

## **The Role Of Public Park Design In Physical Activity Promotion (A case study of Al-Azhar Park )**

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### **Abstract:**

Physical activity is essential for public health. It can prevent premature death and a number of diseases, e.g. cardiovascular diseases and type II diabetes. Physical activity also boosts our mental health and the sense of well-being. Parks can be an important, low-cost neighborhood resource to increase physical activity , reduce overweight and obesity, provide psychological, social, and physical health benefits for users, and can facilitate community building. Literature indicates two main factors for the shift of people towards sedentary lifestyle: The personal factors related mainly to gender, race, age, ethnicity, socioeconomic status and religion and need a behavioural change and factors arising from the urban design of neighbourhoods/communities and cities [1]–[3]. All in all, beautiful, exciting and safe environments encourage movement, and hence, the design of the urban environment is essential for citizen’s level of physical activity. A growing part of the population choose to live in the city, and thus, city planning plays an increasingly important role for general public health. Communities may consider increasing park maintenance and addressing attractiveness in existing parks as a relatively low-cost environmental strategy to encourage park use, increase physical activity, and reduce the burden of obesity, especially among people in low-income communities.

Al-Azhar Park is one of the foremost public parks in Egypt, found in Cairo City, and it is recorded as one of the world's sixty incredible open parks by the Public Spaces Venture. The Historic Cities Support Program made it with the help of The Aga Khan Trust for Culture. Once a rundown region in Cairo, it has undergone a miraculous change and is a popular tourist destination in Egypt. The Park is an awesome place to relax, learn about history, and enjoy the beauty of nature. Al Azhar Park is self-sustainable and a driver and catalyst for a whole range of associated urban regeneration projects in its surroundings. It is a model of development and this is replicable in other historic cities The aim of the current research is to investigate the parameters that should be taken in account in the planning and design of open parks within neighbourhoods/communities in order to enhance and ameliorate the quality of life of people in the community. Due to time

and scope limitations, the research investigates the features and characteristics that a park must provide in order to encourage physical activity for its users. The purpose of the study is to bring social interests together, contribute to the protection of the country's nature and environment, create and preserve valuable buildings and involve the public in the planning process. In conclusion, as conditions and perceptions of parks may be more important than the presence or absence of these resources in influencing physical activity, improving quality of the parks may be key to increasing usage and promoting physical activity within various communities

**(Keywords: health, public health, well-being, physical activity, leisure-time physical activity, urban planning, active living behaviour, open parks)**

### **The study purpose:**

The purpose of this publication is to share knowledge on how planning, design, management and maintenance of the urban environment can enhance physical activity

### **Study objectives:**

- Identify the main characteristics of park design and layout that encourage people to visit parks and promote physical activity
- Ensure that urban design of public/communal spaces and open parks can promote public health and an active lifestyle for people

### **Study Hypothesis:**

The attractive parks with less disorder and more activity settings will have a greater number of users and users participating in more physical activity to promote health.

### **Importance of the study:**

Successful parks inspire residents, provide joy to viewers, and foster civil society in the important realm of leisure and connection to nature and one's environment. They become the settings for families to come together

### **Introduction:**

According to the World Health Organization [6], health is “a state of complete physical, mental and social well-being and not merely the absence of disease or

infirmity”(31). Physical Activity (PA) and health related to the design and building of parks are directly linked to economic performance and economic indicators that increase with closer proximity to green and open spaces and decreasing poverty levels resulting in more resilient and socially cohesive communities across many cultures and mentalities [5]. WHO defines PA as an important foundation of health throughout life not only regarding NCDs, but it also has positive effects on mental health by reducing stress reactions, such as anxiety , depression, delaying the effects of Alzheimer’s disease and dementia among older people through enhancing social participation(13). Furthermore, PA is fundamental to achieving energy balance and weight control [32]. Local parks, offer the opportunity for physical activity at low or no cost [1], this means that park environmental characteristics such as features, access, condition, aesthetics, safety and policies are most related to physical activity [1]. Recommended guidelines for physical activity encompass four components: frequency, time or duration, type and intensity of physical activity [28]. There are different forms, kinds and levels of intensity of PA, these include fundamental movement skills, active play, leisure activities, such as walking, dancing, hiking and biking, sports and structured exercise [6]. Sallis et al, classifies physical activity into four domains of life: leisure/recreation/exercise, occupation/school, transportation, and household that depend upon different built environment features and policies. WHO recommends that adults and older people undertake at least 150 minutes of moderate-intensity aerobic physical activity each week, while children and young people should accumulate at least 60 minutes of moderate to vigorous-intensity physical activity every day[29].Built environments are all places built or designed by humans, including buildings, grounds around buildings, community facilities, transportation infrastructure, parks and trails [9]. Physical activity can be encouraged by designing spaces and streets that allow walking, cycling, and other forms of active transportation [4] and by creating facilities such as trails, swimming pools, parks, courts, greenways, soccer fields, picnic areas, open spaces and playgrounds [1], [9]. The degree of accessibility designed in the built environment can also encourage persons with disabilities to be physically active and to be socially integrated into their community [12]. Pate et al. indicates that the environment often presents important barriers to participation in physical activity, including a lack of bicycle trails and walking paths away from traffic, inclement weather, and unsafe neighbourhoods(14). Other studies have consistently shown an association

between a deteriorated physical environment and higher rates of crime, making neighbourhoods less safe for walking and in some cases resulting in greater social isolation [13]. Research on the relationship between the built environment and health has largely focused on housing, transportation, neighbourhood characteristics and park design [12].

### **PARKS AND PUBLIC HEALTH:**

Local parks are close-to-home facilities and services available at low or no cost. According to studies [19], local parks and organized recreation programs and facilities are appreciated by people and their communities due to the following benefits:

- Personal benefits, including physiological and mental wellbeing, such as finding a good balance between active and sedentary past times that may be addressed by exercise on one hand and relaxation and leisure in the context of natural environments on the other (31).

- Social benefits, which look not at the individual but rather as the collective and enhance community resilience and acceptance by providing places for the community to cohabit and interact and is characterized by diverse locales for a diverse community. They also contribute to improving the overall health and wellness of the community by promoting social equity by acting as social levellers through the programs that may be offered and bring together very diverse groups of people activity[23].

- Economic benefits: Several studies pointed out that proximity to a park or reservoir – that is green and blue infrastructures, whether natural or man-made – has been shown to have a positive correlation to the real estate value of adjacent properties like availability, bringing business activity to community that may enhance commercial activities [1], [22] .

- Cultural benefits, the parks are considered not only venues for relaxation, leisure or physical activity but also as spaces for education and for the production of culture by hosting a diverse range of activities that transform them to outdoor classrooms such as Orman Garden in Cairo(25).

-Psychological health benefits: the human spirit may be uplifted at the same time that one benefits from physical activity if this happens in a natural setting conducive to the amelioration of the human psyche, emotions and mental stability. The simple act of looking out a window as such places as community parks may be an uplifting experience. Further studies found that park users were in a better mood and reported lower levels of anxiety, stress and sadness after visiting parks [31], [5], [30].

Environmental benefits attributed to the increased presence of trees in parks which combat the negative consequences of emission resulting from automobile exhaust fumes in urban areas, reducing air pollution , providing shading and cooling [1], [24] and shaping the microclimate.

Moreover, the National Recreation and Park Association [16] share in the physical development of youths and young adults and their mental development and physical wellbeing as well (Figure 1)

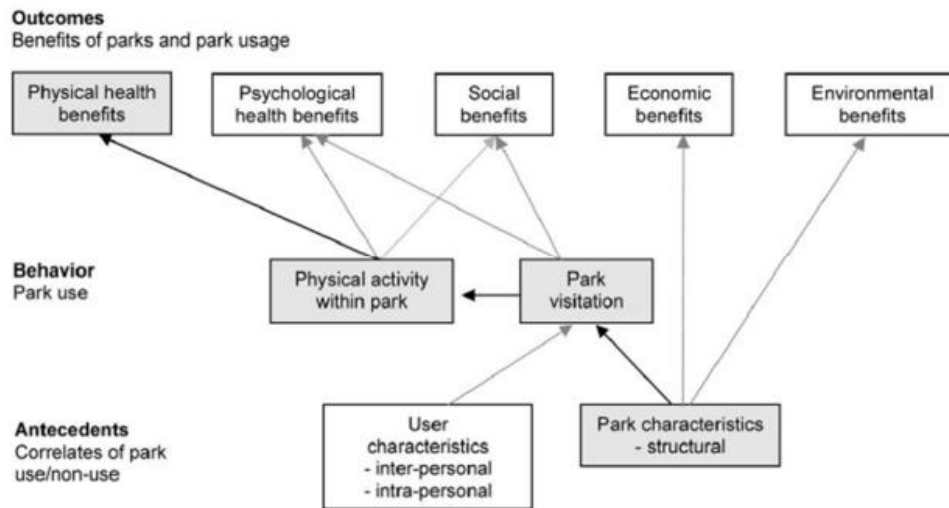


Figure 1: Relationship between park and physical activity

Source: CHLOE KADI & ANDREAS SAVVIDES, ” MOBILITY FOR HEALTH: DESIGNING OPEN PARKS TO ENCOURAGE PHYSICAL ACTIVITY” WIT Transactions on Ecology and the Environment, Vol 249, © 2020 WIT Press, The Sustainable City XIV(9)

**PARK CHARACTERISTICS AND RELATIONSHIP TO PHYSICAL ACTIVITY:**

With industrialization in the 19th century many of these nations and cities saw the first large scale appearance of organized open spaces and parks – some of them themed – with a view to providing open air spaces for congregations and common events thereby providing a healthier outlook from the severely dense and cramped conditions that prevailed at their work places and their places of habitation (30). These new spaces provided a proximity to nature and the natural. The trees were seen as filtering the polluted air and the healthier cleaner surroundings were seen as countering what was perceived as the moral decay that characterized inner cities [17]. In recent times parks are seen as places of leisure, recreation and learning, lending themselves to a variety of activities such as sports and markets and outdoors concerts and a variety of other cultural and commercial activities that appeal to a diverse community regardless of age, gender, condition of personal mobility or ethnic backgrounds as stated by Healthy People 2020 and the Institute of Medicine and cited accordingly by Sallis (25) and Bull et al- [4]. In fact there are significant variations in park and outdoor recreation behaviors based on a number of demographic or social characteristics such as age, gender, race/ethnicity, socioeconomic status physical, cognitive or sensory ability and residential location [19].

### **Case Study:**

Over the years, a number of books and other materials have been published focusing on how design and planning of the urban environment can support people's physical activity. The Aga Khan Trust for Culture sponsored a conference in Egypt in 1984. It was called "The Expanding Metropolis: Coping with the Urban Growth of Cairo." There was an urgent need for more green space in the city(2). One study had found that the amount of green space per inhabitant in Cairo, the center of the largest metropolitan area in Africa and the Middle East, was the size of a single footprint. At the conference, the Aga Khan announced his intention to finance and create a park in the city. The task ahead was formidable. The available space was a thirty-hectare site in the Islamic heart of Cairo(3). It was surrounded from the north and west by poor, densely populated neighborhoods dating from medieval times and noted for their mosques and other architectural treasures, and from the east the City of the Dead, a sprawling fifteenth century cemetery. The site had been a rubbish dump since the late Mamluk period; indeed, over hundreds of years, the accumulation of garbage and building debris was nearly forty meters deep in some areas. After six years of work, Al-Azhar Park

opened in 2004 to international as well as local acclaim. The initiative includes not only a vast green space for the people of Cairo, but the restoration of Islamic historical sites, revival of ancient crafts and revitalization of adjacent neighborhoods. “The result is an urban vision that is startling in its scope(7). The context served as a challenge to revitalize the heritage of Islamic Cairo and use it as a catalyst for cultural, social and economic development. In other words, it was clear that the construction of the park should act as a stimulus for the rehabilitation of the Al-Darb Al-Ahmar neighboring district and its 200,000 residents. The Aga Khan Trust for Culture (AKTC) initiated projects that would uplift the living conditions in the vicinity of the park(19). However, Egypt’s notion of environmental improvement was new, untested and limited to planting trees in a few streets. Other challenges included the lack of environmental awareness and understanding of the profession of landscape architecture in Egypt, even today, there are no Egyptian academic institutions offering a degree in landscape architecture. The building industry does not supply quality products for use in outdoor space. In addition, there are no specialized contractors that are qualified to execute proper landscape works(19).

### **Design and Construction**

The design of Al-Azhar Park was initiated in 1998. To form the main guiding principles for the park design, AKTC worked with several design firms including Sasaki Associates of Boston, Sites International was appointed as the lead consultant to take on the central organizing role in the development of the final master plan and landscape architecture design of the park(3). There were several design and construction challenges: the historical context of the old city and Islamic monuments; the serious geotechnical limitations of a soil unsuitable for planting or construction; the existence of three water tanks on site supplying water to Cairo; and the lack of local commercial plant materials and landscape products. Recognizing these challenges, our vision was to develop a paradigm shift in public space design and education in Egypt. The first visit to the site was a nightmare; hills of garbage and construction debris were all over the site. Soil would reach up to your knees as you walked. The historical wall to the west was buried under the garbage, and the scene of three large concrete water tanks, each eighty meters wide, was depressing. There were no signs of life on site; no plants and no birds. During the earthwork of the site’s western slope descending toward the Al-Darb Al-Ahmar district, crews uncovered the Ayyubid wall built by Saladin in the twelfth century to defend the city from the Crusaders. The 1,500-meter wall represented the new urban edge for the project after being restored from rubble.

The existence of the wall fostered the notion of utilizing the park as a panoramic platform from which to view the heritage of old Cairo, and to create a historic wall promenade along the park's perimeter. The geotechnical survey revealed a soil profile of thirty to forty meters of garbage, construction debris and highly toxic/salty soils unsuitable for construction or planting. Over 765,000 cubic meters of soil were removed and 160,000 cubic meters were used as a fill elsewhere on the site. A further 605,000 cubic meters were geotechnically treated and mixed with 60,000 cubic meters of special sand and topsoil. Soil replacement created a layer of good soil ranging from a half to two meters deep. Roads and paths were built on structural fill ranging in depth from one to two meters(20).

Earlier in the planning stages of the project, the General Organization for Greater Cairo Water Supply announced its intention to install three underground water reservoirs on site(7). Sites International developed an indigenous and adaptive plant list for the park, detailing species and required sizes at installation. More than 650 species were planted in Al-Azhar Park(3). Palms, trees, shrubs, citrus groves and ground covers play a functional, visual, aesthetic and environmental role. For example, the palms contribute in defining the linear space and orienting pedestrians toward the impressive view of the Citadel; *Cassia nodosa* trees with their flowering canopies were used to mark the major walkway to the Citadel View restaurant. Greening the site posed some unique challenges as chemical property tests confirmed low levels of nutrients, high levels of alkalinity, very high levels of salinity and Ca CO<sub>3</sub> content. Thus, the need for appropriate soil conditioning was a major issue for some plants to survive. Drought tolerance, soil stabilization and erosion prevention were key plant selection criteria, and complete subsurface drainage was needed to protect the historic wall from any runoff. Almost everything for the park—furniture, lighting, bollards, seats, trash receptacles, drinking fountains, playground equipment, pergolas—had to be custom designed by the landscape architect and manufactured by local artisans. In the process, artisans reclaimed some old techniques in stone work that had almost died out. The design intent was to provide green open space for the residents of the adjacent districts and the greater Cairo population, and to utilize local artisans and laborers in the construction of the park as an effort to improve their economic status. The design theme was derived from the contextual historical Islamic heritage of old Cairo, a distinctive interpretation of the Islamic garden design criteria. The design was equally keen to protect and incorporate the historic wall into the park(21). The main pedestrian spine is the key feature of the park, running north-south. It is characterized by sophisticated geometric pavement patterns, accentuated by various water features; fountain bowls, and narrow water runnels. The axial boulevard also incorporated rows of palms, aromatic plants and shade trees. On



both sides of the main spine are secondary walkways with secluded sitting areas as well as sunken gardens and citrus orchards. The series of geometric, sequential gardens blend meaningfully with the curvilinear and rolling topography of the site, creating an oasis-like feeling of freshness and greenery. Since the planning theme of the park was derived from the heritage of old Cairo, the main spine is directed to a view of Cairo’s Citadel and Mohammed Ali Mosque(21). To further integrate the context, original gates of the Ayyubid wall served as a major entrance to the park from the Al-Darb Al-Ahmar district. AKTC created a local Egyptian company, Aga Khan Cultural Service of Egypt, to maintain and operate the park, the idea being that the park be economically sustainable. Furthermore, AKTC aimed to implement the Islamic endowment system, using income to sustain the running of public facilities, thus, income generated from tickets, parking and restaurants in the park is used in maintaining the facility and helps support urban rehabilitation projects in the adjacent neighborhood(19). A large staff was hired including personnel for security, gardening, irrigation, fountains and food outlets. Al-Darb Al-Ahmar residents were given priority in hiring (2) (figure,2).



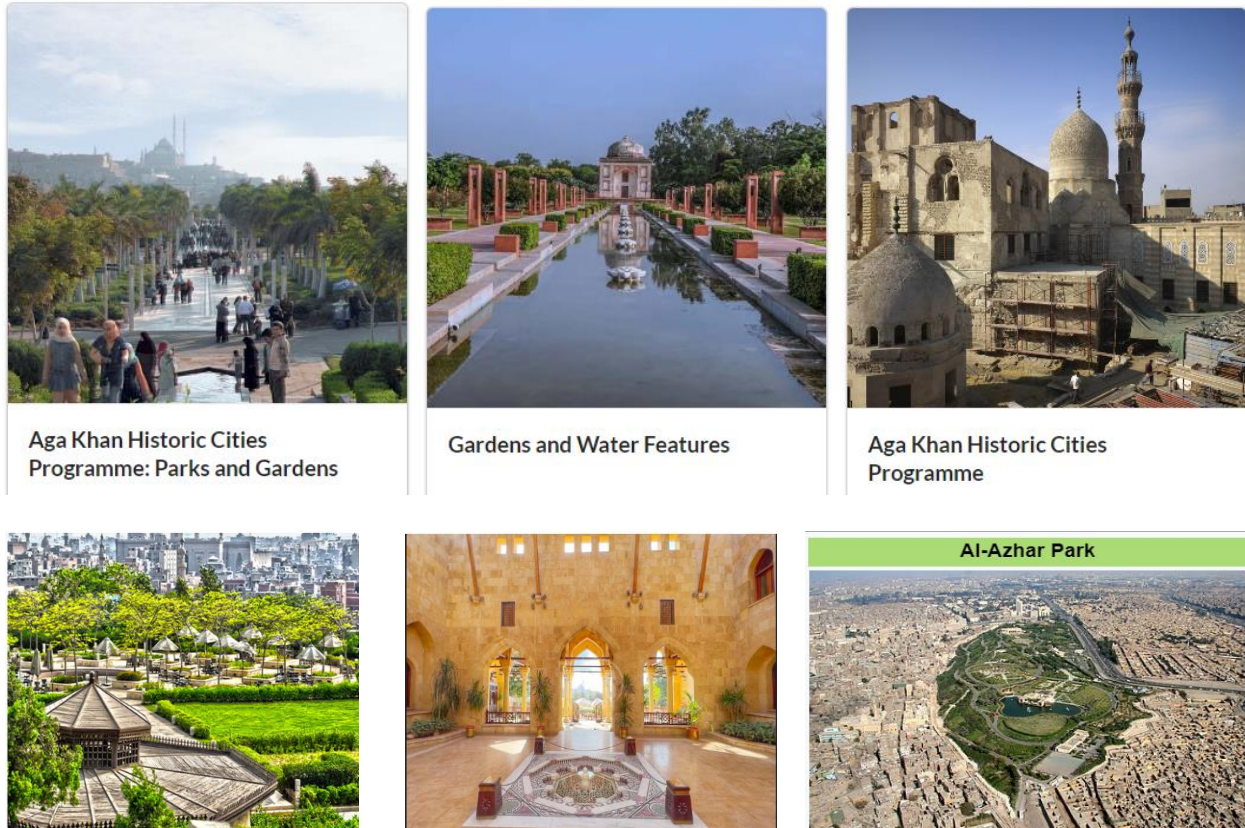
**Ayyubid Historic Wall Conservation**  
Cairo, Egypt



**Hilltop Restaurant**  
Cairo, Egypt



**Lakeside Café**  
Cairo, Egypt



**Figure 2:Al Azhar Park Pictures (Researcher)**

### **Achieving Harmony**

The success of the Al-Azhar Park is the result of the environmental revitalization of the land in addition to the rehabilitation of the adjacent district. The project is a physical translation of cultural, social and economic development. The park is considered an urban intervention that successfully addressed the context of the Al-Darb Al-Ahmar district. It saved the surrounding urban fabric by giving it a future and creating jobs for residents of the neighboring district (2). Furthermore, the surrounding cultural monuments and homes were renovated with the aim of improving the overall urban fabric. At the micro level, the community prioritized a list for refining the district; training programs were developed, houses were rehabilitated, micro projects were financed (3). At the macro level, Al-Azhar Park is viewed as a green oasis serving the Al-Darb Al-Ahmar district, old Cairo's historic sites and indeed the city at large. Despite the numerous green areas of the park, it conserves water resources. A water irrigation system optimizes the use of water and arid plants that consume far less water than lawn areas were used. The park is a recreational space for the community and the Cairene society to gather

and perform activities in a welcoming green space (7). It has become a destination for tourists and an educational botanical garden visited by students from planning, architecture and agriculture schools. It provides a wide range of activities in its playgrounds, gardens, walkways, restaurants and amphitheater. The park has proved to be a success and a source of pride for Egyptians.

Overall, the architectural style of Al-Azhar Park reflects the Islamic influences in Cairo. The Park is planned in a way that is both aesthetically pleasing and functional, making it a popular spot for local people and visitors alike (18).

The Park is a great place for tourists to visit for several reasons (21):

- First, the Park is a great example of sustainable development. The Park was built on top of a landfill and has been designed to use recycled water and solar power.
- Second, the Park is great for learning about Egyptian culture and history. Several museums and cultural centers are located in the Park, and the Park hosts several events throughout the year .
- Third, the Park is a great place to relax and enjoy the outdoors.
- The Park has several gardens and is located near other important Cairo landmarks.
- Finally, the Park is home to several attractions, making it a great place to spend a day (21).

### **There are several activities available at the Park, including:**

- Walking and hiking:** Several trails are available for walking and hiking. The trails offer great views of the Park and the city.
- Bird watching:** The Park is home to several birds, including ducks, egrets, small falcons. Bird enthusiasts can enjoy watching the birds in their natural habitat.
- Picnicking:** There are several picnic areas available in the Park. Picnickers can enjoy the beautiful scenery while they eat their lunch.
- Boat rides:** Boat rides are available on the lake. Visitors can enjoy the views of the Park from the water.
- Visiting the Al-Azhar Mosque:** The Al-Azhar Mosque is located near the Park. The mosque is open to visitors and offers a place to pray and learn about Islam (21).

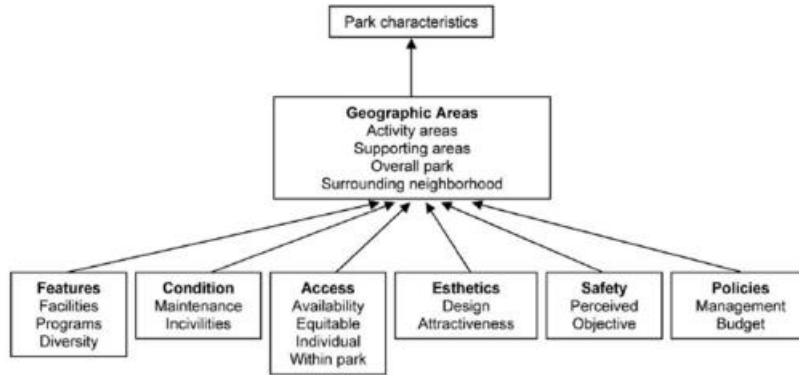
### **Methods for assessing physical activity in Al Azhar Park:**

To measure park use and park-based physical activity, the System for Observing Play and Recreation in Communities (SOPARC) is a validated direct

observation tool for assessing park and recreation areas, including park users' physical activity levels, gender, activity modes/types, and estimated age ethnicity groupings (McKenzie and Cohen, 2006) [18]. Using this tool, trained observers conducted periodic scans, a visual sweep from left to right, of target areas and recorded gender, age (youth versus adult), and activity level of each observed individual. Physical activity level must be collected as sedentary (lying down, sitting, or standing in place), walking (casual pace), or vigorous (greater than an ordinary walk) [18]. Scans must be conducted six times per day (two morning, two noon, and two evening hours) over two weekdays and one weekend day. To capture park usage, optimum observation times must be determined through consultation with neighborhood coalition members. Observations were summed to form park aggregates

### **Results and discussion:**

There is a vast amount of research studying the role of urban design towards a more sedentary lifestyle, which is associated with lower levels of physical activity. Previous studies have shown that physical activity (PA) can reduce the probability of earlier mortality by decreasing such diseases as heart disease, diabetes, high blood pressure, cancer, depression, anxiety, and obesity while building up the body and ensuring the health of human bone structure, skeletal joints and muscular disposition [33]. It is also widely recognized that increasing the levels of physical activity to 30 minutes a day may positively influence the health of people, especially in relation to non-communicable diseases (physical and mental) associated with insufficient activity levels, which are identified as a major reason for premature deaths(31,32). Research on the connections between the built environment and health has largely focused on housing, transportation, and neighbourhood characteristics. The current study was focused on the main characteristics of park design and layout which can promote physical activity and public health (figure 3).



**Figure 3: Environmental classification of park attributes**

**Source:**CHLOE KADI & ANDREAS SAVVIDES,” MOBILITY FOR HEALTH: DESIGNING OPEN PARKS TO ENCOURAGE PHYSICAL ACTIVITY” WIT Transactions on Ecology and the Environment, Vol 249, © 2020 WIT Press, The Sustainable City XIV

Al-Azhar Park is one of the most beautiful public parks in Egypt that is located in Cairo City and it is even listed as one of the world’s sixty great public parks by the Public Spaces Project. Although it was once a neglected expanse in Cairo, it has become a miraculous transformation and started to be a very famous tourist destination in Egypt(7). Al-Azhar Park includes more than two million trees and plants. It has become now a very amazing site with stunning views, has the best-shaded walk-ways, and it also provides a majestic play area for children to give the best chance for all family members to enjoy their vacations and have a wonderful time. While being in Al-Azhar Park, you will be able to enjoy the best walk tour in Old Cairo, enjoy its magnificent attractions and visit the hypnotic Khan El-Khalili Bazaar in addition to taking the best opportunity to attend one of the most terrific traditional Tanoura dancing shows in Wikalet El-Ghouri(18). Inside the Park, there are a couple of small cafés and a wonderful open-air theatre that is called “El-Genaina” plus a wonderful restaurant that is located in the park’s northern section(7). There is also a lakeside café which is located on the other side of the park and it has a really beautiful lake edge setting. Many different types of tourists would enjoy visiting Al-Azhar Park. This Park is a great place to visit for those who enjoy spending time outdoors, as there are a lot of opportunities to do so. There are also several different cultural attractions within the Park, making it a great place for those curious to learn more about Egyptian culture. Another type of tourists who would enjoy visiting Al-Azhar Park is the history buff. This Park is close to several different historical attractions, including the Al-Azhar Mosque and the ancient Salah Aldeen citadel in the neighbourhood. This mosque is one of the oldest in Egypt and is a great place to learn about the country's history and culture. Overall, Al-Azhar Park is a great place to visit for various tourists. Whether you're

a nature lover, a history buff, or just someone who enjoys spending time outdoors, you'll find plenty at this Park, this means that Al-Azhar Park design has succeeded in creating built environment that promote physical and mental wellbeing according to The UN's Sustainability Development Goals (SDG number 11 goal ) (19,29). Moreover It was found that the design intervention changed the characteristics of park users and their activity patterns in Benjakitti Park, a public park in Bangkok, Thailand whereas more children and older adults' visitors were observed in the post-design intervention through the survey questionnaire results that showed one-time park visitation was associated with an increase of five minutes of moderate and vigorous physical activity per week (27). This means that even a small design intervention could change people's behavior towards a healthier and more active lifestyle for different age groups.

### **Recommendation:**

- 1-Design communities that support safe and easy places for people to walk, bike, wheelchair roll, and do other physical activities especially near homes, schools, worksites, and other places where people regularly spend time(11,12).
- 2-Promote equitable park programs and policies that make it safe and easy for residents to be physically active, regardless of their age, race, income, ability, or disability (34).
- 3-Increase access points to recreation areas and green spaces or locate them along public rights of way so they are more accessible to community members.
- 4-Work closely with local planning and transportation departments to build and maintain sidewalks, crosswalks, bike racks, bike paths, and shade trees.
- 5-Work with community partners and municipal departments to increase public access to places to be physically active. These places may include school yards, municipal building grounds, or university pools and training facilities(19)
- 6-Consider closing parks to motor vehicles and opening streets to pedestrians in and around parks.
- 7-Promote equitable open streets and play streets to provide people with more spaces to be active(16).
- 8-Educate people about the benefits of safe physical activity and places to be active.
- 9-Provide information about accessibility for people with mobility or other limitations (34)
- 10-Use traffic calming along routes to parks.
- 11-The size of the park was an important factor for attracting people.
- 12-Well-designed open parks in close distance to homes, which are easily accessible, offer a range of activities and supporting areas for all ages and provide



an overall appealing environment for youth and young adults(3). They provide city dwellers with options that offer them essential physical, mental and social benefits. Moreover, if we now considers the stress that has been placed on communities as a result of the COVID-19 restrictions regarding social distancing, parks may provide a flexible and evocative setting for many cultural and leisure but also commercial and even business-related activities that may occur outdoors. Al-Azhar Park is an awesome place to relax, learn about history, and enjoy the beauty of nature. Al-Azhar Park has succeeded in creating built environment that promote physical and mental wellbeing according to SDG number 11 goal targets that provide access to safe, inclusive and accessible, green and public spaces, protect the world's cultural and natural heritage, reduce the environmental impact of cities (waste management, air quality) and reduce the adverse effects of natural disasters as COVID-19 pandemic (29, 31). Future research may focus on further environmental characteristics for open parks located in countries with hot climates.

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دور تصميم الحدائق العامة في تعزيز النشاط البدني (دراسة حالة حديقة الأزهر)  
الملخص:

النشاط البدني ضروري للصحة العامة. للوقاية من الوفاة المبكرة وعدد من الأمراض، على سبيل المثال. أمراض القلب والأوعية الدموية والسكري من النوع الثاني. يعزز النشاط البدني أيضاً صحتنا العقلية والشعور بالرفاهية. يمكن أن تكون المتنزهات مورداً حياً مهماً ومنخفض التكلفة لزيادة النشاط البدني، وتقليل الوزن الزائد والسمنة، وتوفير فوائد صحية نفسية واجتماعية وجسدية للمستخدمين، ويمكن أن تسهل بناء المجتمع. تشير الأدبيات إلى عاملين رئيسيين لتحويل الناس نحو نمط الحياة المستقر: العوامل الشخصية المتعلقة بشكل أساسي بالجنس والعرق والعمر والانتماء العرقي والحالة الاجتماعية والاقتصادية والدين وتحتاج إلى تغيير سلوكي وعوامل ناشئة عن التصميم الحضري للأحياء/المجتمعات والمدن. [1]–[3]. وبشكل عام، فإن البيئات الجميلة والمثيرة والأمنة تشجع على الحركة، وبالتالي فإن تصميم البيئة الحضرية أمر ضروري لمستوى النشاط البدني للمواطن. يختار جزء متزايد من السكان العيش في المدينة، وبالتالي، يلعب تخطيط المدن دوراً متزايد الأهمية للصحة العامة. قد تفكر المجتمعات في زيادة صيانة المتنزهات ومعالجة الجاذبية في المتنزهات القائمة كاستراتيجية بيئية منخفضة التكلفة نسبياً لتشجيع استخدام المتنزهات، وزيادة النشاط البدني، وتقليل عبء السمنة، خاصة بين الأشخاص في المجتمعات ذات الدخل المنخفض. تعد حديقة الأزهر واحدة من أهم الحدائق العامة في مصر، وتقع في مدينة القاهرة، وقد تم تسجيلها كواحدة من

ستين حديقة مفتوحة مذهلة في العالم من قبل Public Spaces Venture. تم تحقيق ذلك من خلال برنامج دعم المدن التاريخية بمساعدة صندوق الأغا خان للثقافة. لقد كانت منطقة متهدمة في القاهرة، وقد شهدت تغييرًا حارقًا وأصبحت مقصدًا سياحيًا شهيرًا في مصر. تعد الحديقة مكانًا رائعًا للاسترخاء والتعرف على التاريخ والاستمتاع بجمال الطبيعة. تعتبر حديقة الأزهر مستدامة ذاتيًا ومحركًا ومحفزًا لمجموعة كاملة من مشاريع التجديد الحضري المرتبطة بها في المناطق المحيطة بها. إنه نموذج للتنمية ويمكن تكراره في مدن تاريخية أخرى الهدف من البحث الحالي هو دراسة المعايير التي ينبغي أخذها بعين الاعتبار عند تخطيط وتصميم الحدائق المفتوحة داخل الأحياء/المجتمعات من أجل تعزيز وتحسين نوعية حياة الناس في المجتمع. نظرًا للقيود الزمنية والنطاق، يبحث البحث في الميزات والخصائص التي يجب أن توفرها الحديقة لتشجيع النشاط البدني لمستخدميها. الغرض من الدراسة هو الجمع بين المصالح الاجتماعية والمساهمة في حماية طبيعة وبيئة البلاد وإنشاء المباني القيمة والحفاظ عليها وإشراك الجمهور في عملية التخطيط. في الختام، بما أن ظروف وتصورات المتنزهات قد تكون أكثر أهمية من وجود أو عدم وجود هذه الموارد في التأثير على النشاط البدني، فإن تحسين جودة المتنزهات قد يكون مفتاحًا لزيادة الاستخدام وتعزيز النشاط البدني داخل المجتمعات المختلفة