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The impact of urban design on mental well-being by integrating green spaces in Doha City, Qatar

Shikha Patel^{1,*}, Nour Jabbour², Deepthi John³, Ahmad M. Ahmad¹, Raffaello Furlan¹, Rashid Al-Matwi¹, Rima J. Isaifan⁴

¹ Department of Architecture and Urban Planning, College of Engineering, Qatar University, P.O. Box 2713, Doha, Qatar

² Ministry of Public Health, P.O. Box 42, Doha, Qatar

³ University College London, M.Arch—National Institute of Technology, Calicut 673601, India

⁴ Division of Sustainable Development, College of Science and Engineering, Hamad Bin Khalifa University, Qatar Foundation, P.O. Box 34110, Doha, Qatar

* Corresponding author: Shikha Patel, shikhamehta9281@gmail.com

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Abstract: The fields of urban design and public health play an important role in the success and failure of the city. Research combining the two fields to improve citizens' lives is rare, particularly in a rapidly developing city like Doha. This study highlights the urban planning efforts of the municipality of Doha city to improve the mental health of its citizens and aims to understand the impact of urban design elements on mental health by analyzing the physical form and characteristics of green urban areas in Doha. The methods employed include an observational study and a structured survey interview, where visitors' responses to selected green urban areas are analyzed. The results show how Doha officials are working to improve the mental health of its citizens by providing accessible, child-friendly, older citizen-friendly, and equitable green urban spaces and suggesting policies that could provide more opportunities for people and the government to provide a healthier environment in Doha. The implications encompass shaping urban design strategies, raising public awareness, enhancing healthcare initiatives, and ultimately emphasizing the positive impact of well-designed green spaces for mental well-being in Doha and other Gulf countries.

Keywords: green spaces; mental health; urban design; Doha; Qatar; accessibility; safety; physical exercise

1. Introduction

Our mental well-being is intricately linked with our environment, knowingly or unknowingly. For example, a study in 2019 revealed that even brief interaction with nature, such as walking or spending time in the garden, profoundly impacts an individual's stress levels (Bratman et al., 2019). Active or not, we constantly interact with green spaces around us (Tannous et al., 2021). Walking to a transit station, meeting friends in the evening, or taking your child to play ball, each activity associates individuals with the public places in their surroundings (Pearson and Craig, 2014). The environment we inhabit influences our mental health. A study by White et al. (2019), found that exposure to green areas enhances cognitive functions and reduces symptoms of anxiety and depression (White et al., 2019). The collaboration of urban designers and psychologists continues to explore the recurring elements, signs, and environments in our surroundings that influence mental health (Furlan and Sinclair, 2021).

This study discusses the significance of well-designed green spaces and their

potential to affect the mental health of citizens. Furthermore, it discusses the initiatives endeavoured by the planning authorities of Doha City, the capital of Qatar, to improve the mental health of its citizens. While highlighting the efforts of Doha city, the study also suggests actions that could be additionally inculcated to better the mental health of citizens. In a rapidly urbanizing world, it is essential to contemplate the association of urban design in cities with the mental well-being of its citizens.

“We shape our buildings, and afterwards, our buildings shape us.” Churchill (1943) said.

1.1. Association of urban design with mental health

One in every eight people worldwide suffers from one or more than one type of mental illness (WHO, 2022). The association of the person’s mental well-being with the surrounding built environment has gained research interest recently, especially since the breakout of COVID-19. The deteriorating mental health of citizens in urban areas has grabbed the attention of urban designers globally (Peen et al., 2010). Research on the mental health of urban areas has focused on demographic and socioeconomic factors, but there is little evidence of the association between the built environment and mental health. A study in Germany found that easy access to green spaces improves sleep and reduces anxiety. The feeling of inclusivity increases confidence in a person, leading to enhanced problem-solving ability (Douglas and Douglas, 2021).

Understanding the impact of green spaces on mental health has made theoretical advancements through a series of research studies. White et al., (2013) found through a survey of ten thousand people in the UK that green spaces reduce mental discomfort and improve mental wellbeing in a socioeconomically diverse region. Furthermore, a study discovered a potential link between the number of trees per kilometer of the street and a drop in the number of antidepressant prescriptions per thousand people (Taylor et al., 2015). The benefits of green spaces include their beneficial effects on stress reduction, enhanced social and cognitive functioning (including for people with attention deficit disorder), decreased rates of depression, including mood symptoms related to dementia, and a decrease in violent crime (Barton and Rogerson, 2017; Völker and Kistemann, 2015). When studying the impact of green spaces on mental health, the focus is on the mediators, namely, accessibility, the feeling of belongingness, safety, public amenities, and the presence of shaded areas.

1.2. Mediators between green urban space and mental health

One of the city’s pressing issues is that mental health is not a priority when designing green spaces (Roe and McCay, 2021; Urban Design Group, 2017); rather, economic/business/entrepreneurship and environmental benefits are more focused. The sense of community is enhanced by devising green spaces that are inclusive to all. Designing for diversely populated urban areas instilling a sense of belongingness and safety is difficult (Little et al., 2021). The solution may lie not in major changes in land use or density of the neighbourhood, but in small urban design elements that engage diverse populations. Accessibility to all, regardless of age, race, gender, and economic status, is an essential spatial mediator. According to a study in the U.S.,

having access to enough green spaces in one’s neighbourhood and within walking distance is crucial for maintaining good mental health (Slater et al., 2020).

A recent study (2021) in India stated that more than fifty percent of women suffer from mental stress due to the lack of public toilets in their cities (Singh, 2021). Public toilets and drinking water comprise the fundamental amenities for green spaces. In times of climate change, robust measures are innovated to maintain the thermal condition of the outdoors. Integrating health strategies into planning, Toronto in Canada implemented natural shading devices to address the issues of skin cancer (due to skin exposure to the sun) and mental stress (Al-Malki et al., 2022; Kapelos and Patterson, 2014). Additionally, providing sufficient space for physical activity through jogging/walking and cycling tracks has promoted city mental wellbeing (Wicks et al., 2022). Thus, these urban design interventions focused on the functionality and efficiency of these mediators can create balanced mental health through urban design.

1.3. Aim and objectives

This research aims to discuss the impact of urban design strategies implemented while developing green spaces on the mental health of citizens of Doha City. The objectives of this study are (1) to examine the spatial urban design measures and initiative; (2) to understand how the physical form and attributes contribute to enhancing mental health; (3) to employ observational study and conduct structured survey interviews to gather insights and perceptions of the residents and (4) provide suggestions and actionable measure for Doha municipality to improve and expand green spaces in Doha giving priority to the mental wellbeing of its residents.

2. Methods

The following research tools were employed for the study, as represented in **Figure 1**:

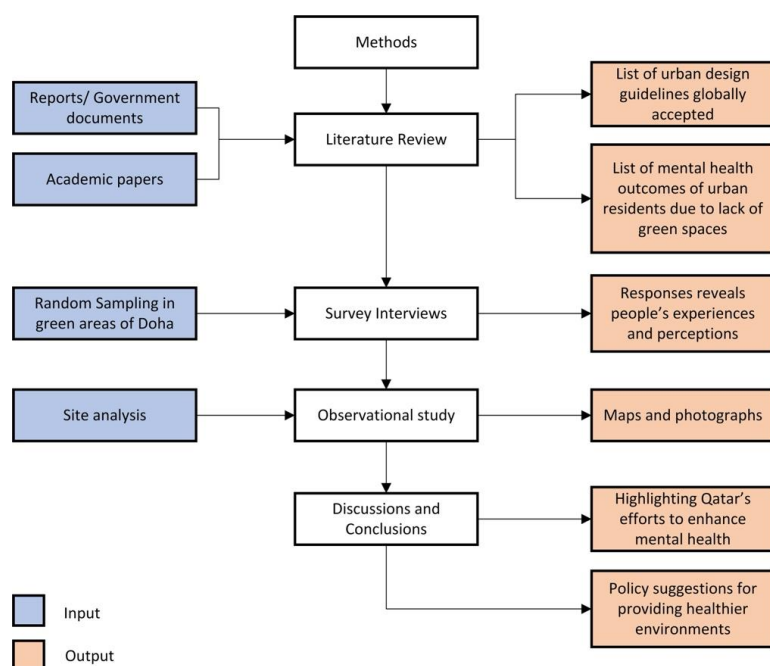


Figure 1. Methods (Source: Authors).



Figure 2. Green areas are highlighted in the Doha city map (Generated in QGIS by authors, using Open Street Map as the base map).

- 1) A content analysis of guidelines for designing green spaces and its related urban design policy based on published government documents has been reviewed, discussing the issue of mental health addressed through urban design.
- 2) The literature review examines the impact of designed green spaces on mental health. Case studies are cited to understand the relationship between them. The takeaway from the literature review enlists a set of design elements globally accepted in response to improving the various mental disorders of the citizens caused by the inefficiency of the built environment.
- 3) Survey interviews were conducted through random sampling in green urban areas in Doha (**Figure 2**). The following key research questions were considered when framing the questions for the survey interview: (1) How does accessibility of green areas impact one's visitation and mental health outcomes? (2) To what extent does the perceived safety of residents visiting green areas impact their

utilisation? (3) How do adequacy and quality of lighting in green areas have subsequent mental health experiences? (4) What benefits do well-designed and well-maintained cycling/ jogging tracks have on mental health? (5) How do the citizens experience the mental health benefits upon providing public amenities? and (6) To what extent does inclusivity contribute to the feeling of belongingness? The responses were noted on a scale of one to three, one being least satisfied and three being most satisfied. Eighty survey interviews were conducted from 1st July 2022 to 30th July 2022 on weekends and weekdays between 5.00 PM and 10.00 PM when more people are expected to use green spaces in summer.

- 4) Photographs were taken during an observational study that validated the data collected from the survey interviews. The green spaces in Doha City observed and studied include neighbourhood parks, regional parks, roadside green pathways, private parks, and green areas around public spaces, such as mosques, museums, malls, stadiums, and schools.

3. Analysis and results

Several globally accepted guidelines and manuals focus on enhancing mental health by improving public green spaces in cities. Some of these include:

- World Health Organization (WHO) guidelines promote the importance of green areas for mental wellbeing through their report published in 2017. The report highlights the importance of a multidisciplinary approach and community engagement in making green spaces more efficient in alleviating mental illnesses, particularly in lower socioeconomic classes (WHO, 2017).
- The Trust for Public Land (TPL) resources provide reports on parks assessing accessibility, equity, and design principles. They often collaborate with governments and local municipalities to implement context-specific and evidence-based interventions (Foderaro and Klein, 2023).
- The National Recreation and Park Association (NRPA) often releases reports related to park design for enhancing mental health. These documents create awareness and evidence of the need to create healthy green spaces in cities (NRPA, 2023).
- The International Federation of Parks and Recreation Administration (IFPRA) also promotes parks and recreation-related guidelines that help enhance the mental wellbeing of individuals, particularly urban residents (Konijnendijk et al., 2013).

Researchers and scientists have also contributed extensively to this field through research and journal articles. Dr Matilda van den Bosch and Dr Terry Hartig have published in-depth studies on the psychological effect of nature exposure (Wood et al., 2017).

The Public Parks Department of the Ministry of Municipality and Environment (MME) is responsible for designing and maintaining green spaces and associated landscaping elements in the streets and public spaces in Doha City. Since the first urban plan of Doha City, green spaces have been given importance. On average, 5.2 hectares of green space are allocated to every thousand people in Doha (Hashem, 2015). Today, more than 148 public parks have green areas or landscapes with

trees/grass (Doha Directory, 2022). Additionally, Qatar achieved the target of planting one million trees in the urban areas supported by various government, semi-government, and private entities (The Peninsula, 2022).

The Public Parks Department has actively designed green spaces that facilitate physical activity, such as jogging/walking tracks, cycling tracks, and open gym equipment. While the aim and vision are set for each green space, urban design elements mediate accessibility, safety, a feeling of belongingness, shaded areas, and public amenities. People’s opinions about green spaces were recorded and scored on a scale of one to five, with one being the least satisfied and five being the most satisfied. The results were classified by user population type: male, female, and adults with children. This classification ensured the study of all opinions of potential users. **Figure 3** shows the responses to the survey. The method of constructing the survey questions involved considering the key research questions designed to capture visitors’ experiences at the green spaces in Doha. For example, the first set of questions gauges the visitor’s sense of belongingness, inclusivity, safety, and peace. The second set of questions aimed to gauge the satisfaction among visitors with the facilities provided such as accessibility, public amenities, shaded areas, and quality of walking tracks. The final set of questions delved into the visitors’ desires and expectations of the green area when they revisited.

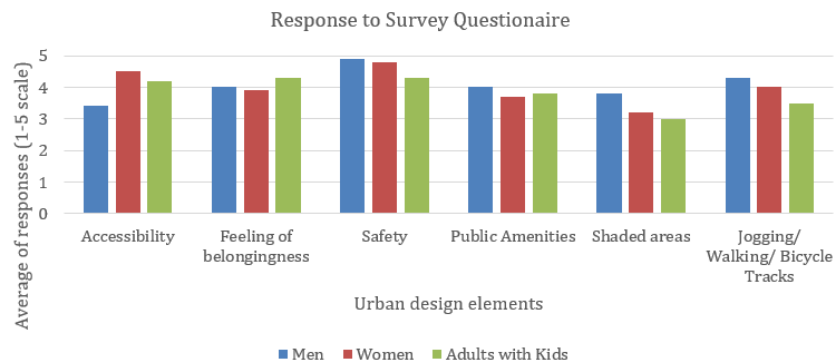


Figure 3. Responses to the survey (Source: Authors).

While men were most dissatisfied with accessibility, women, especially adults with children, were satisfied. The reason may be that some parks are difficult to access for single men, especially on weekends, as many parks enforce policies that allow only families to enter at the weekend. Above all, adults with children felt a sense of belonging the most. The reason may be children’s play areas and semi-open gazebos in various green spaces. Installing surveillance cameras and local parks without clear boundaries has made populations feel safe. The manned security at parks and metro stations, which are easily approachable, may be one of the reasons to feel safe. Public toilets and drinking water facilities are provided in local green spaces, but it was investigated that there is a lack of such facilities in neighbourhood green spaces. What most people complained about was the provision of shaded green areas. This becomes a decisive parameter given Doha city’s hot, arid, and humid climate. Finally, men were most satisfied with the jogging/walking/bicycle tracks. Since the gender-based separation of public space is common culturally in Doha, the lack of use by women and children could be the reason. Culturally, many public spaces are designed

specifically for women or men, creating limited co-usage spaces, potentially contributing to the observed differences in usage patterns between men and women.

3.1. Accessibility

Past studies have stated that accessibility is the primary mediator that evaluates the efficiency of green spaces (AL-Mohannadi et al., 2023; Pedersen et al., 2019; Tannous et al., 2020). A London study found that accessibility to green spaces is proportional to good mental health, and tree density is inversely proportional to antidepressant prescriptions (Taylor et al., 2015). In another study in Mexico, accessibility to green spaces was studied concerning women's health to conclude a notable drop in the depression scale of women who have accessible green spaces within 400 meters of their homes (Bojorquez and Ojeda-Revah, 2018).

The green spaces in Doha city are devised with the preliminary planning policy ensuring accessibility to all; each green space, whether a neighbourhood park, a regional park, or a public sidewalk, must have wheelchair access/access to parents with strollers. While the emphasis has been primarily on physical accessibility, there is a potential to address and acknowledge the needs of residents with non-physical disabilities. **Figure 4** highlights the urban design efforts that ensure green spaces are easily accessible to all residents of Doha city, irrespective of physical ability. However, for future research, it is important to consider a broader spectrum of accessibility to design truly inclusive green spaces.



(A)

(B)

(C)

Figure 4. (A) Parking for specially-abled at Al Muntaza park (B) Wheelchair-friendly swing at 5/6 park (C) Gym equipment for elderly at Al Muntaza park. (Source: Authors).

3.2. Feeling of belongingness

Social connections are integral to good mental health as they offer support by giving a sense of purpose that reduces anxiety, boosts self-esteem, and encourages health-promoting behaviours which are difficult to maintain when psychologically distressed. A feeling of community belongingness is enhanced by providing nature-based social connections, which positively affect mental health. (Furlan et al., 2022; Rugel et al., 2019). Zouras (2020) investigated the relationship between the physical environment and the feeling of belongingness. They concluded that there is a strong connection between individuals who feel lonely and their desire to belong.

Some general urban design concepts incorporated in Doha city are building to a human scale, providing semi-private places for social interaction in green spaces, providing street furniture appropriately, and creating urban spaces to which an individual can connect. Realizing the diversity in the population of Doha city, these urban design elements strengthen a feeling of belongingness. For example, stone benches are a part of green spaces in Doha city, as places for people to rest and interact. The hot-arid climate of Doha city can easily heat up conventional metal benches; hence, as a part of urban design intervention, stone benches are installed, which need a lot of time to heat up. Visual connection across large green spaces and semi-private seating spaces in green areas are the two important strategies that enhance the feeling of belongingness. **Figure 5** shows a park bench made of stone serving the green area and the walking track, a seating arrangement in a park, and gazebos allowing women and children some privacy. Pocket parks within neighbourhoods, which are easy to access on foot by people living nearby, encourage a sense of belongingness by becoming a space where people from the community gather for a small amount of time on a daily/weekly basis.



Figure 5. (A) Stone Benches shaded by a tree in the middle of a walkway at 5/6 park (B) Furniture and lighting in the park for evenings at Al Ruwais Polic Castle park (C) Shaded gazebo in the park, at different parks represent Opportunities to rest in green areas at Al Ghanim Al Qadeem park (Source: Authors).

3.3. Safety

Growing evidence stipulates that crime in neighbourhoods and surroundings directly affects an individual's stress levels. A study (in 2021) collected reports and local examples to review the correlation between safety and mental health and deduced that people with depression and psychological distress identified stronger associations with perceived crime measurement (Baranyi et al., 2021). The perceived lack of safety induces psychological distress and a lack of community engagement. Perceived neighbourhood safety can be a calming influence by assisting in stress reduction. In a study conducted in China, researchers found that a sense of community safety promotes physical exercise and social cohesiveness, which are both beneficial to mental health (Furlan, Al-Mohannadi, et al., 2023; Wang et al., 2019). Lighting is highly indicative of safety. The more the streetlights, the more people perceive it as safe (Hao et al., 2022; Peña-García et al., 2015). Research showed a notable shift in the attitudes and behaviours of pedestrians following a streetlight program, as

individuals revealed an increased willingness to use the street after dark and reported less psychological distress due to fears associated with crime (Painter, 1996). Additionally, a study in Oslo revealed that the higher the tree density, the higher the perception of safety, reiterating that perceived safety is crucial for mental health (Mouratidis, 2019).

The presence of surveillance cameras in green spaces in Doha City is a way to increase a sense of safety and security for individuals. Knowing that cameras are in place to monitor and record any suspicious or criminal activity can help people feel more at ease when using these spaces. Also, well-lit green areas can help deter potential offenders and provide users with a clear line of sight. Additionally, lighting helps reduce stress and anxiety levels for pedestrians, especially those walking alone at night. **Figure 6** shows ample lighting during the night and surveillance cameras around green areas.



Figure 6. Ample lighting and surveillance within parks in Doha reinforce a sense of safety at Al Muntaza and Hotel Park (Source: Authors).

3.4. Public amenities

Many studies associate mental health with public amenities such as toilets (Wood et al., 2017). Lack of easy access to public toilets is directly related to mental distress. One such study in India revealed that more than 50% of women suffer from mental stress due to the lack of public toilets (Singh, 2021). A similar study in China concluded that having a clean, safe, and comfortable community environment evidently strengthens good mental health (Al-Mohannadi et al., 2023; Li et al., 2021).

The intentional provision of well-maintained public toilets and drinking water facilities in green spaces of Doha City, which had been integral since the outset, has contributed to various physical and mental benefits. Providing accessible and clean toilets ensures comfort and safety and promotes social connectedness. The provision of safe and clean drinking water ensures a positive impact on mental issues such as fatigue, headaches, and mood swings that are caused due to dehydration. The provision of drinking water is especially essential given the climate of Doha city. **Figure 7** shows toilets and drinking water facilities in and around green spaces. However, it was also observed that these facilities are lacking in neighbourhood green spaces. Additionally, many children's play areas and open gym facilities in and around green spaces add to Doha City's efforts to provide public amenities.

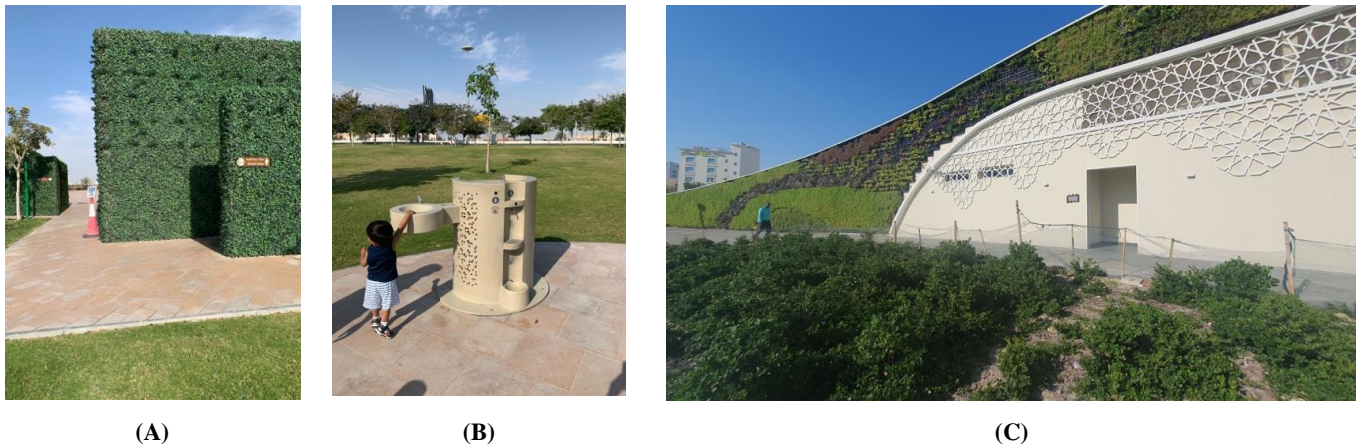


Figure 7. Public toilets, drinking water facilities, and prayer rooms in a local park at 5/6 Park (A,B) and Al Gharraffa Park (C) (Source: Authors).

3.5. Shaded areas

Evidence suggests that shaded areas can positively impact citizens' mental health (Buttazzoni et al., 2022). In Doha city, where temperatures can be very high, shaded areas may provide a respite from the heat and make outdoor activities more comfortable and enjoyable. This can lead to increased physical activity, which is linked to better mental health outcomes. In California, USA, having high-density trees was associated with better social cohesion and overall general health (Ulmer et al., 2016; Valdeolmillos et al., 2023).

In the case of Doha, people are more likely to gather around shaded areas. While trees and green spaces have been found to reduce stress levels, shaded areas also create opportunities for building community connections. However, it is important to note that various factors, including individual preferences, cultural values, and access to other resources and support systems, may influence the impact of shaded areas on mental health. Therefore, while shaded areas in Doha city may positively impact mental health, it is likely just one of many factors that contribute to overall wellbeing. **Figure 8** shows people gathering on a summer weekend around a shaded area.



Figure 8. People gathered around the shaded areas at Corniche (Source: Authors).

3.6. Walking/Jogging/Cycling tracks

Regular physical activity has been linked to improved mood and reduced

symptoms of anxiety and depression. In addition, exercising outdoors is particularly beneficial for mental health, as exposure to natural light and green spaces can reduce stress levels and improve mood. Providing sufficient space in the city to exercise can promote active lifestyles, and often, physical fitness is associated with improving mental health. Improving pedestrian quality and connectivity and incorporating jogging/ cycling tracks can significantly influence a person's behaviour and lifestyle. The prerequisites for walking/jogging/cycling tracks must focus on safety, accessibility, and comfort, as devised by New York City planning guidelines (NYC Planning, n.d.). A study based in the UK showed that the youngest population experienced positive changes in self-esteem, and adults experienced reduced aging effects when actively involved in physical activities that can be performed in nature (Barton and Pretty, 2010).

In terms of creating walking/jogging/cycling tracks, Doha City has distinguished itself by building the world's longest and uninterrupted Olympic Cycling Track (Furlan et al., 2023). At this milestone, Doha city promoted cycling and running culture, one of the main reasons to improve its citizens' mental health. In addition, Doha city has cycling tracks up to a few kilometers in and around green areas. These short cycling tracks encourage children and adults who cycle for leisure. **Figure 9** shows a 1.3-kilometer-long cycling track in a local park.



Figure 9. Cycling track in a local park at 5/6 park (Source: Authors).

4. Discussion

Green spaces in cities play a crucial role in promoting mental health and wellbeing. Studies have shown that access to green spaces in cities can improve mental health outcomes, including reducing stress, anxiety, and depression. This is because exposure to nature has been found to positively impact emotional and psychological wellbeing, helping to reduce the negative effects of urban stressors such as noise, pollution, and congestion. In addition to providing a physical space for people to connect with nature, well-designed green areas can encourage physical activity and social interaction. This can have additional benefits for mental health, including improved self-esteem and social support. Furthermore, green spaces can contribute to mitigating the effects of climate change in cities. They can help to reduce heat island

effects, improve air quality, and provide habitat for wildlife.

To maximize the mental health benefits of green spaces, urban designers must prioritize the accessibility, safety, and quality of these areas and incorporate features that encourage people to use these spaces, such as seating, walking paths, and recreational amenities. Urban designers must also consider the easy maintenance and management of green spaces to ensure they remain healthy and appealing over time.

When incorporated, the lessons learned from the case study of green spaces in Doha city can promote mental health in other cities. **Table 1** summarizes design recommendations that would promote mental health in green areas. There are several ways in which the urban design of green spaces in Doha city has helped to promote mental health even further:

- Incorporating diverse natural elements: Urban green spaces must incorporate various natural elements, such as trees, plants, water features, and wildlife habitats, which can help create a more diverse and stimulating environment that promotes mental restoration and reduces stress.
- Providing opportunities for physical activity: Urban green spaces must be designed to provide opportunities for physical activity, such as walking, jogging, or cycling that can help to improve physical health and provide an outlet for stress relief.
- Creating spaces for social interaction: Urban green spaces must also be designed to encourage social interaction, with features such as benches, picnic tables, and community gardens that can help promote a sense of community and social support, contributing to improved mental health outcomes.
- Incorporating features for children: Urban green spaces must also be designed to incorporate features for children, such as playgrounds and nature trails that can help to promote physical activity, learning, and a sense of connection with nature.
- Providing access to natural light: Urban green spaces must be designed to provide access to natural light, which has been shown to impact mental health positively, which can include designing spaces with open views of the sky or incorporating skylights and windows in buildings adjacent to green spaces.
- Ensuring accessibility for all: Urban green spaces must be designed to be accessible to all community members, regardless of age, ability, or socioeconomic status, which can include designing accessible paths, seating, and facilities.

Table 1. Summary of recommendations for green areas to promote mental health.

Key strategies	Doha’s Initiatives	Recommendation
Accessibility to green parks for all	<ul style="list-style-type: none"> • Wheelchair access to all parks. • Free parking in most of the parks. • Metro connects to regional parks. 	Incorporate and improve seating, walking paths and recreational areas. Implement parking for neighbourhood parks.
Counter-urban stressors like noise and pollution	<ul style="list-style-type: none"> • Walls are constructed to create a buffer in most of the parks. 	Creating natural buffers such as trees and water bodies.
Encourage physical activity and social interaction.	<ul style="list-style-type: none"> • Shaded gazebos are provided in most of the neighbourhood parks. 	Design more spaces within the park with shaded areas. Include children’s play area, playground, and exercise zones.

Table 1. (Continued).

Key strategies	Doha’s Initiatives	Recommendation
Public amenities like toilets and drinking water	<ul style="list-style-type: none"> Free, air-conditioned, and well-maintained toilets are provided in all parks. Free and well-maintained drinking water booths are provided in all parks. 	Introduce eco-friendly measures for the sustenance of public amenities.
Reduce urban heat island effect and improve air quality	<ul style="list-style-type: none"> The parks in Doha City have increased the greenery, improving air quality. 	Introduce, design, and maintain diversity of natural elements such as wildlife habitat and water features.

5. Conclusion

Based on the learning from Doha city, the following approaches to further the studies related to urban design and mental health are recommended:

- **Conduct more research:** There is still a need for more research to understand better the relationship between urban design and mental health outcomes. Studies can be conducted in different settings, such as urban, suburban, and rural areas, to understand better the impact of different design features on mental health.
- **Use advanced technologies:** Advanced technologies, such as virtual reality and simulation modelling, can help create more realistic and controlled environments for testing the impact of different urban design features on mental health outcomes.
- **Collaborate with experts from different fields:** Collaboration with experts from various fields, such as psychology, sociology, and public health, can help better understand the complex relationship between urban design and mental health.
- **Apply findings to real-world design projects:** Once the findings of research studies are available, they should be applied to real-world design projects to create more effective and evidence-based urban green spaces.
- **Evaluate the impact of design interventions:** After implementing design interventions, evaluating their impact on mental health outcomes is important that can help to refine design strategies and promote the implementation of effective urban design interventions.

By working collaboratively, urban designers and public health workers must provide research and evidence, promote public education, establish guidelines and standards, and monitor and evaluate outcomes. The public health department can play a critical role in supporting the design of green areas that promote positive mental health outcomes.

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Appendix

Questionnaire for the survey interview:

	Highly Dissatisfied (1)	Dissatisfied (2)	Neutral (3)	Satisfied (4)	Highly Satisfied (5)
Accessibility					
<hr/>					
How would you rate the ease of access to this park from your residence or workplace?					
How accessible do you find the park for individuals with mobility challenges or disabilities?					
How convenient are the parking facilities near the park?					
How well-connected is this park to public transportation options?					
Do you feel that the park's location is conducive to attracting visitors?					
How would you rate the availability of parking spaces for bicycles and strollers within the park?					
To what extent does the park signage facilitate easy navigation and information about facilities?					
How accessible are seating areas and restrooms within the park?					
Do you feel the park adequately caters to people of all age groups in terms of accessibility?					
<hr/>					
Safety					
<hr/>					
How safe do you feel while visiting this park during the day?					
To what extent are safety measures like adequate lighting and visibility implemented in the park during nighttime?					
How would you rate the presence of security personnel or surveillance cameras in the park?					
Are there any concerns regarding vandalism or damage to park property that affect your sense of safety?					
How well-maintained are the walking paths and play areas in terms of preventing accidents or injuries?					
How secure do you feel about your personal belongings when visiting the park?					
How often do you observe patrols or maintenance staff in the park?					
How would you rate the emergency response systems or information available within the park?					

Highly Dissatisfied (1) Dissatisfied (2) Neutral (3) Satisfied (4) Highly Satisfied (5)

Provision of Public Amenities

How satisfied are you with the availability of seating and shaded areas in the park?

To what extent do you find the cleanliness and maintenance of public amenities, such as restrooms and drinking water facilities?

How would you rate the availability of recreational facilities like playgrounds or sports areas?

How satisfied are you with the picnic areas and barbecue spots in the park?

How accessible and well-maintained are waste bins and recycling facilities within the park?

How satisfied are you with the availability of food and beverage kiosks or vendors within the park?

How satisfied are you with the availability of community gathering spaces or event areas?

Cycling/ Jogging Tracks

How satisfied are you with the condition and maintenance of cycling and jogging tracks in the park?

To what extent do you find the tracks conducive to your fitness routines or recreational activities?

How safe do you feel while cycling or jogging within the park?

How well-marked and segregated are the tracks from pedestrian pathways?

How satisfied are you with the length and variety of tracks available in the park?

To what extent do the tracks encourage you to engage in outdoor physical activities?

How would you rate the accessibility of the tracks for users of different fitness levels?

How satisfied are you with the availability of amenities like water fountains or resting spots along the tracks?

Feeling of Belongingness

To what extent does visiting this park contribute to your sense of belonging to the community?

How welcoming do you find the park in terms of promoting social interactions among visitors?

How well do community events or activities within the park foster a sense of belonging among visitors?

Highly Dissatisfied (1) Dissatisfied (2) Neutral (3) Satisfied (4) Highly Satisfied (5)

How satisfied are you with the inclusivity of the park, ensuring everyone feels welcome and accepted?

To what extent do you feel a connection or attachment to this park as a communal space?

How would you rate the park's role in fostering a sense of unity among diverse groups within the community?

How satisfied are you with the opportunities for social engagement and networking within the park?

How well does the park cater to the needs and preferences of various demographic groups?
