



Article The Importance of Resilient, Health-Promoting, and Accessible Cultural Landscapes Using the Example of One Suburb of Gdańsk, Poland

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Abstract: The urban green public spaces "UGSs" provide a place for everyday contact with nature to humans. Green and blue infrastructure is important for urban heat mitigation. This study focuses on the relationship between satisfaction with the place of living and quality of life indexes, accessibility, and the quality of public green spaces in one of the suburbs of Gdańsk in Poland. Even though there are award-winning public parks and a large-scale Tri-city Landscape Park, the individual indexes measuring the satisfaction of local inhabitants with accessibility to public parks and their quality were well beyond the average in Gdańsk. The research question was to explain such low satisfaction with green public parks and spaces in Gdańsk-Osowa. The results of the evaluation of available "UGSs" against the universal standard for health-promoting urban places confirmed their recreational value but also demonstrated limited spatial and physical accessibility and possible overcrowding. Thus, the possibilities for everyday contact with nature for numerous inhabitants are limited and that condition may influence the life quality indexes. The results suggest that increasing urban density and the further development of residential neighborhoods requires careful planning of new public parks within walking distance is crucial when planning new developments.

Keywords: urban planning; open space; public parks; Gdańsk

1. Introduction

Therapeutic landscape is an analytical framework coined by Wilbert Gesler, based on three components: physical environments, social environments, and symbolic environments that together create an environment conducive to healing [1,2]. Gesler described it as a "particular setting that has 'an enduring reputation for achieving physical, mental and spiritual healing" [1]. There are places around the globe where people are flocking to regain health, e.g., Lourdes in France, Bama village in China, or Epidaurus in Greece in ancient times. However, these places are not available to everyone, and the voyage is still costly and time-consuming. People who are experiencing health issues may not be able to travel long distances or might not be capable of organizing such a journey.

According to UNESCO, the cultural landscapes represents the "combined works of nature and of man", designed and created intentionally by man [3]. Thus, urban green public spaces "UGSs" are structural parts of landscapes designed to fulfill the aesthetic, recreational, and utilitarian needs of people. The everyday "UGSs" are cultural landscapes where people spend time daily. Thus, the interesting question is how to make these everyday landscapes places for health promotion. The therapeutic landscapes are connected to a given physical environment, and the beauty of the natural landscape and contact with nature are important. The design of a "UGS" strives to replicate some qualities of natural landscapes, e.g., beauty, serenity, sounds, smells, and multisensory experiences [4]. The social and symbolic environment might be difficult to create, but usually, there are existent attributes of placeness—"the quality of being a place" in a "UGS" which might



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Copyright: © 2024 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). be the reasoning behind the health-promoting atmosphere [5]. That question is even more important during the times of the epidemiological, humanitarian, and economic crises the world is facing today. The role of handy green spaces proved all the more important to promote the health and well-being of urban dwellers, especially in densely populated metropolitan areas of large cities.

The resilience of "UGSs" regarded as cultural landscapes is closely linked to their image and identity in collective memory. The phenomenon of "placeness" relates to services that "UGSs" are providing to local people. Open green places valued as accessible and health-promoting are spaces where people spend their free time and therefore care about, maintain, and protect from development. This relation goes in both directions—neighborhoods with accessible health-promoting places offer better living conditions and resiliency.

This study focuses on the relationship between satisfaction with the place of living, quality of life indexes, and accessibility and the quality of public green spaces in one of the suburbs of Gdańsk in Poland. The suburb, Gdańsk-Osowa, is located near the Tri-City Landscape Park. One of the studied public parks won many awards for the best public space in Pomerania Voivodship. However, the satisfaction with the place of living and accessibility of open public green spaces declared during the research on life quality indexes was relatively low [6]. The individual indexes measuring the satisfaction of local inhabitants with the accessibility of public parks and their quality was well beyond the average in Gdańsk [6].

This study aimed to verify why the life quality indexes of a suburb with a beautiful, award-winning public park are so low. The study thesis was that the public parks in that suburb, even though they offered health-promoting qualities, have poor accessibility. There were two research objectives: first, to verify the health-promoting qualities of public parks and "UGSs" in Gdańsk-Osowa, and then to assess their accessibility.

Therefore, the spatial accessibility of public parks and their health-promoting qualities were assessed using literature and document review and field visits. The field analysis of proximity to open public green spaces proved that only a limited number of inhabitants live within walking distance of public parks. The assessment of public parks using the standard for health-promoting public parks demonstrated that they are high-quality places. Nevertheless, this study shows that even though the available public parks and natural forests can be regarded as health-promoting places, their limited spatial and physical accessibility and possible overcrowding limit possibilities for everyday contact with nature for numerous inhabitants. The results suggest that increasing urban density and the further development of residential neighborhoods requires a careful consideration of proximity to public open green spaces and simultaneous planning of new public parks. The accessibility of public parks within walking distance is crucial when planning new developments. Both accessibility and health-promoting qualities are important factors of "UGSs" and the entire district's resilience.

2. Literature Review

A plethora of evidence demonstrates that everyday contact with nature is important to human health and well-being [4,7–10]. At the same time, today more people face the prospect of living in residential environments with little green space due to increasing urbanization. The consequences can be as severe as increased morbidity, which was proven by a large-scale horizontal study conducted in Denmark [10]. The annual prevalence rate was lower in living environments with more green space in a 1 km radius. The relation was even stronger for children and people with a lower socioeconomic status, who may find it difficult to commute to green spaces located within larger distances. Another study of greenery in public spaces in Lublin, Poland revealed that even though the presence of nature is a very important factor, it is often underestimated and neglected [11].

Nevertheless, contact with nature can have a healing effect. The concept of therapeutic landscapes was coined by Wilbert Gesler. It represents places 'where the physical and built

environments, social conditions and human perceptions combine to produce an atmosphere which is conducive to healing' [1,2]. The concept of therapeutic landscapes can be translated into everyday health-affirming places [12]. Urban health-affirming places are everyday places that unite the qualities of therapeutic landscapes to influence people's physical, mental, and spiritual healing [12]. Thus, such places should be planned and delivered in urbanized areas, especially residential districts. The question today is not if human beings have a potential possibility of contact with nature but if that contact is accessible every day within the possibilities of a given person.

The location and area of a "UGS" should correspond to the size of the city and its population. According to the guidelines published by the World Health Organization (WHO), at least 9 m² of green space should be available per individual, and the ideal value is 50 m² per capita [13]. The European Environment Agency (EEA), specified that urban residents should have access to green spaces within a walking distance of 15 min, which is approximately 900–1000 m [14].

In Cracow, Poland's second-largest city, with an area of 327 km² and a population of around 780 thousand, landscaped greenery covers only 13.47% of the city's area and includes public parks and cemeteries [15]. A study in another Polish city, Białystok, revealed that even though the WHO standards are met, there are some deficiencies in access to public green spaces [16]. That is the problem in Gdańsk as well [17].

Another problem is connected with means of access. Even the most beautiful park would not serve the local population if there was no access to such a park. Examples of difficulties are physical obstacles, e.g., distance, fences, busy roads with limited pedestrian crossings, etc., or psychological obstacles, e.g., a lack of safety, a lack of maintenance, solitude in the park, no other users within view, etc. Walking may be the best medicine but accessible pedestrian sidewalks are needed [18–22]. Accessibility with public transport is also important [17].

Urban green spaces are not only used for recreational purposes, they may contribute to improve social interactions and community cohesiveness. However, there are still many barriers to tourism and recreation for people with disabilities, e.g., urban, architectural, and social barriers; lack of tourist equipment; high costs; and insufficient information on the tourist needs of people with disabilities [23]. Some of the architectural barriers may be easy to eliminate with extra caution given to specific technical aspects of the infrastructure in open public green spaces. However, the accessibility barriers that may be encountered in natural forests may be impossible to overcome. Therefore, accessible public parks and gardens are important.

Gdańsk-Osowa

Gdańsk is a city located in the north of Poland on the Baltic coast (Figure 1). The area of the city encompasses 26,300 ha. There are over 500 hundred thousand inhabitants. In the city, there are 21 parks, which cover over 180 ha (0.68% of the city area).

Osowa is a suburb of Gdańsk, located in the north-west, behind a strip of the forested TPK—Tri-city Landscape Park (Figure 2). It is one of the most densely populated suburbs of Gdańsk. At the same time, it is one of the youngest districts—the average age of inhabitants is 39. In 2021, the official number of inhabitants was over 16,121. The total area of Gdańsk-Osowa is 13.73 km², so the density of the population is 1174 persons per km² [24].

The suburb Is located, on average, 140 m above the sea level, thus higher than the part of the city next to the seacoast. The urbanization pattern used to be composed mostly of single family or rowhouses. Nowadays, it has changed. Today, predominantly multifamily blocks are constructed in the newest part of the suburb [25–27]. Historically, Osowa spans the terrain of a few historic villages developed during the process of suburbanization. The climate zone is the same as the rest of Poland, Dfb: temperate continental climate/humid continental climate, according to the Koppen-Geiger Climate Classification.



Figure 1. Location of Gdańsk: (**a**) on the map of Poland, source: own elaboration and (**b**) within the Gdańsk Agglomeration, source: Map data ©2023 Google.



Figure 2. Location of public parks in Gdańsk-Osowa and route accessibility: in the upper left (northwest) Park Chirona—1; lower right (south-east) park Diany—2; and Tri-city Landscape Park—3. Source: https://www.geoportal.gov.pl (accessed on 22 April 2024).

3.1. Quality of Living Survey Information

The Gdańsk-Osowa district is perceived as one of the wealthiest suburbs in Gdańsk. The results of a sociological study on the quality of life in Gdynia (2017) show that the index for financial well-being is among the highest in the city. The quality of living should be relatively high. The average pay in Gdańsk is well over the country mean (2023) [6,28].

The results of a sociological study on the quality of life in Gdynia (2017) demonstrate that regarding nature and the natural environment, the suburb of Gdańsk-Osowa was among the districts with the highest average index [6]. This category included, among others, air quality, noise disturbance, the accessibility of green spaces, maintenance, and esthetics. However, even though the overall index in the category was above the average, as was the one regarding the accessibility of green spaces, the index indicating the maintenance and esthetics of green spaces was well beyond the Gdańsk average.

Moreover, the results of the survey measuring satisfaction with the quality of sports and recreational infrastructure placed Gdańsk-Osowa among the suburbs with the lowest index. This category included the accessibility of public parks, quality of public parks, and accessibility and quality of playgrounds and tot lots, as well as sports and recreational facilities. The individual indexes measuring the satisfaction of local inhabitants with accessibility to public parks and their quality was well beyond the average in Gdańsk as well.

3.2. Field Studies and Site Observation

Green Spaces in Gdańsk-Osowa

The suburb is surrounded by open and green spaces. The northern and eastern border of the suburb is limited by the forest of the Tri-City Landscape Park. To the north-west, there is Wyspowo Lake, and to the west and south there are open green spaces and agricultural land. There are limited open green public spaces developed into public parks: Park Chirona and Park Diany (Figures 2 and 3). There are a few undeveloped open green public spaces.



Figure 3. Location of public parks in Gdańsk: in the upper left (north-west) is Park Chirona—1 and on the lower right (south-east) is park Diany—2. Source: Map data ©2023 Google.

Public Parks

There are two important pocket parks in Gdańsk-Osowa: Park Chirona and Park Diany.

Park Chirona

The park is located in the quarter of Chirona, Biwakowa, Zeusa, and Minerwy streets in the north-western part of Osowa district (Figures 4–6). It covers an area of approximately 3 ha. The park was built from 2006 to 2010 [29].



Figure 4. Location of Park Chirona—1 pedestrian paths and public bus stops. Source: OpenStreetMap.



Figure 5. Location of Park Chirona—1 bicycle routes. Source: OpenStreetMap.



Figure 6. Location of Park Chirona—1: relationship between urban fabric and public spaces. Source: https://geoportal.gov.pl (accessed on 22 April 2024).

It is one of the most interesting contemporary parks in Gdańsk, thanks to natural and landscape values, as well as a rich variety of recreational equipment. The collection of plants includes native species, as well as some ornamental shrubs, perennials, and aquatic plants (Figures 7–9).

The pond is a picturesque feature with a rich collection of aquatic plants. In the center of the pond, there is a bird breeding island, unavailable to visitors. A wooden viewing platform enables recreational fishing.

The park offers many intimate places, sitting areas, squares, picturesque park alleys, and numerous bridges enabling access to all corners of the park. The sports and recreational infrastructure is rich in variety and includes an outdoor gym, tennis, and chess tables, and separate play areas for children of various age groups. For dog walkers, there is a fenced dog run with dog-friendly equipment.



Figure 7. Access to Park Chirona. (a) The path and (b) the entrance. Source: photos by author (2023).



Figure 8. Park Chirona. Edges are created by fences of individual properties bordering the park. (a) The edge is formed by thuja hedge and layered shrubs and bushes. (b) The edge is formed by layers of trees, shrubs, and bushes. Source: photos by author (2023).



Figure 9. (a) The water reservoir in Park Chirona filled with aquatic plants. (b) Recreational infrastructure in Park Chirona. In the background there are trees, which are covering the view of the city. Source: photos by author (2023).

Due to its values, Chiron Park received an award for The Most Beautiful Public Space of the Pomeranian Voivodeship in 2012. The park is universally accessible to people with special needs. There are seven entrances to the park, located on Biwakowa, Zeusa, and Chirona streets (Figures 4, 5 and 7) [29]. The park is fenced. The boundaries of the park are formed by layered planting, trees, shrubs, and bushes (Figures 7–9). The view of the city is hidden behind the greenery.

Park Diany

The park is located in the quarter of Diana Street in the south-eastern part of Osowa district (Figures 10–12). It covers an area of approximately 1 ha. The park was built in stages starting in 2015, following the guidelines of the Osowa District Council to answer the needs reported by the inhabitants.



Figure 10. Location of Park Diany—2 walking paths and public bus stops. Source: OpenStreetMap.



Figure 11. Location of Park Diany—2 bicycle routes. Source: OpenStreetMap.



Figure 12. Location of Park Diany—2: relationship between urban fabric and public spaces. Source: https://mapy.geoportal.gov.pl (accessed on 22 April 2024).

Despite its small dimensions, the park offers a rich variety of sports and recreational equipment. The park is equipped with a multi-purpose sports field, a skate park, a health path, and an outdoor gym. The park also offers numerous benches, a chess corner, a tennis table, a beach volleyball field, and a dog run. In the park, there are recreational lawns with an area of approximately 4200 m² (Figures 13–15).









Figure 13. Access to Park Diany. (**a**) Path to the park along fenced playground for younger children. (**b**) Access to the park and central plaza, and in the foreground, the surrounding urban pattern of multifamily blocks. The crane is marking the site of new blocks of flats under construction along the southern edge of the park. Source: photos by author (2023).

Many native plants, fifteen species of deciduous trees, many coniferous trees, and several dozen species of ornamental shrubs, perennials, and grasses were planted there.

The park design is based on varied topography in the form of hills, which were made of soil obtained during excavations for the construction of a sports field and paths [30]. The southern edge of the park is formed by urban fabric consisting of four to five-level blocks of flats. From the north, where single-family houses prevail, the boundary is much softer and consists of trees, shrubs, and bushes.



Figure 14. (a) Path in Park Diany. (b) Skatepark bowl in Park Diany. Source: photos by author (2023).





(b)

Figure 15. Edges of Park Diany: (**a**) from the south, with multifamily buildings and (**b**) layers of trees, shrubs and bushes from the north, with single family houses. Source: photos by author (2023).

There are also a few undeveloped vacant lots but they could not satisfy the recreational needs of the inhabitants of Gdańsk-Osowa. Some of them are fenced and will be developed in the future according to the specifications of the study of the conditions and directions of spatial development in the city of Gdańsk [27]. There will be more housing units.

TPK the Tri-City Landscape Park

The Tri-City Landscape Park was established in 1979. The current area of the park is 19,930 ha, and the buffer zone is 16,542 ha [31]. The northern complex covers part of the areas of Gdynia, Rumia, Szemud, and Wejherowo, while the smaller southern complex covers parts of the areas of Gdynia, Sopot, and Gdańsk (Figure 16).

The landmarks of the park are the post-glacial features of the landscape, forested hills and valleys with springs and streams, clean forest lakes, and peat bogs as well as numerous erratic boulders. The flora and fauna are very diverse. The Tri-city park extends its surface along the conurbation, thus it offers close contact with nature to inhabitants, but at the same time is subject to enormous anthropocentric pressure. The TPK Landscape Park is difficult to access because a highway forms a barrier between the park and the residential areas (Figure 17). On the other hand, the park is difficult to access for many people due to the steep slopes of its hills [31].



Figure 16. (**a**) TPK Tri-city Landscape Park. Source: OpenStreetMap. (**b**) Path in the TPK Tri-city Landscape Park.



Figure 17. Location of TPK Tri-city Landscape Park—3: relationship between urban fabric and public spaces. The highway is a natural barrier and access is difficult. Source: https://geoportal.gov.pl (accessed on 22 April 2024).

4. Materials and Methods

This study included a literature review and field observation of selected parks and patterns of the use of open green spaces, as well as unstructured interviews with park users. The major points were the quality and accessibility of public parks.

The quality of public parks was assessed with the author's tool: a universal standard for health-promoting urban places—public park (Table 1), which was developed and improved over time from 2017 to 2023. This methodology is filling the gap. There are no other tools dedicated to the assessment of the health-promoting qualities of urban public parks. The standard was developed using the triangulation of a literature review of research evidence and field studies compared with design documents. It can be used as an audit tool to determine the potential health-promoting qualities of urban places.

It is a set of criteria organized into five categories: Sustainability, Accessibility, Amenities, Design, and Placemaking. The individual categories are as objective as possible. Only a limited number of categories are prone to subjectivity, e.g., perceived safety, overall aesthetics, and the optimal level of complexity.

A Universal Standard for Health-Promoting Places				
1. Sustainability	2. Accessibility	3. Amenities	4. Design	5. Placemaking
 1.1 Environmental characteristics Area Location Surrounding urban pattern Soil quality Water quality Water quality Air quality Noise level Green and blue infrastructure 1.2 Parks of second (new) generation 1.3 Forms of natural protection Parts of open green space not available to visitors Native plants Native animals Natural maintenance methods 1.5 Sustainable water management Rainwater infiltration Irrigation with non-potable water 1.6 Urban metabolism 1.7 Ecological energy sources 	2.1 Distance to park 2.2 Sidewalk infrastructure Width of sidewalk Evenness of surface Lack of obstructions Slope Sufficient drainage 2.3 General conditions of walkways Maintenance Overall aesthetics Street art Sufficient seating Perceived safety Buffering from traffic Street activities Vacant lots 2.4 Traffic Speed Volume Number and safety of crossings Stop signs On-street parking 2.5 User Experience Air quality Noise level Sufficient lighting Sunshine and shade Visibility of nearby buildings 2.6 Public transport stops 2.7 Sufficient parking	 3.1. Catering to basic needs Safety and security (presence of guards, cleanliness, maintenance, etc.) Places to sit and rest Shelter Restrooms Drinking water Food (possibility to buy food in the park or in the closest vicinities) 3.2. Psychological and physical regeneration Natural landscapes Green open space Presence of water Places to rest in quiet and solitude 3.3. Promotion of physical activities Sports and recreational infrastructure Addressing the needs of people with disabilities 3.4. Promotion of social contacts Meeting places for groups Community gardens 	4.1. Architectural design Human scale Structure of interior connections Framed views Long vistas (extent) Pathways with views Invisible parts of the scenery (vistas which engage the imagination) Possibility to watch other people Possibility to see wildlife 4.2. Salutogenic design Focal points and landmarks Optimal level of complexity Engaging features Controlled risk Mystery/fascination Movement 4.3 Water in the park 4.4. Sensory stimuli design Sensory stimuli: sight Sensory stimuli: smell Sensory stimuli: touch Sensory stimuli: touch Sensory stimuli: touch Sensory stimuli: touch Sensory stimuli: touch Sensory stimuli: touch	5.1 Social engagement Organization of events Personalization Animation 5.2 Human perception—spiritual and symbolic Sacred places 5.3 Culture and connections to the past 5.4. Works of art 5.5. Monuments 5.6. Thematic gardens

Table 1.	Standard	for health-	promoting	g urban	places—	public	bark.
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Source: Author, improved version of the standard [4,32,33].

The first stage of evaluation is performed remotely. It encompasses research on park location, data sources, climate conditions, catchment area, overall qualities of walkways to the park, and all other available information. The field observation with a universal standard tool is the second stage. The evaluation with the standard can be performed as a rough or detailed assessment. The rough binary assessment method was previously used to assess the 10 public parks in Bydgoszcz [32]. In this study in 2023, the improved version of the standard was used (Table 1) The characteristics which are subjective and unmeasurable are concisely described. The tangible qualities were assessed using the binary assessment method:

- Absent, not observed = 0
- Present, observed, and evaluated as satisfactory = 1

The rough assessment method represents the first phase of assessment.

If necessary, the second stage of assessment can be performed. For a more detailed assessment, all of the qualities are described in detail. Evaluation for each of the criteria is performed separately. For this study, only a rough assessment was performed. The field observation was conducted by one researcher. Multiple visits to the park were necessary to verify the presence of the attributes. The observations were noted (Table 2).

The Universal Standard for Health-Promoting Urban Places					
	Park Chirona	Park Diany	TPK Tri-City Landscape Park		
	1. SUSTAIN	NABILITY			
	1.1. Environment	al characteristics			
	Neighborhood	Pocket Park	Landscape		
Area, approximately	Park	1 ha	Park		
	3 ha, incl. 0.8 pond		19,930 ha		
Location	Gdańsk-Osowa	Gdańsk-Osowa	Tri-city agglomeration		
Surrounding urban pattern	Urban tissue	Urban tissue	Linear conurbation of Tri-city		
Soil quality	Previously agricultural or undeveloped land	Previously agricultural or undeveloped land	Semi-natural acidic lowland beech forest [34]		
Water quality	Good	No water reservoir	Good		
Air quality	Very good according to Polish air quality standards [35]	Very good [35]	Very good [35]		
Noise level	Low according to noise load map [36]	Low [36]	Low [36]		
Green and blue infrastructure	Part of green and blue infrastructure	Part of green and blue infrastructure	Part of green and blue infrastructure		
1.2 Parks of second (new) generation	Low maintenance scheme	Low maintenance scheme	Only natural maintenance methods		
1.3 Forms of nature protection	No	No	Yes, natural reserves		
	1.4. Biodiversi	ty protection			
Parts of open green space not available to visitors	Yes—fragment of park is closed to visitors, an island on the pond	No	Yes—fragments of park are fenced and closed to visitors		
Native plants	Present	Present	Only native plants, visible presence of invasive species along borders with urbanized areas		
Native animals	Present	Present	Only native animals		
Natural maintenance methods	Low maintenance scheme	Low maintenance scheme	Only natural maintenance methods		
1.5 Sustainable water management					
Rainwater infiltration	Majority of surface	Majority of surface	Entire surface		
Irrigation with non-potable water	No data	No data	No irrigation		
1.6 Urban metabolism	Waste segregation	Waste segregation	Waste is prohibited		
1.7 Ecological energy sources	Yes, PV cells	Yes, PV cells	Yes		
2. ACCESSIBILITY (assessment of walkways to park)					
	2.1. Distan	ce to park			
Distance to potential users	Less than 500 m but there are some barriers	Less than 500 m but there are some barriers	Less than 500 m but motor highway forms a barrier		
2.2 Sidewalk infrastructure					
Infrastructure	Moderate Parts with no sidewalk	Moderate Parts with no sidewalk	No sidewalk infrastructure		
Width of sidewalk	Partially too narrow	Parts with no sidewalk	Parts with no sidewalk		
Evenness of surface	Partially uneven	Partially uneven	Partially uneven		
Lack of obstructions	Some obstructions	Some obstructions	Some obstructions		
Slope	No	No	Significant slope		
Sufficient drainage	Partially insufficient	Partially insufficient	Partially insufficient		
2.3 General conditions of walkways	Moderate	Moderate	Moderate		
Maintenance	Rather clean	Rather clean	Non-stabilized walkways		
Overall aesthetics	Rather good	Rather good	Rather good		
Street art	No	No	No		
Sufficient seating	No seating	No seating	No seating		
Perceived safety	Perceived as safe (subjective)	Perceived as safe (subjective)	Perceived as safe (subjective)		
Buffering from traffic	Walkways are not buffered from the traffic	Walkways are not buffered from the traffic	Walkways are not buffered from the traffic		
Street activities	Limited	Limited	Limited		
Vacant lots	Present	Present	Present		

Table 2. The assessment of open green spaces in public parks in Gdańsk-Osowa.

The Universal Standard for Health-Promoting Urban Places					
	Park Chirona	Park Diany	TPK Tri-City Landscape Park		
	2.4. T	raffic			
Speed	Low	Low	Low		
Volume	Low	Low	Low		
Number and safety of crossings	Moderate	Moderate	Moderate		
Stop signs	Present	Present	Present		
On-street parking	Present	Present	Present		
	2.5. User E	Experience			
Air quality	Good [35]	Good [35]	Good [35]		
Noise level	Low [36]	Low [36]	Low [36]		
Sufficient lighting	Partially insufficient	Partially insufficient	Partially insufficient		
Sunshine and shade	Yes	Partially insufficient shade	Partially insufficient shade		
Visibility of nearby building	Partially covered by private gardens	Yes	Partially covered by private gardens		
2.6 Public transport stops	Yes, available within moderate walking distance	Yes, available within moderate walking distance	Yes, available within moderate walking distance		
2.7 Sufficient Parking	Yes	Yes	Yes		
	3. AMENITIE	ES in the park			
Cafatry and convertey	3.1. Catering i		1		
	1	1	1		
Chalter	1	1	0		
Shelter	1	0	1		
Restrooms	1	0	0		
	1	1	0		
F000	1 2.2. Payshological and		0		
3.2. Psychological and physical regeneration					
	1	0	1		
Green open space	1	1	1		
shade	1	1	1		
Place to rest in silence and solitude	1	0	1		
3.3. Promotion of Physical Activities					
Sports and recreational infrastructure	1	1	0		
Addressing the needs of people with disabilities	1	1	0		
3.4. Promotion of Social Contacts					
Meeting places for groups	1	1	0		
Community gardens	0	0	0		
4.1. ARCHITECTURAL DESIGN Human scale 1					
Structure of interior connections	1	1	1		
Framed views	1	1	1		
Long vistas (extent)	1	1	1		
Pathways with views	1	1	1		
Invisible parts of the scenery (vistas which engage the imagination)	1	1	1		

Table 2. Cont.

	The Universal Standard for Health-Promoting Urban Places				
	Park Chirona	Park Diany	TPK Tri-City Landscape Park		
Possibility to watch other people	1	1	1		
Possibility to see wildlife	1	1	1		
	4.2. Salutoge	enic design			
Optimal level of complexity	1	1	1		
Focal points and landmarks	1	1	1		
Engaging features	1	1	1		
Controlled risk	1	1	1		
Mystery/fascination	1	1	1		
Movement	1	1	1		
4.3 Water in the park	1	0	1		
4.4. Sensory stimuli design					
Sensory stimuli: sight	1	1	1		
Sensory stimuli: hearing	1	1	1		
Sensory stimuli: smell	1	1	1		
Sensory stimuli: touch	1	1	1		
Sensory stimuli: taste	1	1	1		
Sensory path	1	0	1		
4.5 Soundscape	1	1	1		
5.1. SOCIAL ENGAGEMENT					
Organization of events	1	1	1		
Personalization	0	1	0		
Animation	1	1	1		
5.2. Human perception—spiritual and symbolic					
Sacred places	1	1	1		
5.3. Culture and connections to the past					
5.4. Works of art	1	0	0		
5.5. Monuments	0	0	0		
5.6. Thematic gardens	0	0	0		
TOTAL	39/43 (very good)	27/43 (good)	31/43 (good)		

Table 2. Cont.

Source: own elaboration based on author [4,32,33].

5. Results

5.1. Quality

The assessment of qualities is presented in Table 2 and provides an assessment of open green spaces, public parks, in Gdańsk-Osowa.

5.2. Sustainability

The results in the Sustainability section are very satisfactory. All of the parks offered very good air quality and low noise levels. All of them are part of the green and blue infrastructure. Biodiversity protection was a strong point. TPK Tri-city Landscape Park is a natural forest, with native plants and animals. Park Chirona offered a secluded part, closed to people—an island on the pond. There were PV cells for onsite electricity production in Park Chirona and Park Diany. Waste segregation was promoted.

5.3. Accessibility

Field analysis demonstrates that accessibility to public parks is limited by gated communities, fences, private properties with no trespassing, and physical distance. There

were numerous problems with access to public parks. There were no sidewalks or the sidewalks were too narrow, or obstructed, i.e., by parked vehicles. The surface of some sidewalks was uneven, which may hinder walkability for people with special needs, elderly, etc. Walkways were not buffered from the traffic. There was no seating on the walkways. On the other hand, accessibility to natural forests is naturally limited to healthy adults, older children, and teenagers as there are no even sidewalks inside the forest.

5.4. Amenities in the Park

Both Park Chirona and Park Diany are well-equipped with sports and recreational infrastructure. They are accessible to people with special needs. Their basic needs are satisfied; however, there are no public restrooms in Park Diany. The TPK Landscape Park is a natural forest; therefore, there are neither places to sit nor restrooms nor drinking water.

5.5. Architectural Design

The results in this section are highly satisfactory. Both Park Chirona and Park Diany are well-designed and offer sensory stimuli. They are full of salutogenic design features, focal points, and fascinating landmarks. The TPK Landscape Park offers long vistas and beautiful landscapes that engage the imagination.

5.6. Social Engagement

Park Chirona, Park Diany, and the TPK Tri-city Landscape Park are places that can be used for social engagement. There are events organized in all of them. There are no works of art, monuments, or thematic gardens in any of them.

Park Chirona received 39, Park Diany 27, and the TPK Tri-city Landscape Park 31 out of 43 possible points. That means that they offer the majority of possibilities for health-promoting activities. However, the evaluation of the pathways to parks demonstrated several deficiencies. Some of the pedestrian paths were uneven, too narrow, with some obstacles, and not buffered from the traffic. The highway was a barrier limiting access to the TPK Tri-city Landscape Park.

6. Discussion

This study's aim was to explain why the life quality indexes and satisfaction with green public parks and spaces in Gdańsk-Osowa are so low. The study thesis was that the public parks in that suburb, even though they offered health-promoting qualities, have poor accessibility.

The research results confirmed this thesis. There were two research objectives: first, to verify the health-promoting qualities of public parks and "UGSs" in Gdańsk-Osowa, and then to assess their accessibility. The quality assessment showed that both of the parks unite the health-promoting qualities. The results demonstrated that all three parks are well-developed and maintained. The scores were as follows: Park Chirona 39/41, Park Diany 27/41, and TPK Tri-city Landscape Park 31/41 points.

The good result for Park Chirona was anticipated. This space was voted as The Most Beautiful Public Space of the Pomeranian Voivodeship in 2012 and is well-maintained. The only two categories that were missing were community gardens and personalization. However, in this particular case, those features may be added to the park if needed. Additionally, the park is surrounded by private gardens, and thus, some level of personalization and community gardening is present.

The result for Park Diany was better than expected. The park is tiny, but well-equipped with sports and recreational infrastructure for all age groups, as well as a dog park.

The astonishingly low result for the TPK Tri-city landscape park in comparison with small pocket parks results from the fact that the tool Universal Standard for Health-Promoting Places focuses on qualities related to human physical and psychological regeneration and includes categories evaluating comfort and accessibility. The relatively low result for the TPK Tri-city Landscape Park results from the fact that natural or semi-natural forests are not naturally accessible to people with any special needs without additional amenities. The trails in the forest are accessible only to the most fit and healthy.

The field study demonstrated that even though the parks are beautiful and full of interesting features and recreational infrastructure, they may be too difficult to visit for many users. The deficiencies were observed on the road to the parks. The non-existent or too-narrow sidewalks limit the possibility of getting to the park. Some of the pedestrian paths were uneven, with some obstacles, and not buffered from the traffic. The highway was a barrier limiting access to the TPK Tri-city Landscape Park. The natural parks protect nature and the reason for their establishment was to protect natural landscapes from further development. Therefore, it would not be a good idea to build paths, walkways, and roads to accommodate users in the natural parks. This study demonstrated that natural parks should not be regarded as universal places for everyday recreation for all of the inhabitants. They should not be treated as "UGSs" that would satisfy the recreational needs of new inhabitants. Instead, "UGSs" with universal access should be planned simultaneously with any new development. Moreover, the terrain of the parks is relatively small when compared to the number of inhabitants who live in its vicinities. The anthropological pressure on the natural forest is very high. The same is true for all of the public open green spaces in the district.

7. Conclusions

The results of the evaluation with the Universal Standard for Health-Promoting Places demonstrated that all three parks in Gdańsk-Osowa can be considered health-promoting places. The tool Universal Standard for Health-Promoting Places is so far the only tool dedicated to the assessment of the health-promoting qualities of urban public parks. The limitation of the assessment with this tool is related to the subjectivity of a few intangible categories. Evaluation by a team of researchers may be more reliable to convince the decision maker and developers about the reliability of the assessment.

This study confirmed that the major problem in the studied district and many cities in Poland and Central Europe is accessibility. The walkability of streets connecting the public parks with multifamily housing should be improved. There were streets with no walkways, or they were too narrow and uneven. The new buildings were added without improving the poor walking infrastructure. Even though the architecture of new buildings is modern, interesting, and uses high-quality materials, the grid of walkways and accessible public parks need to be improved to match these high standards.

Moreover, the observation led to the conclusion that there is not enough per capita recreational space within walking distance from the multifamily housing. The existing parks are so popular that it is difficult to find a sitting place during the weekends on sunny days. This is especially seen in Park Diany, which was extremely crowded during the time of observation.

The results of this study are important for health-promoting urban planning and design. This study proves that there is an urgent need to introduce more quality public parks into the urban grid when planning for new development of densely populated urban areas. Relying on award-winning "UGSs" is not enough to satisfy the recreational needs of a constantly growing population. When the number of users is significantly increasing, new "UGSs" should be constructed. Moreover, the accessibility of public parks within walking distance is often overlooked when planning new developments. The quality of streets, bicycle paths, and roads leading to the park is crucial to attract possible users, and so is accessibility with public transport. Resilient, health-promoting, and accessible cultural landscapes are important features of urban neighborhoods. Both the accessibility and quality of public green spaces may have a direct effect on satisfaction with the place of living and quality of life indexes.

This study was limited to one district of the Gdańsk agglomeration. It represents well the common problems of many cities in Poland and Central Europe. Further studies in other climates and continents may be beneficial to better understand the importance of designed open public green spaces for human inhabitants of modern cities.

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References

- 1. Gesler, W. Lourdes: Healing in a place of pilgrimage. *Health Place* **1996**, *2*, 95–105. [CrossRef]
- 2. Gesler, W. Therapeutic Landscapes: An evolving theme. *Health Place* 2005, 11, 295–297. [CrossRef] [PubMed]
- 3. United Nations Educational, Scientific and Cultural Organisation, Convention Concerning the Protection of the World Cultural and Natural Heritage Adopted by the General Conference at Its Seventeenth Session, Paris, France, 16 November 1972. Available online: https://whc.unesco.org/archive/convention-en.pdf (accessed on 26 March 2024).
- 4. Trojanowska, M. Parki i Ogrody Terapeutyczne. (Therapeutic Parks and Gardens); Wydawnictwo Naukowe PWN: Warszawa, Poland, 2017.
- PLACENESS, PLACE, PLACELESSNESS A Website by Edward (Ted) Relph Exploring the Concept of Place, Sense of Place, Spirit of Place, Placemaking, Placelessness and Non-Place, and Almost Everything to do with Place and places. Available online: https://www.placeness.com/ (accessed on 12 November 2022).
- Brosz, M.; Załęcki, J. Jakość Życia w Gdańsku i Jej Społeczno-Przestrzenne Uwarunkowania. Studium Socjologiczne. (Quality of Life in Gdańsk and Its Socio-Spatial Conditions. A Sociological Study); Wydawnictwo Zakładu Realizacji Badań Społecnzych Q&Q: Kawle Dolne, Poland, 2017.
- 7. Ulrich, R. View through a window may influence recovery from surgery. Science 1984, 224, 420–421. [CrossRef] [PubMed]
- 8. Largo-Wight, E. Cultivating healthy places and communities: Evidenced-based nature contact recommendations. *Int. J. Environ. Health Res.* **2011**, *21*, 41–61. [CrossRef] [PubMed]
- 9. Bell, S.L.; Foley, R.; Houghton, F.; Maddrell, A.; Williams, A.M. From therapeutic landscapes to healthy spaces, places and practices: A scoping review. *Soc. Sci. Med.* **2018**, *196*, 123–130. [CrossRef] [PubMed]
- 10. Maas, J.; Verheij, R.A. Morbidity is related to a Green living environment. *J. Epidemiol. Community Health* **2009**, *63*, 967–973. [CrossRef] [PubMed]
- Trzaskowska, E.; Adamiec, P. Green as an element of tipping attraction and quality of public spaces. *Acta Sci. Pol. Adm. Locorum.* 2017, *16*, 111–123. [CrossRef]
- 12. Trojanowska, M.; Sas-Bojarska, A. Health-affirming everyday landscapes in sustainable city. theories and tools. *Archit. Civ. Eng. Environ.* **2018**, *3*, 3. [CrossRef]
- 13. Łukasiewicz, A.; Łukasiewicz, S. Rola I Kształtowanie Zieleni Miejskiej [Urban Greenery Role and Development]; Wydawnictwo Naukowe UAM: Poznań, Poland, 2016. [CrossRef]
- 14. Wüstemann, H.; Kalisch, D.; Kolbe, J. Access to urban green space and environmental inequalities in Germany. *Landsc. Urban Plan.* **2017**, *164*, 124–131. [CrossRef]
- 15. Krzeptowska-Moszkowicz, I.; Łukasz, M.; Karolina, P. Evolution of the Concept of Sensory Gardens in the Generally Accessible Space of a Large City: Analysis of Multiple Cases from Kraków (Poland) Using the Therapeutic Space Attribute Rating Method. *Sustainability* **2021**, *13*, 5904. [CrossRef]
- 16. Krzywnicka, I.; Jankowska, P. The accessibility of public urban green space. A case study of Białystok city. *Acta Sci. Pol. Adm. Locorum.* 2021, 20, 203–214. [CrossRef]
- 17. Korwel-Lejkowska, B.; Topa, E. Dostępność parków miejskich jako elementów zielonej infrastruktury w Gdańsku (Availability of city parks as elements of green infrastructure in Gdańsk). *Rozw. Reg. I Polityka Reg.* **2017**, *37*, 63–75. [CrossRef]
- Rosenblatt Naderi, J. Landscape Design in the Clear Zone: The Effect of Landscape Variables on Pedestrian Health and Driver Safety. 2002. Available online: https://journals.sagepub.com/doi/10.3141/1851-12 (accessed on 22 April 2024).
- 19. Rosenblatt, N.J. Design of walking environments for spirituals renewal. In Proceedings of the Walk21-V Cities for People, the Fifth International Conference on Walking in the 21st Century, Copenhagen, Denmark, 9–11 June 2004.
- Takano, T.; Nakamura, K.; Watanabe, M. Urban residential environments and senior citizens' longevity in megacity areas: The importance of wakable green spacer. J. Epidemiol. Community Health 2002, 56, 913–918. [CrossRef] [PubMed]
- 21. Van Dyck, D.; Cardon, G.; Deforche, B.; Sallis, J.F.; Owen, N.; De Bourdeaudhuij, I. Neighborhood SES and walkability are related to physical activity behavior in Belgian adults. *Prev. Med.* **2010**, *50*, S74–S79. [CrossRef] [PubMed]
- Van Dyck, D.; Cardon, G.; Deforche, B.; Owen, N.; Sallis, J.F.; De Bourdeaudhuij, I. Neighborhood walkability and sedentary time in Belgian adults. *Am. J. Prev. Med.* 2010, 39, 25–32. [CrossRef] [PubMed]
- Wajchman-Świtalska, S.; Alina, Z.; Anna, L. Recreation and Therapy in Urban Forests—The Potential Use of Sensory Garden Solutions. *Forests* 2021, 12, 1402. [CrossRef]

- 24. Gdańsk Municipality Official Webpage. Available online: https://www.gdansk.pl/osowa/ludnosc-i-ilosc-mieszkancow,a,161199 (accessed on 26 March 2024).
- 25. Developer Official Webpage. Available online: https://www.raipb.pl/ (accessed on 26 March 2024).
- 26. Gdańsk Municipality Official Webpage. Available online: https://www.gdansk.pl/osowa/planowanie-i-kierunki-rozwoju,a,16 1208 (accessed on 26 March 2024).
- Study of the Conditions and Directions of Spatial Development in the City of Gdańsk [PL Studium Uwarunkowań I Kierunków Zagospodarowania Przestrzennego Miasta Gdańska]. Available online: https://bip.brg.gda.pl/studium-suikzp/obowiazujace-2019 (accessed on 26 March 2024).
- Gdańsk Municipality Official Webpage. Available online: https://www.gdansk.pl/wiadomosci/Zarobki-w-Gdansku-i-innychmiastach-wojewodzkich-Czerwiec-2023,a,247677 (accessed on 28 October 2023).
- Gdańsk Road and Greenery Administration Official Webpage Dedicated to Park Chirona. Available online: https://gzdiz.gda.pl/ mapa/park-chirona,o,79 (accessed on 28 October 2023).
- Gdańsk Road and Greenery Administration Official Webpage Dedicated to Park Diany. Available online: https://gzdiz.gda.pl/ mapa/park-diany,o,108 (accessed on 28 October 2023).
- 31. Tricity Landscape Park Official Webpage. Available online: https://tpkgdansk.pl/ (accessed on 28 October 2023).
- 32. Trojanowska, M. Assessment of therapeutic qualities of ten public parks in Bydgoszcz. Bud. I Archit. 2019, 18, 121–143. [CrossRef]
- 33. Trojanowska, M. A universal standard for health-promoting places. Example of assessment—On the basis of a case study of Rahway River Park. *Bud. I Archit.* 2021, 20, 57–82. [CrossRef]
- 34. Available online: https://tpkgdansk.pl/o-parku-7/przyroda-1/flora-i-mikroflora/ (accessed on 26 March 2024).
- 35. Real-Time Visual Map of Air Quality. Mapa Wizualna Jakości Powietrza W Czasie Rzeczywistym. Available online: https://aqicn.org/map/gdansk/pl/ (accessed on 28 October 2023).
- 36. Portal for Permanent Noise Monitoring in Gdańsk, Portal Stałego Monitoring Hałasu W Gdańsku. Available online: https://mag.bmt.com.pl/VisMap/apps/gdansk/public/index.html (accessed on 28 October 2023).

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