television.

Computers besides offering the basic concepts of video games have an additional feature or attraction. The individual's control on how a game (or program) actually unfolds gives computers an added edge. There seems to be a link between video game use and computer use in that as the child's interest in video games develops and matures he becomes more interested in the actual component parts of the game and the machine that runs them, in short he becomes more interested in how the game actually works (Greenfield 1984). Many of the more popular video games contain a considerable amount of aggression, tension and action and as Greenfield (1984) argues, may cause the same results as televised aggression and action. However, the author believes that due to the child's involvement in the game or situation and due to the animation used in the games, the effects of the video games are not as threatening as those of television and cinema.

### **A.II.E. Conclusions**

It would probably seem to the reader that the author is an anti-television advocate. This, despite appearance, is not the case. Television is a media device that transmits what it is fed. It is the material that television and other media devices carry and distribute that cause the problems. Violence, sex and adult view points of life are being consumed by children at such an early age that one begins to wonder whether children would ever have a childhood. Childhood: an age where the adult world is mysterious and intriguing, where sincerity and innocence dominate and where learning in its own right is fun. People

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connected with the production of programs and films unfortunately are preoccupied with philosophy, profit and aesthetic quality that their duties towards society. In their negligence of their moral and social duties as people that can reach masses of people and carry a message to them one is saddened. As Greenberg (1976) put it,

The world of children's television programs is essentially a view of two different worlds. For the child, the world is one that is good or bad, and hard or easy. One is tempted to suggest that it is a simple world, if not a simple-minded one. For the professional programmer, the child's view of television is conceived of as no different from his own. And his own revolves around program style, the building of program interest, and thence with the general quality of the programming. (p.84)

However, programmers are not the only people who have a responsibility in mediating the effects of television on the child. The family and especially the parents could control and limit (to some degree) the effects of television on their children (Brown and Linne 1976, Greenfield 1984). Parents can talk and discuss programs with their children, they can carefully choose programs that the children view and a number of other techniques could be employed to ensure that the child understands the producer's/programmer's intent. Perhaps more importantly, the child should be made to come to realise that what happens on the screen in most cases is make-belief and not real. Television is not an electronic baby-sitter and should never be used as such, if the children of today are going to carry the previous generations' values and traditions: their heritage.

There is a great urgency in making people become more aware of the effects of television and the mass media today, not only for the possible effects it may have on children's attitudes, behaviour and minds; but also for cultural diversity and social harmony. With the advent of satellites and television broadcasts that know no borders nor boundaries the Global Village concept may have devastating effects. The population of less developed countries are being exposed to developed nations' ideologies, ways of life and behaviours. With this exposure many questions must be addressed. Does this exposure make developed societies' ideologies, beliefs and actions more acceptable the world over?, and do the nationals of less developed countries surrender their ways of life to follow the more glamorous ways? What would be the consequences if the more developed nations broadcast their own views and stereotypes of peoples, political systems and nations to the entire population of the world? Are we entering an age where who ever controls the media controls the masses?, and if so then unfortunately we have not advanced much since the era of Nazi Germany! The author does not mean to be a pessimist, however only by examining extremes in a situation can one come to an understanding of the norm. The media, in some way, will shape our awareness and understanding of different peoples and cultures. It is up to each individual to try to limit this to a minimum upon ourselves and our children.



Children's play environments have the potential of reducing the effects of television and the mass media on the child. The attraction of television lies primarily in that it provides information, entertainment, socialisation and solitude. Play in an environment that is well planned and designed could provide for these needs with a much lower probability of anti-social or undesirable effects. One may argue that children choose or desire to watch television over play as an activity, which at the present time is the case when both are available (Cramond 1976). Perhaps children find more pleasure in watching television than in the concrete surfaced barren landscapes of most play areas in most cities today. Perhaps children can not get to or are not permitted to go to play areas because of roads and the dangers associated with them. There are many issues/factors which make television viewing a more pleasurable experience than outdoor play. It is us, planners and environmental designers that must provide for children's environments that are entertaining, enjoyable, informative and supportive of socialisation if we are to invest in our future.



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## **Appendix III : Adventure Playgrounds**



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### **A.III.A. Introduction**

Alternatives to contemporary playground philosophies and designs have been many however, no one alternative has received as much attention in recent years as adventure playgrounds. This attention is largely due to the nature of adventure playgrounds and what they offer to the child in terms of experience, learning and general fun. Although adventure playgrounds are a fairly new experiment in children's play environments (first playground established in 1943), most of the early indications seem to be positive (Lambert and Pearson 1974). The success is especially noticeable in urban areas of high or middle densities where both space and experience are hard to come by for the child. It is the aim of this essay to provide the reader with some information concerning adventure playgrounds. There are basically five sections to this review of adventure playgrounds. The first section will deal with some definitions and background on the subject. The second section will aim at illustrating to the reader the many activities that are present in an adventure playground. The nature of adventure playgrounds has raised many concerns about the safety of children and other hazards, the third section of this review will aim to address some of these concerns. Many people have claimed that adventure playgrounds are beneficial to both child and community. Some of these suggested benefits will be the subject of the fourth section. The fifth and final section in this review will aim to look at the possibility of providing adventure playgrounds in the city of Jeddah, Saudi Arabia.

### **A.III.B. Background and Definitions**

It might be misleading to suggest that adventure play only came into existence during the twentieth century. Adventure play has existed for a very long time indeed, children when adult life was simpler and allowed for the child the freedom to explore, experiment and have fun enjoyed adventure play in quantity. However, as the adult life and the environment that supports this new life style (in the form of industry and urbanity) became prevalent less and less space and opportunity was offered to the child to explore and learn directly from the environment (Cooper 1970, Shier 1984). As a result of these limitations planner, designer and society in general provided the child with a specialised space to play and explore: the playground. The practice of playground provision in the urban areas was continued without any concern towards the actual use of these spaces and the children's enjoyment of them.

It was only when one of the landscape architects, that had designed many playgrounds in Denmark, stopped and observed children playing that some changes occurred. C.T. Sorenson, as Cooper (1970) points out,

..... noticed that children seemed to enjoy playing with the construction materials on the playground sites after workmen had left. In fact, they seemed to gain more pleasure from this than from playing on the completed playground. This gave him



[Sorenson] the idea for a different kind of play area, and in 1931, he suggested laying out a site where children could create their own playground using surplus building materials. (p.18)

From that suggestion came the term of *adventure playgrounds*, and in 1943 in one of Copenhagen's suburbs (Emdrup) the first adventure playground was created. From this first example of adventure playgrounds, many others were created all over Europe and to a much lesser extent the United States. Perhaps the main features which has aided in the success and popularity of the adventure playground is the freedom it provides the child to manipulate the environment. The human desire to control and dominate the environment seems to be more than a desire, but indeed a need. It is perhaps the satisfaction of this need amongst others which has led to the desirability of adventure playgrounds.

An important feature of adventure playgrounds is the existence of adult staff to supervise the unconventional activities that exist in such a playground. Besides supervising the children in their play, the adult staff or the play-leaders or playworkers as they are better known, have many responsibilities and duties within the playground. Their responsibilities range from organising activities for children to record keeping, maintaining and cleaning the playground, community work, planning future projects for the children, arranging and co-ordinating supply deliveries with the members of the community and a host of other obligations. The playworkers are the central concept in the existence of the adventure playground. It is not surprising then to discover that "nothing is more vital to the success of a playground than the number and quality of playworkers" (Shier 1984, p.7).

The number of playworkers that should be employed to supervise the playground varies according to many issues. Amongst the most important issues are the number of children that are using the playground and the size of the playground. However, as a rule of thumb, the National Playing Fields Association (NPFA 1984) suggest that,

a) Single staffing of any playground must be avoided as an unsafe practice for both children and staff. There must be at least two permanent playworkers on site at all times during opening hours, except where an emergency requires the temporary absence of one worker from the site. Whenever possible another responsible adult should be available to cover for such absences and where necessary to help with closing the site.

b) It is strongly recommended that all adventure playgrounds should have a minimum staffing level of three full time playworkers or two full time together with part time workers equivalent to one full time worker. (Full time in this context is defined as a minimum working week of thirty five hours in a five day week). Employers must appoint sufficient staff with regard to the size of the site and its complexity, the range and level of activities, both on and off site, the level of demand from users, and any special factors, such as use by children with special needs (for example, disabled or very young children). (p.25-6)

As stated before, the success of an adventure playground is very much linked to the playworker in charge and his personality. While there are training courses for playworkers



that ensure the playworker's response is proper in case of an emergency on or off the site (NPFA 1984), these courses could not possibly cover the many responsibilities, obligations and attitudes a playworker should have to create a successful playground (Cooper 1970). Some of the responsibilities and attributes that will aid a playworker in establishing a good relationship between himself and the children, the public agency that is his employer, the parents of children, the neighbours and community and many other individuals and/or bodies are listed in the Table A.III.B.1.



Responsibilities/Duties on Site	Responsibilities/Duties off Site
i) Supervision: The playworker in an adventure playground must be vigilant at all times when children are using the site. His main concern is the supervision of the play of the children. While it is very hard to achieve, the playworker must not interfere with the children's play unless there is concern regarding safety.	i) Supplies and Materials: The material supply to the playground must be insured by the playworker. This can be achieved by the playworker's initiative to contact contractors and others that can supply the playground with materials consistently.
ii) Kind to children: The playworker must make the child like him to ensure that the child will request the playworker's assistance and advice when the child requires it.	ii) Influences and Pressures: The playworker is employed by a public agency, and in most cases is observed and overseen by a voluntary committee of parents. However, the playworker must never allow these two groups to influence and dictate the types of activities to occur in the playground and/or how the playground should be run on a day to day basis.
iii) Law Enforcer: The playworker must enforce the rules set for the playground to ensure that children do not risk injury to themselves and/or to others.	iii) Contacts: The playworker must aim to contact schools, children welfare departments, police departments, religious institutions, etc. to find out which children are in need and/or what certain children might require in terms of activities and treatment.
iv) Getting Involved: While one of the playworker's prime directives is not involving himself in the play of children unless asked, to ensure that children develop a positive attitude towards creating things in their own way and to develop confidence and initiative in the child, some activities such as creating bonfires and supervising it, story-telling, instructions on new techniques, etc. could prove beneficial to the child if the playworker initiated them.	iv) Neighbourly Relations: The playworker must try and placate neighbouring households who may not be satisfied or disturbed by noise levels on the playground, smoke from bonfires and/or barbecues and other dissatisfactions that might arise from the playground.
v) Maintenance: The playworker must make certain that the playground appears relatively orderly to insure parents that their children are being looked after by a caring staff in a relatively hygienic environment. The playworker may get the children to aid him in the looking after of their playground.	v) Community Cohesion: The playworker might try and organise events and/or celebrations on special dates that the entire community (children and adults) can attend. For example, plays performed by the children, municipal work in the neighbourhood, etc.
vi) Planning: The playworker must be able to plan some activities in the playground such as barbecues, sale of things children have created, etc. Furthermore, if the community and the public agency in charge of the playground allow for it, the playworker could plan for outings to museums, cultural and environmental interesting sites.	
vii) Administration and Record Keeping: The playworker will be responsible for some administrative work, although the bulk of the administrative work that is involved in adventure playgrounds fall upon the public agency in charge of the playground. Some of the administrative and record keeping duties the playworker include records of minor expenditures, accidents, safety checklists, etc.	

Table A.III.B.1: Some Responsibilities of The Playworker in an Adventure Playground {Compiled from Allen (1968), Bengtsson (1972), Cooper (1970), Lambert and Pearson (1974), NPFA (1984), Miller (1972), Shier (1984)}

It is not surprising by looking at Table A.III.B.1 that good playworkers or play-leaders are individuals that are very hard to come by. Furthermore, the best play-leaders are those who are "fond of children in a deep but unsentimental way" (Cooper 1970, p.29). The evidence available at the moment also indicates that some of the best playworkers have



not had recreational training, nor have they had "expertise" in dealing with children. As Cooper (1970) points out,

..... the most successful leaders have emerged from very varied non-recreational backgrounds - ex-seamen, ex-teachers, ex-janitors, ex-actors. There is evidence to suggest that only especially gifted individuals have in equal measure the ability to relate to children and to the community, and that where possible, two leaders ..... who have complementary talents, should be appointed. (p.88)

Due to the many activities in adventure playgrounds, which will be discussed later, and the nature of these activities, adventure playgrounds tend to be much larger than conventional playgrounds. As Shier (1984) highlights,

Successful adventure playgrounds have been established on sites of greatly varying size. However, a site of less than 0.2 hectares (half an acre) is usually too small, as it does not permit large numbers of children to choose a range of different activities without getting in each other's way. (p.5)

Depending on the staffing levels, an adventure playground could be as large as 0.8 hectares (2 acres). While establishing a larger playground is possible, it is not recommended as Shier (1984) points out, very large adventure playgrounds are difficult for the staff to supervise.

Generally speaking an adventure playground is fenced off from neighbouring and adjacent land-uses. There are several reasons for the fencing of the playground. Fencing the playground will make it easier to develop opening hours and control on access to the playground; unlike the conventional playground, adventure playgrounds cannot and should not be used by children unless the playworkers are present (Cooper 1970). While the fence will not keep children determined to get in the playground out, it does offer a deterrent and send a message to the young that the playground should not be used outside of opening hours. In addition, the fence will keep the younger children out during non-opening hours, it is this groups of children that are most at risk if permitted to use the playground with no supervision. A second reason for the fencing of adventure playgrounds is the fact that while children enjoy the playgrounds, adults oftentimes do not approve of the messiness of the playground (Shier 1984, Allen 1968). Hence the fence would shield the unpleasant appearance of the playground from adults passing by the playground or residing in its proximity. A third reason for the fence is that it provides the children with a sense of space and ownership. The children using the playground will observe these clear boundaries to the playground and realise that 1) this space is theirs, and 2) what applies in this space may not apply outside of it. In general, the fencing to an adventure playground should be at least two meters in height, and while the materials of the fence may vary from bricks to a chain-link fence it is important that the fence fulfils the tasks it was created for.

Hence, an adventure playground is simply a large fenced playground, supervised by adults



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that care for children and their activities and a place where children can alter and build the play environment. In addition, adventure playgrounds offer the child an indoor play environment as an alternative.

### **A.III.C. Activities in Adventure Playgrounds**

As was mentioned before, adventure playgrounds and the activities in them are not conventional. This section will aim to provide a better understanding of the more traditional activities that occur in adventure playgrounds. The review of these activities will be divided into two main sub-sections. The first will deal with the outdoor activities that an adventure playground usually caters for. The second will deal with the indoor activities that the playground can accommodate.

#### **A.III.C.I. Outdoor Activities**

The basis on which adventure playgrounds were formed was the enjoyment children gained from playing with building materials. Another advantage that adventure playgrounds seem to have over conventional playgrounds is the freedom they offer the child to experiment with many things and manipulate the environment. Perhaps it is this fact that has led to the establishment of the building of structures as a traditional activity in adventure playgrounds. With the assistance of the playworkers, children in adventure playgrounds build their own dens, tree houses and other simple structures. The building activity in adventure playgrounds offer children many things, from the knowledge of tool use and material properties to co-operation amongst themselves to achieve a goal (Shier 1984). While the building of simple structures is the main building activity that adventure playgrounds can offer, depending on the playworkers and their experiences, structures of reasonable complexity could be undertaken.

Children also seem to enjoy digging and manipulating surfaces in their play (Cooper 1970). One of the traditional activities in adventure playgrounds is digging and earth manipulation. The resultant holes and gradients must be very carefully monitored by the playworkers however, the changes in the gradient adds to the play experience and the quality of play children are offered, as Shier (1984) points out,

Changes of level add an important dimension to many adventurous play activities. On a totally flat site this is missing, so many adventure playgrounds have mounds, slopes, banks and hollows, all of which add to the variety and imaginative possibilities.(p.5-6)

Another traditional activity in adventure playgrounds is the play with fire and water. Children seem to be fascinated by fires. Adventure playgrounds offer children a place to experiment and understand fires. The younger children especially seem to be captivated by the



presence of fires (Bengtsson 1972). With the supervision of the playworkers, adventure playgrounds offer to the young groups a unique opportunity to witness and understand fires. However, due to safety concerns, fires in adventure playgrounds should not be allowed to take place anywhere on the site but rather in a recognised place/area in the playground. This area should also serve as a focal point for social contact. Other safety concerns will be discussed later.

Water has always intrigued human beings, and children in particular seem to be drawn to water. As Booth (1983) states:

Water is one of the most magnetising and compelling of all design elements. Few people can ignore or fail to react to its presence in the outdoor environment. Humans seem to be instinctively drawn towards water for both utilitarian and visual reasons..... people are emotionally lured toward water for its sight, sound, and recreational uses.

In addition to simply being attracted to water, people have a strong innate temptation to interact with water. Humans have a deep desire to touch and feel water or even become totally immersed in it for fun and recreation. This urge is perhaps most strongly exhibited by small children who instinctively enjoy playing with water. (p.254-5)

It is not surprising then that water in its natural form (lakes and rivers) or in the form of paddling pools is almost always present in adventure playgrounds. Children use the water features to experiment with the water itself and/or combining water with other materials such as sand. Furthermore, some playgrounds may offer off-site water based activities (e.g. a day at the beach) periodically (i.e. during summer holidays).

While building, digging, and experimenting with water and fire are in a sense what distinguishes an adventure playground from a conventional one, these are not the only activities on offer to the child. Conventional equipment (e.g. swings and slides) are in many cases included in an adventure playground. In addition, adventure playgrounds have obstacle courses, adventure routes through bushes and trees and many other activities. The adventure playground and the activities and experiences that it has to offer to the child can vary greatly depending on the enthusiasm and dedication of the playworkers. An adventure playground could offer the children many experiences that are almost impossible to experience in the urban environment such as taking care of animals, gardening and growing plants from seeds. Hence, adventure playgrounds are playgrounds which offer the urban child experiences that seem to be inherent, such as manipulating the environment and playing with fire and water; as well as providing the conventional play equipment that children sometimes adore. An adventure playground could provide, and indeed should when possible, the urban child with experiences that are varied and lacking in the urban desert.



### **A.III.C.II Indoor Activities**

Almost all existing adventure playgrounds have buildings on site. These buildings serve many functions and vary in complexity from a small shed to an indoor play complex, depending on the funds available to the playground and the permanency of the playground as a whole. The buildings serve as a place to store the tools used on the playground furthermore, the buildings usually have toilets for the children to use, an office for the playworkers, and a large playroom which caters for some activities in the case of bad weather and/or if the children prefer to be indoors. The building can also be used during evenings when the remainder of the playground is not (Shier 1984). For this reason, the building should be located near the entrance of the playground. Furthermore, in locating the building in the playground, consideration must be paid to ensure that the offices of the playworkers overlook as much of the playground as possible (Cooper 1970, NPFA 1984).

Besides offering storage space, offices, and toilets the building of an adventure playground is used by the children for many activities. One of the most important activities is socialising. As Shier (1984) states,

Not least they [the buildings] are used by the children as a social centre where they can meet and talk in a relaxed atmosphere, free from the pressures of the adult dominated world outside the playground. (p.12)

The buildings of adventure playgrounds also offer an environment for some activities such as board games, billiards, table tennis, arts and crafts, painting and even cooking if there is a small kitchen in the building (Allen 1968, Cooper 1970). Due to the heavy use the building is likely to receive, especially during times of bad weather, it is highly recommended that the building of the playground be constructed and finished with durable materials. Depending on the playworkers, authorities and parents; the buildings could be elaborate and act as an indoor complex or club especially for the teenagers that frequent the playground (Bengtsson 1972).

Thus, adventure playgrounds have a great deal to offer the urban child, even when the sun does not shine (or in some cases when it shines for too long). However, there have been many constraints and worries concerning adventure playgrounds and their wider distribution in the city. In the next section some of these concerns and/or issues will be briefly reviewed and examined.



### **A.III.D. Concerns Facing Adventure Playgrounds**

Thus far in the review, the positive aspects of adventure playgrounds have been illustrated. This however does not mean that there are no negative aspects to the playground concept. Adults, who in reality control the provisions of facilities and activities for the young, seem to be reserved in accepting adventure playgrounds as a complement to the existing types of recreational facilities offered to the urban child. Hence, in this section some of the concerns and issues that have made parents, officials and adults in general unenthusiastic will be viewed and considered.

The main concerns that seem to affect the adults' acceptance of adventure playgrounds, according to many specialists on the subject, is the unconventional nature of the concept. Adults seem to prefer their children to play in very orderly, clean and manicured surroundings. As Cooper (1970) points out,

People are geared to nice manicured play areas with shiny brightly painted equipment, even though they are not used. (p.89)

The reasons that adults prefer the conventional playground over more adventurous ones is not because adults are evil and do not care what children want and enjoy. The reasons for their choice could be the two points that Wilkinson (1980) highlights:

- I) Tradition: conventional playgrounds and their provisions has become a traditional thing to do.
- II) Lack of Sophistication in Planning and Design: a lack of the true nature of play and the desires of the children has led public agencies to "stay with the devil they know" rather than try something new.

In addition to these main obstacles to the wider provision of adventure playgrounds, there are other concerns. These concerns are listed below in order of importance according to Cooper (1970).

- a) Liability and insurance cost.
- b) Unsightly appearance.
- c) Loss of property value near the playground.
- d) Cost of operation is too high.
- e) Fire hazards.
- f) Crime, vandalism and drug trafficking on the playground.

It is important to consider each one of the concerns listed above to have a clear perspective on the matter. There is no point to try and deny that adventure playgrounds and the activities in them are not potentially hazardous. However, the true issue is not whether or not children get hurt, but what is causing these "accidents". Many people have



suggested that the lack of variety in an environment will lead to boredom, vandalism and eventually accidents and/or conflict (Moore 1989, Fjeldsted 1980) (See Chapter III). Hence, accidents are not only caused by challenge on the contrary, challenge is very important to the play of children. This point is perhaps best described by Allen (1968) when she argues,

It is rewarding experience for children to take and overcome risks, and to learn to use lethal tools with safety. Life demands courage, endurance and strength, but we continue to underestimate the capacity of children for taking risks, enjoying the stimulation of danger and finding things out for themselves. It is often difficult to permit children to take risks, but over-concern prevents them from growing up. This is all too clearly seen in the dull, "safe" playgrounds that continue to be devised.  
(p.11)

As for the concerns voiced against the appearance of adventure playgrounds, there is one question that one has to ask in considering this point. Which is more important, the appearance of the environment or its effectiveness in offering what was meant for it to provide? Once priorities are listed and realised this issue will become irrelevant. Furthermore, the playground should be, as stated earlier, fenced and periodically cleaned and maintained in an effort to reduce any aesthetic nuisance that might be caused by children enjoying themselves!

The loss of value to property near the playground is a concern that is not really based on research and evidence. While property values are determined by many social and physical aspects and features, the amount of facilities and their quality tend to have a positive effect on property values. Hence, it is a reasonable assumption to assume that the presence of an adventure playground might increase rather than decrease the property values in its proximity. The counter argument could be that the immediate property to the playground might be decreased due to the noise levels, fumes and other negative factors. This argument is a valid one indeed. The only suggestion one can put forth is the following:

In areas where it is possible to shelter and/or screen the playground from neighbouring houses and incompatible land-uses it should be done. Where it is not possible to do so, one must work with people most affected by the playground's presence and come to a compromise in the different aspects and activities of the playground (i.e. opening hours, the times that fires can take place).

The cost of operation in adventure playgrounds is higher than the conventional playground. Perhaps the reason for this increased cost is the fact that unlike the conventional playground, adventure playgrounds are continually changing, a living environment in a sense. To justify the increase in cost one must look at the cost effectiveness of any proposal. The greater the return on an investment, the more cost effective it is. In comparing between the conventional playground and an adventure playground one will quickly come to realise that the adventure playground is a better



investment with regard to the opportunities, experiences and amount of enjoyment the child gains from it. If the reader still has doubts concerning this point, perhaps the below table (Table A.III.C.1) will illustrate the differences observed by Fjeldsted (1980) in her study of the two playground types.

Type of Analysis	Conventional Playground	Adventure Playground
Play Equipment	Many pieces had only one use.	Pieces were manipulable and had many versatile uses.
	Seemed to involve only gross-motor activity.	Seemed to stimulate self-directed play of all the children, especially those of toddler age. Actual development stage in play was not as important.
	Stimulated mostly onlooking, solitary, parallel and associative play.	Stimulated much associative and co-operative _ imaginative play.
Behaviour and Arousal Seeking		
Exploration	Seemed to have a moment of visual exploration.	Had the same moment of visual exploration but seemed more anxious actually to get into the situation and play.
Investigation	Children went from object to object spending about 5 minutes with each until they had investigated all the objects.	First 10 minutes were spent exploring various objects; then they spent 35 minutes, 1 hour and longer playing with the sand and water before moving on to other objects.
Manipulation	Present	Present. There seemed to be more actual learning through the manipulation.
Epistemic	Present, but seemed to stop at a point when there was nothing more to learn about an object. Pacer stimuli seemed to be used up.	Present. Each object seemed to provide a wealth of learning situations. Interactions with the environment seemed to spiral upwards.
Time of Sustained Interest	The children spent 1 hour, 40 minutes in playground. This is perhaps due to the fact it was the first time they had visited the playground.	The children spent 1 hour, 45 minutes in the playground. After a break the children returned to the playground and began building a fort.

Table A.III.C.1: Comparisons Between Adventure and Conventional Playgrounds. [Taken from Fjeldsted (1980) p.40-2]

There are numerous other advantages that an adventure playground has over the conventional playground however, they will not be discussed here, but rather in a forthcoming section. For the time being it is evident that the extra cost of operating an adventure playground is justified.

The concern regarding fires and possible hazards is a very serious and valid concern. The National Playing Fields Association (NPFA) (1984) have placed guidelines that must be followed to reduce the possibility of fire hazards. The most important of these guidelines are illustrated below:

- 1) There must be a recognised and established area for fires in the playground with



a non-combustible base. There must not be any underground services beneath this area.

II) Fire areas must be sited away from areas of high activity. Seating around the fire areas must be made with non-combustible materials (such as earth banking) and at a minimum distance of 2 meters from the fire.

III) The area for fires must be sited away from buildings, fences, vegetation, etc. Furthermore, siting the area must pay special attention to people living nearby.

IV) Fires should be built on ground level. Fires in holes are not acceptable. Fires could be started in metal containers, however special attention should be paid to:

a) Keeping children away from the container because the surface temperature of the container may not be noticed by the children. Concrete pipes must never be used, because they might explode.

b) The fire is stabilised and extinguished properly.

v) Fires are preferred to be started with paper. However, in certain circumstances fire lighters might be used. The fire lighters must be kept under lock and key. Under no circumstances should petrol, and other flammable fluids used to start the fire. Once the fire is started, no flammable liquid should be added to the fire to sustain it.

vi) Materials that might explode or give off toxic fumes should not be thrown in the

fire. Some of these items include:

- Asbestos	- Bottles and other glass items	- Gas bottles	- All chemicals such as washing liquids, etc.
- Plastics	- Foam, rubber and other plastics	- Concrete slabs, pipes and bricks	- Tin cans
- Oil drums		- Tyres	
- Aerosol containers		- Slate	

vii) A supply of water or loose sand must be nearby the fire to extinguish it. If there is no means of putting out a fire then the fire must not be started. Fires must be extinguished completely by continuous watering and raking. Special attention should be paid to container fires, because the surface of the container will retain heat.

The concern regarding adventure playgrounds as providing a nice refuge for vandalism, crime and drug consumption and/or trafficking is unfounded. There is evidence that adventure playgrounds actually aid in the reduction in the levels of vandalism and crime (Wilkinson 1980, Cooper 1970). Many have argued that vandalism and the improper use of objects is generally caused by the child being bored (See Chapter III). In an attempt to relieve this boredom the child might resort to finding new ways of using an object and this, in the eyes of the adult, is considered vandalism. Hence, the evidence suggests that if children are not bored and have something interesting to do they will not resort to vandalism. As for crime and the issue of drugs, adventure playgrounds with a vigilant community, police force and playworkers are not a very supportive environment for these



activities. However, to ensure that these activities do not occur on the playground outside opening hours, some of the principles put forth by Newman (1972) could be applied. Establishing defensible spaces, whereby neighbouring residences could keep an eye on the playground during closing hours is one of the more natural ways of maintaining surveillance of adventure playgrounds. Police patrols is also another possibility in trying to control the occurrence of crime and drug related activities.



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### **A.III.D. The Merits of Adventure Playgrounds**

Some of the merits of adventure playgrounds have been discussed briefly in preceding sections. In this section some of the wider benefits adventure playgrounds offer the child and the community will be discussed. To begin with, adventure playgrounds offer the urban child some experiences that he might not have living in a city. For example, coming in touch with animals, plants, water and fire has a very significant role in developing the cognitive abilities of the child. The caring for animals and plants in the garden coupled with the co-operation that must exist in some of the activities in the playground will aid the child in socialising and understanding responsibility better. The nature of the playground, in that children can manipulate the environment will affect their sense of being and their importance in and contribution to the world. In building a small shed children will learn many important behaviours, such as planning, envisioning the form and shape of the shed, and perhaps most important of all co-operation with others to achieve a common goal (Cooper 1970, Shier 1984).

It seems that adventure playgrounds teach the child some very important lessons; lessons many adults of the modern era have forgotten or ignored. The list of merits that an adventure playground has to offer to the urban child can go on. However, the primary advantage of adventure playgrounds is that children enjoy them. Play areas are provided for many reasons, the most important of which is children's enjoyment of them. They are not provided for the enjoyment or the fulfilment of planners or designers, parents or the community at large, these groups do not have to use the areas and their enjoyment of them is not of vital importance. Just as the enjoyment of a documentary film is not expected of a child.

As well as providing the individual child with many gains, adventure playgrounds have many things to offer the community. The community involvement in the operation and supervision of the playground is a very significant benefit to the society (Cooper 1970). Having the community involved in children and their activities will perhaps direct some attention to the problems that children in today's urban environments must contend with. This involvement will almost certainly bring the community closer together. As a force in society realising some of the important issues of planning and design, the community could then influence the policies and practices that affect them, their city and perhaps their society. Great advances in the planning and design of cities can only come from the nucleus of society: the community. With the involvement of the many communities in the city, the planning policies and decisions will surely reflect some of the true needs and desires of people. Furthermore, a community that is close in terms of concerns and relations will probably be a community that deters crime and other plagues of the modern city (Cooper 1970). While adventure playgrounds are not the only means of bringing



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people together and establishing relationships within a community, they can only have a positive effect towards this elusive objective.

If the reader is under the illusion that adventure playgrounds will solve the problems that children and their play face in the urban environment it must be pointed out that this is not the case. Children do want a place they can call their own, sheltered from the adult world. In this sense, adventure playgrounds are a valuable asset to society's provisions for children's needs and desires. In aiding the child in many developmental tasks, adventure playgrounds are a valuable asset. However, if the child cannot be integrated into the many aspects of society and has to be always fenced off from society, then the problem of truly providing for his needs and desires is not solved but rather tranquillised. As Shier (1984) states,

..... perhaps we should be concerned that children cannot be properly integrated into society and can only play freely in a special preserve behind a high fence. It has been suggested that our priority should not be the building of playgrounds, but the re-designing of the environment as a whole, and indeed the restructuring of society so that the needs of children are recognised and provided for in every aspect of community life. (p.21)

#### **A.III.E. The Possibilities of Providing Adventure Playgrounds In Jeddah**

The issue of providing adventure playgrounds to the urban child is not a simple one. While it is true that children and their desires are the most important issues in play area provision, other groups that might exert a great deal of influence on planning authorities have to be considered seriously. This is the dilemma that authorities must face in adventure playground provision. Priorities must be established however, without priorities the authorities might crumple under the least of pressures. The child should always be at the top of any priority list. The benefits, the enjoyment and the skills (social, physical and cognitive) a child gains from an environment must always take prominence to all other minor issues such as appearance.

Providing adventure playgrounds in Jeddah is a possibility. However, some issues must be dealt with in order to make this possibility a reality. To begin with, there is a need to introduce the concept and benefits of adventure playgrounds to the society. A considerable effort needs to be put into the "marketing" of the idea and the playground. The society needs to be convinced that this type of playground is beneficial to their children in many aspects, despite its appearance and the unconventional activities that occur within it.

If the concept of adventure playgrounds is to be adopted in Jeddah and in Saudi Arabia in general, a course or mechanism for training playworkers has to be established.



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Playworkers are a pillar on which the adventure playground concept rests, and as such, provision of good playworkers must be viewed as important as the playgrounds themselves. A second issue that must be dealt with concerning playworkers is the communities' reliance and trust of the playworker. Unfortunately, there is no easy way to gain the trust of parents when dealing with their most precious of their belongings: their children. Trust and dependence will have to be earned by the playworkers. It might prove beneficial and a valuable aid for the playworkers in gaining the trust of the community to involve the community whenever possible. Perhaps in seeing the treatment and the concern that a playworker shows towards the children the parents and the community will come to value the playworkers more and in time come to trust them.

Perhaps one of the main obstacles that will face the adoption of the adventure playground concept in Jeddah will be the issue of land. As was illustrated earlier, adventure playgrounds to function as they were meant to, require a sizeable amount of land. This fact might hinder the provision of adventure playgrounds in the more developed areas of Jeddah where these types of playground are needed most. In other areas of the city that can offer an ample supply of undeveloped land the provision of adventure playgrounds might be just as difficult due to the high land prices (See Chapter IV). The solution to these obstacles are not simple and indeed require definite answers through extensive research. However, for the time being, one suggestion must be put forth to the reader concerning this topic. The majority of land in Jeddah is owned by a few developers, as was illustrated in Chapter IV. of the main text. These landlords should give something back to the society in the form of either offering some land to public agencies for the purposes of establishing playgrounds; or offering to reduce the prices of land as to allow for the purchase of the land by public agencies without stretching public funds.

There are many issue involved in the provision of adventure playgrounds, only the most important have been highlighted in this review of the concept. Provision of adventure playgrounds will not solve the many problems facing children's play in the urban environment. However, its provision will aid in solving the problem especially in areas where a large density of children exists. In the case of providing adventure playgrounds in Jeddah, the many issues affecting their provision require much more thought, analysis and research. In the event that adventure playgrounds are to be provided to the public in Jeddah, and if they are to function well, then there needs to be a massive effort by many members of the society. An effort that will be in the end appreciated by the children of the society.



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## **Appendix IV : The Questionnaires**



**Letter to Respondents**

Dear Citizen,

Children are the loved ones to us all. As God Almighty states in his book,

**WEALTH AND CHILDREN ARE THE ORNAMENT OF THIS LIFE. (18:46)**

One of the things that provides pleasure to children is play. However in recent years due to the growth of Jeddah, children generally have been restricted in their play to mainly indoor spaces. This study is concerned with providing our children with safe, suitable and pleasant outdoor spaces throughout Jeddah. Your co-operation and time are greatly appreciated in helping us realise some of the issues and problems you may be concerned with; and God willing your opinions and suggestions will provide us with the building blocks to build a better future for our children in our city.

Dear respondent, please keep in mind that the questionnaire you have in hand is not an exam, however to obtain the best results from it instructions must be read and followed carefully. Furthermore, to reduce the chance of making mistakes read the questions and all the suggested answers before choosing or marking your answer. If you feel that the questionnaire does not address an issue that you feel should be addressed please feel free to give us your comments and opinions in the blank sheet of paper at the back of the questionnaire.

I send you my sincerest thanks and appreciation.

Mamdouh M.A. Sobaihi

University of Sheffield, Department of Landscape Architecture



## **Questionnaire Format 1: To Parents.**



**SECTION A :**

This section is concerned with finding out some of your opinions on children's play in general and your children's play in particular. Please read the instructions and all the answers before marking the answer you see to be the best.

A.1) Please choose four of the answers below that describe the nature of play best, and order or rank your answers accordingly. With (1) being the best description, (2) being the second best and so on.

Rank/Order				Description
1	2	3	4	Recreation and fun
1	2	3	4	Physical and Muscle development
1	2	3	4	Helps the child understand things around him
1	2	3	4	Helps the child in spiritual relaxation/contemplation
1	2	3	4	Helps the child in making friends and in communication skills
1	2	3	4	Others (Please Specify) ..... .....

A.2) Please rate the below in terms of importance to the child's (age 1-12) healthy and normal development. Mark with (X) in the appropriate box.

	Very Important	Important	Not so Important	Not Important
Nutrition				
Education				
Parental Love				
Friends				
Good and Pleasant Environment to Grow up in				
Play in Childhood				
Others (Please Specify) .....				

A.3) Please choose four of the below statements that you think define play best. Order your answers accordingly, with (1) being the best definition, (2) the next and so on.

Rank/Order				Statement
1	2	3	4	Play is the active involvement of the child in an activity he likes and enjoys
1	2	3	4	Play is an activity for the child in which he is free to experiment with things with little or no pressure to achieve a goal or result.
1	2	3	4	Play is an activity for children in which they can practice skills that they might use in adulthood.
1	2	3	4	Play is not an activity for children alone, but rather it is an activity enjoyed by all people even though play activities take different forms in different stages of life.
1	2	3	4	Play is an activity which is important to the child because it helps the child develop his physical, emotional and intellectual qualities
1	2	3	4	Play can be best described as being the opposite of work.
1	2	3	4	Play is an activity that is practised differently in every culture, as such it is an important element of any given culture and society.
1	2	3	4	Others (Please Specify) ..... .....



A.4) Where do you and your children (family) go for recreational purposes usually. Mark with (X) in the appropriate box.

Places	Frequency					
	Every-day	Three times a week	Every week	Every two weeks	Every month	Once in a while/On special occasion
Visit friends or relatives.						
Do something at home such as play cards or a game.						
The Cornice						
A Public Park						
An Amusement Park						
Restaurant or Cafe						
Shopping centre						
The chalets on the Red Sea						
Out of Jeddah (Please Specify where)						
Others (Please Specify) ..... .....						

A.5) How often do your children (Males/Boys) play outside your home? Mark with (X) in the appropriate box.

- Everyday
- Three times a week
- Only on week-ends and school holidays
- Never -----Why? Please only choose four (4) reasons.
  - No special place to play in in the neighbourhood.
  - Danger of the automobiles.
  - They may pick up bad habits from other kids.
  - The other kids are violent and bully children.
  - It is too hot to play outdoors usually.
  - The places where they can play are usually too far for the kids to go to
  - Others (Please Specify)
  - .....

A.6) How often do your children (Females/Girls) play outside your home? Mark with (X) in the appropriate box.

- Everyday
- Three times a week
- Only on week-ends and school holidays
- Never -----Why? Please only choose four (4) reasons.
  - It is not proper for girls to play outdoors.
  - Girls may be mistreated by boys or men if they play outdoors.
  - No special place to play in in the neighbourhood.
  - Danger of the automobiles.
  - They may pick up bad habits from other kids.
  - It is too hot to play outdoors usually.
  - The places where they can play are usually too far for the kids to go to
  - Others (Please Specify)
  - .....



**NOTE :** If your children Never play outdoors, Please advance to question A.20

**A.7)** When your children play outdoors, where do they usually play? Please choose the three most frequent places only. Mark with (X) in the appropriate box.

Boys/ Males		Girls/ Females
	The corridor outside the flat	
	Near the entrance of the apartment building	
	The street in front of the building	
	The roof of the building	
	An empty lot of land near your home	
	A park in the neighbourhood	
	In-between buildings	
	Others (Please Specify) .....	

**A.8)** What time of the day do your children usually play outdoors. Mark with (X) in the appropriate box.

Boys		Girls
	Mornings	
	Early Afternoons (2:00-4:00 P.M.)	
	Late Afternoons (4:30-Sunset)	
	Evenings	

**A.9)** What is the average duration your children usually spend in their outdoor play? Mark with (X) in the appropriate box.

Boys		Girls
	10 minutes or less	
	10-25 minutes	
	30-60 minutes	
	More than 60 minutes	

**A.10)** How do your children go to the place they usually play at? Mark with (X) in the appropriate box.

Boys		Girls
	They walk	
	They ride their bicycles	
	They take a bus or taxi	
	They drive a vehicle (i.e. motorcycle, car)	
	They are driven	
	Other (Please Specify) .....	

**A.11)** What mode of transport would you prefer your children to use to get to the place they played at most in your neighbourhood? Mark with (X) in the appropriate box.

Boys		Girls
	Walking	
	Bicycle	
	Vehicle/Car	
	Other (Please Specify)..... .....	



A.12) Would your answer to question A.11 change if the streets were safer for pedestrian use? Mark with (X) in the appropriate box.

No Yes----- What would your answer be?

.....

A.13) How far will you allow your child to travel unaccompanied to a play area in the neighbourhood? Mark with (X) in the appropriate box.

Information about the Child				5 Minutes or Less	5-10 Minutes	10-20 Minutes	More than 20 Minutes
	Age	Male	Female				
Child 1							
Child 2							
Child 3							
Child 4							
Child 5							
Child 6							
Child 7							

A.14) When your children are accompanied in their outdoor play, who usually accompanies them? Mark with (X) in the appropriate box.

- |                |                        |
|----------------|------------------------|
| They go alone  | Aunt/Uncle             |
| Brother/Sister | House Keeper/Nanny     |
| Mother/Father  | Driver                 |
| Grand Parent   | Other (Please Specify) |

.....

A.15) If there is a caring and understanding adult that you know in the play area your children use, supervising all the children and their play, would you allow your child/children go to that play area alone? Mark with (X) in the appropriate box.

Yes Maybe No ----- Why?

- Your child/children have special needs.
- You do not trust others to take care of your children.
- You prefer to be with your child/children.
- You prefer someone you know very well to be with your child/children.
- You prefer your child/children to play indoors.
- Others (Please Specify)

.....

A.16) At what age would you grant your male child/children permission to play outdoors without supervision? Mark with (X) in the appropriate box.

- About 5 years old.
- 6-10 years old.
- 11-15 years old.
- Never

A.17) At what age would you grant your female child/children permission to play outdoors without supervision? Mark with (X) in the appropriate box.

- About 5 years old.
- 6-10 years old.
- 11-15 years old.
- Never



A.18) At what age would you prevent your female child/children from playing outdoors unsupervised? Mark with (X) in the appropriate box.

- About 5 years old.
- 6-10 years old.
- 11-15 years old.
- Girls should not play outdoors at any age.

A.19) In the table below are a list of activities, please indicate what activities your child/children participate in now and what activities you would like your child/children to participate in if the facilities and spaces were provided. Please note that the order of children should follow that you have made in question A.13. Mark with (X) in the appropriate box.

Activities	My Child Participates in this Activity							I Would Like my Child to Participate in this Activity						
	C	C	C	C	C	C	C	C	C	C	C	C	C	
	h	h	h	h	h	h	h	h	h	h	h	h	h	
	i	i	i	i	i	i	i	i	i	i	i	i	i	
	l	l	l	l	l	l	l	l	l	l	l	l	l	
	d	d	d	d	d	d	d	d	d	d	d	d	d	
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Read														
Play Cards														
Play a Musical Instrument														
Build things (e.g.. Lego)														
Watch T.V. and Video														
Write Stories and Poetry														
Paint														
Listen to Radio, Music Tapes and LPs														
Play Tag, Chase and Hide & Seek														
Play Jacks														
Play Hopscotch														
Jump Rope														
Climb a Tree or Frame														
Play House and/or School														
Ride a Bicycle														
Wrestle														
Play with Swings Slides and other conventional Playground equipment														
Play Marbles														
Jog or Run														
Mountain or Rock Climbing														
Water Skiing														
Sailing														
Play with Animals														
Nature Walks														
Horse Riding														
Motorcycling/Motorcross														
Buggy/Sand Dune Riding														
Body Building														
Athletics														
Ping Pong/Table Tennis														
Football														
Basketball														



Hockey														
Volleyball														
Tennis														
Squash														
Badminton														
Swimming														
Water Polo														
Diving														
Scuba Diving														
Others (Please Specify)														
.....														
.....														
.....														

A.20) In the table below there are some factors which might influence the play of children in the urban environment. These factors may influence the play of children with differing degrees according to the child's age and stage of development. Please rate the factors below and how they affect the play of children in different stages and ages. Mark with (X) in the appropriate box.

Factors	Affects 0-5 Year Olds				Affects 6-10 Year Olds				Affects 11-15 Year Olds			
	G	S	L	N	G	S	L	N	G	S	L	N
	r	e	a	t	r	e	a	t	r	e	a	t
	t	w	h	a	t	w	h	a	t	w	h	a
	t	e	e	y	t	e	e	y	t	e	e	y
	l	y	a	f	l	y	a	f	l	y	a	f
	f	a	f	f	f	a	f	f	f	a	f	f
	e	c	t	e	e	c	t	e	e	c	t	e
The great numbers of automobiles on the roads.												
The speed of vehicles on the roads.												
The crowded residential areas.												
The parents' lack of time to take children out to play.												
Children not having enough time to play because of too much school work.												
The lack of good public play areas in Jeddah												
The lack of good play areas, whether public or private												
The dangers posed by people that harm children, whether abuse or mistreatment												
Others (Please Specify)												
.....												
.....												



---

**A.21) How would you rate the play areas in your neighbourhood? Mark with (X) in the appropriate box.**

- Very Poor
- Poor
- Fair
- Good
- Excellent

**A.22) How would you rate the play areas throughout Jeddah? Mark with (X) in the appropriate box.**

- Very Poor
- Poor
- Fair
- Good
- Excellent

**A.23) What in your opinion are the best five play areas or environments in Jeddah today? Please order them accordingly.**

- 1) .....
- 2) .....
- 3) .....
- 4) .....
- 5) .....



A.24) In the table below are some of the factors that a designer or planner of children play areas in Jeddah might consider. How important do you think these factors are in the provision of children's play areas? Mark with (X) in the appropriate box.

Statement	Very Important	Important	Not Important	Do not Know	Disagree with Statement
Play areas should be located so that children can get to the spaces on their own.					
Play spaces should be away from vehicular traffic.					
Play spaces should be located in places where they can be overlooked by people in their homes and/or adjacent land uses.					
Play spaces should have areas for adults that wish to accompany their children.					
Play areas should have an abundance of toys and/or equipment.					
Play spaces should be near the sea and other challenging areas.					
Play spaces should be very large and away from schools.					
Play areas should have an adult present at all times whose job it is to look after the children playing.					
The play spaces should have lots of children playing and/or socialising.					
The play areas should have lots of natural materials such as trees, flowers, sand, water and so on.					
The play spaces should be protected from undesirable climatic conditions such as the hot sun, strong winds and so on.					
Some play spaces should be specialised for a certain activity such as ball games, arts, etc.					
Some play spaces should have buildings that serve as an indoor play space as well as area where certain activities like reading can take place.					



Play areas should have certain facilities such as toilets, drinking water, first aid, etc.					
Play spaces should have all age groups of children playing together.					
Some play spaces should be specialised to cater for the needs of only one age group.					
Some play spaces should have some cultural activities such as the way fishermen used to fish in Jeddah, the way buildings are built in old Jeddah, etc.					
The play areas should not have any sand in them because it will make the play area messy and disorderly.					
The play spaces should look very modern in design.					
The play areas should incorporate some of the traditional design values and appearance of old Jeddah.					
Others (Please Specify) ..... ..... .....					
..... ..... .....					
..... ..... .....					

A.25) Would you pay money to help maintain your local play space in your neighbourhood? Mark with (X) in the appropriate box.

Yes                      No      -----Why?

.....  
.....

A.26) Would you pay money to help maintain your local play area if it was improved and was enjoyed by children and adults? Mark with (X) in the appropriate box.

No                      Yes----- How much will you be willing to pay every month?  
 Less than 10 Saudi Riyals (S.R.)  
 10-50 S.R.  
 50-100 S.R.  
 100-200 S.R.  
 More than 200 S.R.



**SECTION B :**

Again, I would like to thank you for your time and co-operation. There are a few more questions and then the questionnaire will be over, so please bear with us for a while longer.

In this section of the questionnaire (Section B) we are interested in finding out a bit about your own childhood play experiences. This information would hopefully provide for a basis of comparison between this generation and the preceding ones in terms of play. Please read the instructions and all the answers before marking the answer you see to be the best.

**B.1) Where did you spend your childhood? Mark with (X) in the appropriate box.**

- Jeddah
- Another city in the western region of Saudi Arabia
- In a city or town in Saudi Arabia
- In an Arab city or town
- In a Muslim non-Arab city or town
- Other

**B.2) Did you used to play outdoors when you were young? Mark with (X) in the appropriate box.**

- Yes
- No

**B.3) Where did you used to play outdoors most? You may choose three (3) places. Mark with (X) in the appropriate box.**

- |                                   |                                           |
|-----------------------------------|-------------------------------------------|
| In between buildings              | The street                                |
| In front of your home's entrance  | An empty lot of land in the neighbourhood |
| On the beach/waterfront           | The roof of the house                     |
| The courtyard/garden of the house | Inside the home (e.g.. balcony)           |
| Others (Please Specify)           |                                           |
- .....

**B.4) On average, how long did you play outdoors? Mark with (X) in the appropriate box.**

- Less than 10 minutes
- 10-25 minutes
- 30-60 minutes
- More than 60 minutes

**B.5) How did you usually get to the place you played at? Mark with (X) in the appropriate box.**

- |                         |             |
|-------------------------|-------------|
| Walked                  | Bicycle     |
| Bus/Taxi                | Motorcycle  |
| Drove a Car             | Were driven |
| Others (Please Specify) |             |
- .....

**B.6) What was the time of day you used to play outdoors in most? Mark with (X) in the appropriate box.**

- Mornings
- Early Afternoons (2:00-4:00 P.M.)
- Late Afternoons (4:00 P.M.-Sunset)
- Evenings



**B.7)** How old were you when your parents allowed you to play outdoors with no supervision? Mark with (X) in the appropriate box.

- About 5 Years Old
- 6-10 Years Old
- 11-15 Years Old
- More than 15 Years Old

**B.8)** How often did your parents or other adults watch and supervise your outdoor play? Mark with (X) in the appropriate box.

- Always
- Often
- Sometimes
- Never

**B.9)** What were some of the things or features in the place that you used to play in that made it unique or more enjoyable?

- 1) .....
- 2) .....
- 3) .....
- 4) .....
- 5) .....



**SECTION C :**

The final section of this questionnaire is aimed at finding out some information about you personally. The purpose of this is to compare between different people with different backgrounds. Please read the instructions and all the answers before marking the answer you see to be the best.

**C.1) What is your age? Mark with (X) in the appropriate box.**

20-24	45-49
25-29	50-54
30-34	55-59
35-39	60 or Over
40-44	

**C.2) Gender?**

Male                      Female

**C.3) Nationality?**

Saudi

Arab National ----- How long have you been residing in Saudi Arabia?

1 Year or Less

1-5 Years

More than 5 Years

Non-Arab Muslim National

Other

**C.4) What educational certificate do you currently hold? Mark with (X) in the appropriate box.**

Primary

Intermediate

Secondary

Polytechnique/College

University

Higher Education

**C.5) In what district of Jeddah do you live? .....**

**C.6) What type of residence do you live in? Mark with (X) in the appropriate box.**

Villa/Detached House

Flat in a 2 storey building

Flat in a 3-5 storey building

Flat in a building higher than 5 storeys

Other (Please Specify) .....

**C.7) How long have you lived in this residence? Mark with (X) in the appropriate box.**

One (1) Year or less

1-5 Years

More than 5 Years

**C.8) What is the tenure type? Mark with (X) in the appropriate box.**

You own your residence

Yearly rental

Long Term Lease

Other (Please Specify) .....

**C.9) Marital Status?**

Married

Widow(er)

Separated/Divorced



C.10) Do both parents in the family work?

Yes                      No

C.11) What approximately is the income of your household?

800 S.R./Month or Less  
900-2500 S.R./Month  
2600-5000 S.R./Month  
5100-8000 S.R./Month  
8100-12000 S.R./Month  
More than 12000 S.R./Month

With this we come to the conclusion of this questionnaire, I would like to thank you for your time and co-operation and hope that this questionnaire is a positive step towards establishing a better play environment for the young of Jeddah in the future.

NOTE : If you have any comments, suggestions and/or remarks you would like to put forth, please do so in the blank piece of paper provided at the back of the questionnaire.







## **Questionnaire Format 2: To School Children**



Please read the questions and answers carefully before choosing your answer.

Q.Y.1) How old are you?

- Less than 10 years-old
- 10-14 years-old
- 15-19 years old
- 20-24 years old
- 25 years-old or More

Q.Y.2) What gender are you?

- Male
- Female

Q.Y.3) In which district of Jeddah do you live? If you do not know, name something famous near your home.

.....

Q.Y.4) What type of home do you live in?

- Villa or House
- Flat in a building with two storeys
- Flat in a building with more than three storeys

Q.Y.5) What do you think of the play areas near your home?

- Very Poor
- Poor
- Fair
- Good
- Excellent

Q.Y.6) What do you think of the play areas in all of Jeddah?

- Very Poor
- Poor
- Fair
- Good
- Excellent

Q.Y.7) Do you play outside your home usually?

- No
- Yes \_\_\_\_\_ How many times do you play outside usually?
  - Everyday
  - Three times a week
  - On week-ends
  - On occasions only

Q.Y.8) Why do you not play outside more?

- 1) .....
- 2) .....
- 3) .....

Q.Y.9) When you play outside, where do you usually play?

- 1) .....
- 2) .....
- 3) .....
- 4) .....
- 5) .....



**Q.Y.10) What time of the day do you usually play outside?**

- In the Morning
- In the Afternoon (2:00-4:00 P.M.)
- In the Late Afternoon until sun-down
- In the Evenings

**Q.Y.11) What do you think are the best play areas in Jeddah?**

- 1) .....
- 2) .....
- 3) .....
- 4) .....
- 5) .....

**What are the things that makes these places nice or good?**

- a) .....
- b) .....
- c) .....
- d) .....
- e) .....

**Q.Y.12) How do you spend a usual day?**

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



Q.Y.13) In the table below are some activities. Put an (x) mark in the first column for the activities that you do now. In the second column put an (x) mark for the activities that you would like to do in the future.

Activities	I Participates in this Activity	I Would Like to Participate in this Activity
Read		
Play Cards		
Play a Musical Instrument		
Build things (e.g.. Lego)		
Watch T.V. and Video		
Write Stories and Poetry		
Paint		
Listen to Radio, Music Tapes and LPs		
Play Tag, Chase and Hide & Seek		
Play Jacks		
Play Hopscotch		
Jump Rope		
Climb a Tree or Frame		
Play House and/or School		
Ride a Bicycle		
Wrestle		
Play with Swings Slides and other conventional Playground equipment		
Play Marbles		
Jog or Run		
Mountain or Rock Climbing		
Water Skiing		
Sailing		
Play with Animals		
Nature Walks		
Horse Riding		
Motorcycling/Motorcross		
Buggy/Sand Dune Riding		
Body Building		
Athletics		
Ping Pong/Table Tennis		
Football		
Basketball		
Hockey		
Volleyball		
Tennis		
Squash		
Badminton		
Swimming		
Water Polo		
Diving		
Scuba Diving		
Others (Please Specify)		
.....		
.....		
.....		







**Questionnaire Format 3: To City and Planning  
Officials.**



Please read the instructions and all the answers before marking the answer you see to be the best.

Q.O.1) Which age group do you belong to?

- 15-19
- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50-54
- 55-59
- 60 and over

Q.O.2) What educational certificate do you currently hold?

- None
- Primary
- Intermediate
- Secondary
- College/Polytechnique
- University
- Higher

Q.O.3) Marital Status?

- Single
- Married
- Widowed
- Separated/Divorced

Q.O.4) Do you have children?

- Yes
- No

Q.O.5) How would you evaluate the outdoor play areas and facilities in Jeddah?

- Very Poor
- Poor
- Fair
- Good
- Excellent

Q.O.6) In your opinion which of the below are the three most limiting factors to the outdoor play of children in Jeddah? Please order your answers so as (1) is the most limiting, (2) the second most limiting and so on.

Order/Rank			Factors
1	2	3	The climate of Jeddah is extremely hot.
1	2	3	The speed and number of automobiles on the roads are threatening the child in many ways.
1	2	3	The high density in the residential areas are leading to little space availability.
1	2	3	The children have very little time to play outdoors due to the large quantity of school work.
1	2	3	The parents have very little time to accompany their children to play areas.
1	2	3	There are no good and proper play areas to encourage play.
1	2	3	Others (Please Specify) ..... .....



Q.O.7) From the below suggestions please choose four that you think would help the most in improving the existing situation in Jeddah. Please order your answers so that (1) is the best suggestion and (2) is the second best and so on.

Order/Rank				Suggestions
1	2	3	4	Shade and protect the play areas from climatic conditions.
1	2	3	4	Residential areas need to be planned and designed with more consideration for the pedestrian, and automobiles need to be controlled in terms of speed.
1	2	3	4	School play areas and facilities remain open to the neighbourhood outside school hours.
1	2	3	4	Park designs need to consider use and not only aesthetics.
1	2	3	4	Reduce school work as to allow the children more free time.
1	2	3	4	Improve the existing facilities and areas, and in the future concentrate on providing play areas that benefit the child's development.
1	2	3	4	Involve the children in the planning and design process.
1	2	3	4	Encourage the private sector to provide facilities that not only concentrate on technology, but rather historic, cultural and traditional activities.
1	2	3	4	Employment of professional to supervise some play areas in some neighbourhoods to encourage the use of these areas and to relieve the pressure on parents to take their children to play areas.
1	2	3	4	Others (Please Specify) ..... .....

Q.O.8) Do you think the participation of children in planning and designing play areas would improve the existing situation?

Yes                      Maybe                      No

Why?

- 1) .....
- 2) .....
- 3) .....

Q.O.9) Do you think the involvement of children in decision making in planning and design of play areas is a realistic suggestion in terms of:

	Yes	Maybe	No	Don't Know
a) Contact with children (where are we going to get hold of them)				
b) Children's know how (do children really know anything about planning and design)				
c) The cost of the planning and design process (Children will only slow down the process)				
d) Others (Please specify) .....				

With this we come to the conclusion of this questionnaire, I would like to thank you for your time and co-operation and hope that this questionnaire is a positive step towards establishing a better play environment for the young of Jeddah in the future.







**Questionnaire Format 4: To Professional Planners,  
Designers and Students of Environmental Design.**



Please read the instructions and all the answers before marking the answer you see to be the best.

Q.P.1) Which age group do you belong to?

- 15-19
- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50-54
- 55-59
- 60 and over

Q.P.2) Nationality?

- Saudi
- Arab
- Muslim Non-Arab
- Other

Q.P.3) What educational certificate do you currently hold?

- None
- Primary
- Intermediate
- Secondary
- College/Polytechnique
- University
- Higher

Q.P.4) Marital Status?

- Single
- Married
- Widowed
- Separated/Divorced

Q.P.5) How would you evaluate the outdoor play areas and facilities in Jeddah?

- Very Poor
- Poor
- Fair
- Good
- Excellent

Q.P.6) In your opinion which of the below are the three most limiting factors to the outdoor play of children in Jeddah? Please order your answers so as (1) is the most limiting, (2) the second most limiting and so on.

Order/Rank			Factors
1	2	3	The climate of Jeddah is extremely hot.
1	2	3	The speed and number of automobiles on the roads are threatening the child in many ways.
1	2	3	The high density in the residential areas are leading to little space availability.
1	2	3	The children have very little time to play outdoors due to the large quantity of school work.
1	2	3	The parents have very little time to accompany their children to play areas.
1	2	3	There are no good and proper play areas to encourage play.
1	2	3	Others (Please Specify)
			.....
			.....



Q.P.7) From the below suggestions please choose four that you think would help the most in improving the existing situation in Jeddah. Please order your answers so that (1) is the best suggestion and (2) is the second best and so on.

Order/Rank				Suggestions
1	2	3	4	Shade and protect the play areas from climatic conditions.
1	2	3	4	Residential areas need to be planned and designed with more consideration for the pedestrian, and automobiles need to be controlled in terms of speed.
1	2	3	4	School play areas and facilities remain open to the neighbourhood outside school hours.
1	2	3	4	Park designs need to consider use and not only aesthetics.
1	2	3	4	Reduce school work as to allow the children more free time.
1	2	3	4	Improve the existing facilities and areas, and in the future concentrate on providing play areas that benefit the child's development.
1	2	3	4	Involve the children in the planning and design process.
1	2	3	4	Encourage the private sector to provide facilities that not only concentrate on technology, but rather historic, cultural and traditional activities.
1	2	3	4	Employment of professional to supervise some play areas in some neighbourhoods to encourage the use of these areas and to relieve the pressure on parents to take their children to play areas.
1	2	3	4	Others (Please Specify) ..... .....

Q.P.8) What in your opinion are the main problems with the planning and design of play areas in Jeddah?

- 1) .....
- 2) .....
- 3) .....
- 4) .....
- 5) .....

Q.P.9) Do you think the participation of children in planning and designing play areas would improve the existing situation?

Yes                      Maybe                      No  
Why?

- 1) .....
- 2) .....
- 3) .....



**Q.P.10)** In the table below there are some factors which might influence the play of children in the urban environment. These factors may influence the play of children with differing degrees according to the child's age and stage of development. Please rate the factors below and how they affect the play of children in different stages and ages. Mark with (X) in the appropriate box.

Factors	Affects 0-5 Year Olds				Affects 6-10 Year Olds				Affects 11-15 Year Olds			
	G	S	L	N	G	S	L	N	G	S	L	N
	r	o	i	o	r	o	i	o	r	o	i	o
	a	m	t	A	a	m	t	A	a	m	t	A
	t	w	l	f	t	w	l	f	t	w	l	f
	l	h	e	e	l	h	e	e	l	h	e	e
	y	a	A	c	y	a	A	c	y	a	A	c
		t	f	t	t	t	f	t	t	t	f	t
		f	f	t								
		e	e									
		c	c									
		t	t									
The great numbers of automobiles on the roads.												
The speed of vehicles on the roads.												
The crowded residential areas.												
The parents' lack of time to take children out to play.												
Children not having enough time to play because of too much school work.												
The lack of good public play areas in Jeddah												
The lack of good play areas, whether public or private												
The dangers posed by people that harm children, whether abuse or mistreatment												
Others (Please Specify)												
.....												
.....												

With this we come to the conclusion of this questionnaire, I would like to thank you for your time and co-operation and hope that this questionnaire is a positive step towards establishing a better play environment for the young of Jeddah in the future.

**NOTE :** If you have any comments, suggestions and/or remarks you would like to put forth, please do so in the blank piece of paper provided at the back of the questionnaire.



