
A REVIEW ON CHILDREN'S BEHAVIOUR AND THEIR ATTACHMENT TO THE PUBLIC OPEN SPACE IN CITIES OF NIGERIA

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Abstract

Every child in a city has connection with their environment and its public open space. The space influences children's behaviour, knowledge, attitudes and cognition. Incontrovertibly, informal learning takes place in the public open space in cities of Nigeria. Children are independent and enjoy talent with creative scenario which influence their attachment to where they can relate with their socio-physical environment and exchange ideas at the informal levels. Fundamentally, existing literature revealed that socio-physical space is fundamental for the development and modifications of children social and their attachment to public open space. Interestingly, environmental psychology theories suggest that socio-environmental contexts determine and shape the children attitude in public open space. In addition, literature appraised showed importance of design and planning of public open space to create a conducive environment capable of developing positive social behaviour. Therefore, this paper reviewed existing literature on the relationship between children behaviour and public open space in cities of Nigeria. It describes patterns of social behaviour among children and their attachment to public open spaces.

Keywords: Children's Behaviour, Public open space, Cognition, Place attachment

INTRODUCTION

The availability of safe open space supports healthier physical and psychological development of children. Growing up in a city where there are many accessible and conducive open public spaces is enjoyable. Evidence shows that children who have better access to such places are more likely to be physically active, and less likely to be overweight, compared to those living in neighbourhoods' with less access to such facilities (Shabak *et al.*, 2015, Nasution and Zahrah, 2015). According to World Health Organization, the living conditions in the urban environments are key to well-being and quality of life of its inhabitants. The lack and poor quality open space in urban neighbourhoods constitutes a serious restriction for the well-being of the inhabitants. Likewise, as it does not support developing healthy life-styles, like spending time outdoors, walking and playing. Spending time outdoors reduces the exposure to indoor air, which is often polluted by the use of different artificial materials. Thus, having direct contact with nature tends to be a major challenge for children growing up in cities due to encroachment to the public open space. These together with vague standards and guidelines for open space, resulted in low quality of new residential developments. Inadequately,

communal open spaces to accommodate the outdoor activities in cities of Nigeria. However, findings from the national housing inquiry in Slovenia from 2005 shows that lack of safe space for children's playing and recreation are the second most important concern regarding living environment (after air pollution) (Lestan, Eržen and Golobič, 2014).

Essentially in Nigeria, every child associate with their socio-curative surrounding and its open space. The space influences children's behaviour, knowledge, attitudes, intelligence and perception. Consequently, informal learning takes place in play-fields and yards. These are the socio-physical environment where children meet and exchange ideas at the informal levels. Existing literature revealed that socio-physical space is fundamental for the developments and modifications of the children's social behaviour. Interestingly, environmental and psychological theories suggest that socio-environmental contexts determine and shape children's attitude and behaviour. Also, literature showed that the planning and design of outdoor environment should be done to create enabling environment capable of developing positive social behaviour in children. These processes are fundamental in aiding attachments of children to a place. Thus, this paper intends to review existing

literature on the relationship between public open space and children's attachment in Nigeria. The key research questions that would guide this paper are: (i) what are the patterns of children's behaviour in public open space in Nigeria? (ii) What are the concept of public open spaces in Nigeria? (iii) What are the relationships between children's behaviour and their attachment to open space in Nigeria? This paper is anchored on social learning theory (Bandura, 1991) and attachment theory by (Bretherton, 1992).

Conceptualizing public open space

The concept of public space was, first used in 1833 by committee of public trail in London (Nochian et al., 2015). Open space include public parks, recreational ground, underdeveloped natural landscape, neighbourhood spaces between buildings and urban space established for public use and access (Maruani and Amit-Cohen, 2007). It refers to the part of the three-dimensional void that is not occupied by man-made features constructed for spatial enclosure (Alubo, 2011). Public open space could also mean open spaces or outdoor areas that allow for spontaneous socio-economic, political, religious and cultural activities (Altman and Low, 1992). For example Eagle square, Millenium park and Durban neighbourhood park in Abuja, Nigeria are multi functional space that can be use for children party and visual exploration for many people. In addition, public open space is conceived as a place where members of the community gather and engage in social interactions and communication without any hindrances (Kaplan, Kaplan and Austin, 2008). As social beings that need constant social interactions, public open space fulfils the human needs of the people (Williams and Patterson, 1999). Also, open public place is seen as outdoors that attract people for passive recreations (Nash and Christie, 2003). In residential areas, the open spaces around and between residential buildings are only meant for access and use by the residents (Shabak et al., 2015).

As noted by Nasution and Zahrah, (2015), both physical and non-physical factors determine the success of public open space in terms of the satisfaction of the basic human needs. In addition, the authors stressed further that public open space must have the following qualities. These are: (i) accessibility; (ii) socio-cultural activities; (iii) comfortability; (iv) good images; and (v) sociability.

Jack (2010) opined that public open space can be said to have been successful if it accommodate various socio-cultural, economic and political activities and needs unique to a specific community or group. To Campos (2012), public open space

can be measured in terms of the availability of the recreational facilities rather than social activities within it. The value and usability of open space is determined by its architectural design (Almhafdy et al., 2013). Many studies indicated that development of the sense of attachments to open spaces by their users is greatly predicted by its physical design and its architectural characteristics (Almhafdy et al., 2013) The physical and architectural qualities defined the attachment to the public open spaces. These features are discussed as follows

- a. Site development features included the size of the open space, its density, block arrangements, layouts, ordination and locations;
- b. Architectural design features included styles, designs and quality of the buildings surrounding open spaces, aesthetic features, density, shape, height and volume of these buildings. Materials used for the buildings as well as façade (Zen and Mohamad, 2014).
- c. Natural features such as waterfalls, lagoons, hills or mountains, plains, walking green spaces;
- d. Cultural features such as relics, monuments, statues, fountains, flowers, plants myths, living conditions of the people (Mohammad et al., 2013).
- e. Access-related characteristics, such as traffic situation, are equally vital. Also, traffic-segregation areas would attract children to open spaces;
- f. Facilities such as playgrounds and sports-setting and other basic communities preferred amenities for children are community gathering space, playground, and sports facilities. These facilities must be provided for ensuring the attachment of the children to the place.

Theoretical framework

Attachment theory is one of the dominant theories in developmental psychology. According to this theory, attachment is essential for personal development. The ability of an individual to form emotional and physical attachment with another individuals or places provides sense of security and safety. A psychologist, John Bowlby, introduced and used the term attachment to explain the formation of attachment as well as its importance to social well-being. Mary Ainsworth discovered the existence of attachment behaviour in her study while testing its theoretical relevance. This enabled her to further develop the attachment theory (Quin et.al., 2013). According to environment psychologists, there are three components of place attachment. These are:

(i) cognitive; (ii) affective; and (iii) behavioural components. Cognitive component deals with the beliefs and perceptions about a place. Affective component deals with emotion and feeling about a place. Behavioural component relates to the commitment to a place, and involvement of children to a place could bring about attachment to the place .

Another theory applied in this paper is social learning theory developed by Albert Bandura in 1977. According to this theory, people learn through observation, imitation and modelling from one another. It is referred to as mixture of behaviourist and cognitive learning theories. This is because it encompasses both social and psychological concepts such as attention, memory and motivation. According to Bandura (1977), most human behaviour is learned observationally through modelling. Moreover, in observing others, one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action. Bandura strongly believed in reciprocal determinism. This implies that the world and individual's behaviours are mutually causative in human (Bandura, 1977).

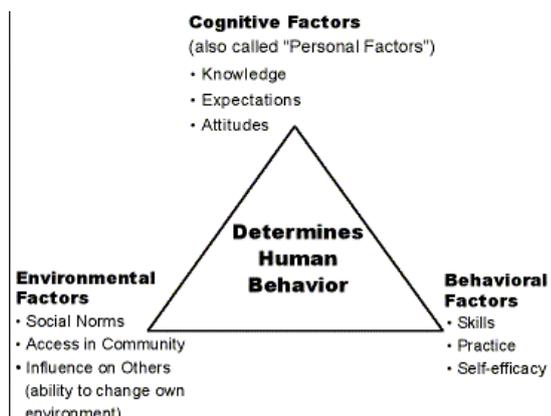


Figure 1. Social Learning Model (Bandura, 1977)

The relevance of these theories to this paper is quite evident, attitude of people about a place or space starts from the young age, it is a process of child's socialization. The experiences of a place, definitions, meanings and interpretations of the place by children, can shape the attitudes of children in a place as well as their attachment. Children are more likely to attach to a place where they experience sense of safety and protection (Zen and Mohamad, 2014). Hence, children are more likely to attach to place that satisfy their basic human needs such as security, social affiliation, express their creativeness and explore their potentials. According to

Ellis (2005), children feel happy and secure in a place where they can easily see their mates and manipulate their surrounding areas. Spencer opined

that places with high qualities and furnished facilities attract children from far and near. According to Shabak *et al.*, (2015), places that allowed children to escape from social pressures where they could express their feeling freely and have a control became their favourite places.

Public open space and children attachment

The development of sense of attachment to a place is influenced by social interactions, activities and behaviours of people within the public space setting (Relph, 1976). The qualities and facilities in an environment determine the attachments and connections of people to the area (Tuan, 1977). Guthey *et al.* (2014) opined that the daily activities of people connected to a place are the major predictor of people's attachment to a place. In addition to this, what people know or read about a place as well their real live experiences determined their senses of place.

Studies revealed that attachments of children to urban place is fundamental for their well-being and sustainability (Nasution and Zahrah, 2015). Children have emotional and cognitive connections and bonding to their accustomed or usual public open spaces. Accustomed and conducive public open space is crucial in defining and developing self-identity as well as creating and ensuring sense of security and stability for the children (Spencer, 2005). Similarly, attachment to a place generate social bonding and rootedness which is vital for healthy development of children (Shabak *et al.*, 2015). Therefore, secured public open spaces for the children, psychological disturbances may result. Children may become traumatized for lack of place to display and express their sociability and psycho-social instincts. Green, (2005) argued that accessible and sociable public open spaces are essential for building and maintaining successful relationship and social interactions among children in urban areas. In residential areas, open public spaces are required for nurturing children attachment to their physical-environment. This is because it aids the development of the sense of self-identity as well as security.

In Nigeria, separation of children from the natural and physical environment has influences on their cognitive and physical developments. Observationally, most children in Nigeria have been isolated from their physical environment as a result of urban growth and development. Many open public spaces have been converted to either industrial or residential areas in the country. Given the rates of urban development in most Nigerian cities, providing good and conducive open spaces for children become problematic for both architects

and urban residential designers (Agboola, Rasidi and Said, 2017) which has resulted in a decline the expected values initiated in both the social, physical and psychological developments. The role of playground in the development of adolescent's health, moral and social standard has attracted lower interest in the recent time. The adolescent sense of community relates to a positive experience in the community open space setting such as playground and social well-being with their peers in general. Over time, little efforts have been initiated by the researchers towards these phenomena. This current study fills the gap by examining the adolescent's sense of community through a quantitative survey via appraisal of the quality of community playground, emotional connection and effects of their participation in playground activities on ameliorating the delinquents' behavior and social vices. Completed survey questionnaires retrieved from a

total number of 69 purposive respondents who are adolescents from three towns and analyzed through relative importance index (RII). As opined by Spencer (2005), considering the importance of open public spaces to the children's social well-being, researchers have called for the consideration and inclusion of children's environmental design in urban planning. Children want a place surrounded by nature such as opened grass to run around, play football, ride bicycles and other physical activities. Children need a place to demonstrate their creativeness and explore their potentials. They appreciate a place where they can create their own play space. They want place where they can fulfil their physical and cognitive needs. As noted by Groves and McNish (2008), children need natural space which has natural features that can increase their physical and creative play such as mud, grass, and trees.

Table 1. Typical public open space in some selected cities in Nigeria.

Parameters of studies	AREA 1 Durbar neighbourhood park Abuja, Nigeria.	AREA 2 Neighbourhood open space, Niger road Ilorin, Nigeria.	AREA 3 Neighbourhood open space at Mushin Lagos, Nigeria.
Built form of public space (google earth 2018)			
Typology	Modern open space/park	Traditional open space	Traditional open space
Space and Characters	Designate park, with proper planning for child play.	Untarred road/pathway within the local community.	Community pocket space for football field and sand castle building for children.
Operation time	10am -6pm	No time restriction	No time restriction
Children age	2-15years	2-18 years	2-18years
Children activities and behavioural pattern			
Types of play	Formal play: active free play	Informal play creative/self-initiative	Informal play; collective play
Facilities	Designed children park, with all kind of toys for children delight. The park has a restaurant, swimming pool, toilets, see-saw, bouncing castle, slides and face painting stand.	Children adapt to pedestrians' pathways, walk-ways, and untarred road within the community. This space has no specific facilities available for their play.	Unstructured open space, trees, mud and grass are the only significant things on the space.

<p>Summary of findings regarding children’s behaviour and place attachment to public open spaces in cities of Nigeria. (Based on observation of the author as no empirical data collected)</p>	<ul style="list-style-type: none"> • The children in this open space are privileged. • Their activities are restricted to the design and facilities in the open space provided. • The children need to pay fee for access to the space. 	<ul style="list-style-type: none"> • Children create their play area on the pathway. • Adaptive use of their open space therefore learnt to be creative. • No designated area as open space, hence it has free access. 	<ul style="list-style-type: none"> • The children have a designated public open space for play, which are not structured. • Any activities can take place in space. • It is free for everyone within the neighbourhood.
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DISCUSSION

Public open space of areas 1, 2 and 3 in Table 1, indicate typical public open spaces and children’s activities in Nigeria cities . Shabak *et al.*, (2015), recommend that urban designers should be mindful of natural features of the urban areas because they are vital in the construction of the sense of place as well as the attachment to the place by the children. Area 1 consisted, many natural greeneries that made the space interesting and child friendly. Meanwhile, the other two areas lacked such natural scenery. Majority of the public open spaces in Nigerian cities lack the natural vibe which may contribute to progressive behaviour and attachment of children. Most of the reviewed papers emphasized the need for public policy on issue of public open spaces. It also include child-friendly policies with security and safety as one of the major factors. Illustration in Table 1 shows three examples of modern (Area1) and traditional (Area 2 and 3) public open space for children play. The children in the modern space were engaged in structured and formal play while the children activities in the traditional public open spaces has natural elements. Thus, mud, sand and even household-used items like tyre to create their play enviroment. Therefore, the children in the traditional space are involve in creative, loose and free play that improve motor skills. It equally encourage better cognition as emphasized Fjortoft (2001).

Similarly, children behaviour are mostly influence by their attachment to a particular public open space in Nigeria cities. However, Bandura’s social learning theory did not include attachment which is a major interface in children behaviour in public open space.

Meanwhile, base on the theory of attachment and Bandura’s social learning theory, this study comes up with a relationship diagram between the two theories that reinforced childern attachment in public open space in Nigeria cities. The space attachment influence their behaviour and cognition which is the main themes of the two theories as illustrated in Figure 2.

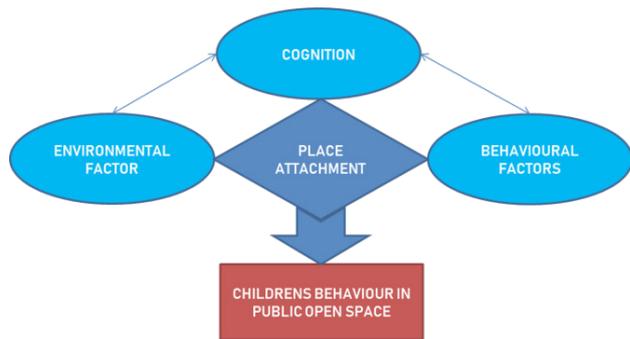


Figure 2. Relationship Diagram of Social Learning And Attachment Theories

Furthermore, security threat has been a major factor limiting children to indoor space, It also impede on the child’s confidence when such child is exposed to public open space.

CONCLUSION

The review indicated that spaces and places are fundamental factors in determining sense of attachments. It shows that people attach different values to places and spaces, which is of no exception to children’s sense of attachment and their behavioural patterns. The three types of spaces examined are common in Nigeria cities and as indicated informal learning takes place within their peers. It has a major influence on the children independent behaviour and cognition. Area 1 can be classified as a privately owned public open space, not free for everybody. Meanwhile, open spaces in area 2 and 3 as shown in table 1 are free for all. Therefore, sustainability of traditional open space would be remedy to meet the sustainable development goal 11. It also emphasised safe, accessible and resilient public open space for all in the future.

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