

Examining Children's Playgrounds in the City of Çanakkale within the Scope of Child-Friendly Cities*

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Abstract

In recent years, the 'Child Friendly City' movement has been launched, aiming to make cities more livable and safer for children. In this study, different children's playgrounds in Çanakkale have been examined within the scope of 'child friendly cities. Basic frameworks regarding their use have been determined by scanning domestic and foreign literature, and photographs and observations have been made in the field. 6 parks, which differ according to their use and distribution of needs, have been evaluated according to the principles and rules of 'child friendly cities. This development is the growth of child development, the growth of livable cities and the emergence of the environment-nature relationship for children. According to the findings obtained as a result of the study, the lack of lighting and the need to take security measures in this direction, the lack of shade distribution, the delay in plant design and the dysfunction of construction elements were determined and design suggestions were presented for these.

Keywords: Child Friendly City, Children and Playgrounds, Children and City, Çanakkale.

*This study is not included in the study group that requires TR Index Ethics Committee Approval.

1. Introduction

Cities, which constitute the living environments of modern societies, are gaining a complex structure day by day. Urbanization is the gradual concentration of the population of a society. The increase in economic activities with the increase in population is a result of urbanization. At the same time, urbanization can be defined as a process in which the economic, technological and demographic structure of life in a society is formed by temporal and sectoral changes (Davis, 1965). While industrialization also influences urbanization, it also contributes to modernization and these processes work together (Kumar & Rai, 2014).

The process of change created by urbanization manifests itself in larger human settlements than villages, with the population gradually becoming denser and people becoming more involved in different production functions. People living in village areas migrate to cities or other regions for better work and living conditions. This expands the environmental areas in cities and urban transformation activities begin. At the same time, with the intensification of urbanization, urban transformations have also started to increase over time. Urban transformations: changes in land use, destruction of forest areas, soil loss and increased energy consumption negatively affect demographic dynamics (Lawrence, 2019). This situation also leads to inequality between different age groups and various income groups (Fabris et al., 2020).

In the case of inequality, since children are not part of the planning process and do not have a say, there are negative effects for this age group in environmental planning. Therefore, incorrect planning affects children's physical and mental health and reduces their quality of life. Even children living in different living standards live in an environment where they do not have the opportunity to play freely, socialize with their peers, and act independently (Aziz & Said, 2012). Many cities do not provide a healthy living environment for children to be physically active for a better adulthood (Krishnamurthy, 2019).

How children perceive this complex structure, and their environment has been an important research topic (Kurt Çavuş, 2024). The factors that cause complexity in the city, such as increasing irregular construction, the decrease in open spaces that provide an environment for recreational activities, and the fact that infrastructure arrangements are made depending on cars, turn cities into dangerous and difficult to reach areas for children. In the redesign of urban spaces, it is very important to take children, who are the individuals of the future, into special consideration. Because ensuring that children grow up as strong and healthy individuals and that they live in healthy, safe and happy environments in the future is also one of the responsibilities of the global society (Özcan Buckley & Türkoğlu, 2022).

1.1. The Emergence of Child-Friendly Cities

Cities around the world have rapidly become the focal point of change and transformation due to the impact of globalization in the post-1980 period. Population growth and integrated living spaces in cities, as well as open green areas per capita for society, have decreased, and as a result, planning people-oriented friendly cities has become increasingly difficult. Children, who represent the future of cities and make up most of the population, are a group affected by these negative factors, and the 'Child Friendly Cities' movement was initiated by UNICEF to make cities more livable for them. Historically, most of the global population has lived in city centers of varying sizes. Children constitute one-third of the 4 billion people living in urban areas. It is estimated that by 2050, approximately 70% of children will live in urban areas, many in slums (UNICEF, 2024).

The city of Fano in Italy was chosen as the first child-friendly city in 1991 as "la citta dei bambini". In order to increase the welfare of children in this city, the Children's City Laboratory (1991) and the Children's House (1998) were opened. In this way, communication was established between children and the administration, a laboratory where children could benefit and a playhouse where they could play freely were established (Aydoğan & Dilek, 2024).

The policies shaped by UNICEF's workshop within the scope of the Habitat II Conference held in İstanbul in 1996 introduced the concept of Child-Friendly City in order to combat the negative effects of rapid urbanization and to consider children as a special urban group (Özcan Buckley & Türkoğlu, 2022).

According to UNICEF, Child Friendly Cities are: "A city or, more generally, a local government system committed to implementing the rights of children. A Child Friendly City is the embodiment of the Convention on the Rights of the Child at the local level, meaning that the rights of children are reflected in policies, laws, programs and budgets in practice. The concept of a Child Friendly City includes communities and other local government systems, drawing on a series of experiences that have emerged under the Child Friendly City Initiative (UNICEF, 2023). In Child Friendly Cities, specific goals are prioritized, with the well-being of the child at the forefront. These goals include ensuring that children have access to basic services such as health and education, can walk the streets safely, play with their friends and enjoy green spaces, and participate in cultural and social activities. Furthermore, children should live in an environment that provides equal rights and opportunities, regardless of their ethnicity, religion, income, gender or disability (UNICEF, 2023).

1.2. Relationship Between Children, Play and Nature

Natural areas are an important element for children's development and creativity. Therefore, the correct use of natural landscape elements is important. Scandinavian researchers have stated that children's motor skills develop more in playgrounds designed with natural elements. Another study conducted in the United States stated that different playgrounds provide positive results on attention deficit in children (Pouya, Bayramoğlu & Demirel, 2016).

Plant Design: Plant elements that are important in terms of functionality and aesthetics are an important factor in children's playgrounds. Playgrounds should provide functional privacy and prevent noise pollution, thus protecting children's safety and health. They should aesthetically attract the child's attention and facilitate their adaptation to the playground. Poisonous plants should not be used in plant design, and plants with colorful flowers or fruits that attract creatures such as bees and butterflies should be avoided. Broad-leaved tree and shrub species should be preferred to provide shading. Large grass surfaces can be preferred to increase children's sense of freedom. In this case, children develop their senses such as touch and feel.

Natural Landscape Elements: Water has always had a relaxing effect on human life. Water has an important effect on the development of emotional and motor skills for children. Water and sand elements develop children's creative intelligence and facilitate their socialization with other children. Ponds, artificial pools and games played with water can provide a fun and enjoyable environment for children. Children can spend different times by throwing stones into water and examining the ecological structure of water. Similarly, children's perception skills can be developed by creating different topographic formations (hills and valleys) (Verhe, 1995).

1.3. Children, Games and Playgrounds

Playing outdoors is an indispensable element for children. It supports children's physical and social interaction with the environment. Children's access to the outdoors is extremely important for their development and well-being. Studies have emphasized that playing outdoors contributes to children's health, motor and social development. The use of outdoor areas should be on the agenda for children's development between the ages of 6-11 (Legendre & Gomez-Herrera, 2011).

Children may have different points of enjoyment in games. While some enjoy active games and competitions, other children enjoy imaginative games. The type of games children enjoy varies from person to person. When building a good playground, it should be designed in a way that allows children to use their bodies, interact with the environment and play different types of games. Themed game designs have recently become quite popular in the United Kingdom. Themed design areas are important in creating a sense of belonging for children. Creating eye-catching and vibrantly colored themed designs in educational areas such as schools helps capture children's imagination. There are elements to consider in designs suitable for different types of games.

Active play: These are areas where active physical activities such as climbing and running can be done. They provide an area where children can release their energy during break times. It is important to include active play in game designs.

Sensory play: This is when children explore games with their sensory organs such as touch. Grassy areas and sandpits allow children to touch various textures.

Imagination play: Some children prefer imagination play in play activities. These children like to create games in their memories, play dolls, and adventures such as treasure hunts. Playgrounds that provide them with the opportunity to develop their imagination are of great importance.

Social play: This type of play is a game where sports equipment and activities take place and that requires following the rules (Design & Lines, 2024).

Children exercise their freedom through play. At this age, children can symbolically represent their emotions. After the ages of 6-13, children start going to school and review their games and experiences with social activities. They have more freedom, friendship and environmental interactions and can explore the environment they live in. In this regard, planning urban open spaces for children is of great importance (Bakar, 2001).

One of the elements in ensuring social development and sustainable urban development is planning to meet the needs of children in urban areas (Dursun & Güller, 2019). The basis of the child-city relationship is the child's development, playing games and the way they perceive space. Social-cultural, physical and economic factors have a great impact on the development of a city and direct the structuring of open green areas, structures and spaces within the city (Aydoğan & Dilek, 2024). Children need to play games as they age, and playgrounds are indispensable and important areas for their development (Memiş & Gülcan, 2020). Childhood, which is the most important period in the development of an individual, plays a great role in the formation of the child's personality. In addition to being the period when the foundations of learning are laid, play in the child's world has an important place in emotional, physical and social development. The child has the opportunity to get to know his/her social environment and develop his/her relationship with society through games (Aklıbaşında, Tırnakçı & Özhanç, 2018). Considering these benefits of play on children, children's playgrounds should be designed or rearranged according to certain criteria to ensure that children can play with their friends and benefit from green areas, which is among the goals of a child-friendly city. Studies show that various environmental factors are important in the design of open areas where children can play.

According to Agarwal, Sehgal and Ogra (2021), parks offer important opportunities for children to learn about nature, socially interact with friends and family, participate in physical activities, and gain new abilities such as basic motor skills. Such activities are necessary for the physical, social, and mental health of children. The most suitable playgrounds for children are areas designed according to their natural play needs and support social, physical, and cognitive development stages. In this context, there are five basic parameters to consider in the design of children's playgrounds.

Physical parameters: Children are affected by the physical characteristics of the environment during their development. Well-maintained facilities such as clean areas, seating, garbage bins and good ground conditions encourage children to go to parks.

Cognitive Parameters: Children explore and understand their environment through play. In this process, they develop their cognitive skills. Challenging and innovative playgrounds attract children's attention.

Perceptual Parameters: The development of children's environmental perception is important for their growth and connection with the environment. Design elements such as natural elements, paths and water features increase the quality of parks. Children generally prefer natural elements such as trees, grassy areas and a variety of surfaces.

Emotional Parameters: Environmental factors can strongly affect children's physical and emotional responses. Play in open spaces offers children the opportunity to move freely and release their energy. Ensuring safety is a critical element for children to feel comfortable and safe in playgrounds.

Social Parameters: Play enables children to develop social skills. Interaction with friends or family members increases participation in physical activity (Agarwal, Sehgal & Ogra, 2021).

When parks and playgrounds in a region are planned and designed to encourage different opportunities, young children can find creative and challenging play opportunities in their neighborhoods (Wilhelmsen et al., 2023). In addition, playgrounds should be close to homes, equipment should be located in a way that children can easily reach, the ground structure of the playground should include flat and hard surfaces so that children can play comfortably, there should be play equipment suitable for different age groups, play equipment and grounds should be designed to ensure children's safety, children should be able to play comfortably throughout the year, there should be appropriate rest areas so that adults can watch children, and open areas should be large enough to allow for various activities (such as basketball, cycling). In addition to ensuring that these areas are safe and accessible, children should be able to interact with nature by including natural elements in the areas (Churchman, 2003).

The aim of this study is to analyze the children's playgrounds in the parks selected from different regions of Çanakkale city in line with the given information and criteria and to present suggestions for the development of the playgrounds in accordance with the criteria.

2. Methodology

The main material of the study consists of 6 parks selected from different regions of Çanakkale city. These are Sinan Cemgil Park, Özgürlük Park, Halk Bahçesi, Prof. Dr. Telat Koç Park, Anadolu Hamidiye Tabyaları Park and Sağlıklı Yaşam Park (Figure 1). The reasons for selecting these parks are that they are located in different regions and differ in terms of size and equipment.

Çanakkale province, located in the Southern Marmara region of Türkiye, between 25° 40'-27° 30' east longitudes and 39° 27'-40° 45' north latitudes, has a geographically important location (Öncül & Kelkit, 2023).



Figure 1. Location of study areas (developed using Google Earth, 2024 and Google Maps, 2024).

The study method consists of the stages of data collection, analysis of the collected data and development of recommendations. In the first stage, a domestic and foreign literature review was conducted on the concept of "Child Friendly Cities" to collect the data accurately and comprehensively, and the basic framework of the study was established in line with the information obtained from the literature. After the data collection, on-site observations were made in the children's playgrounds within the scope of the study and certain areas were photographed. During the observations, the physical characteristics of each playground were examined in detail, considering factors such as children's safety and accessibility, and tables were prepared and interpreted in line with these characteristics. During the study, various determinations were made regarding the extent to which the children's playgrounds in the areas examined complied with the determined criteria. According to the findings obtained, the aspects of the existing playgrounds that were not in line with the "Child Friendly Cities" concept were determined and a few design recommendations were developed to eliminate these deficiencies.

3. Findings

The population of Çanakkale Central District is 204,454 (TÜİK, 2024). Within the framework of the Child-Friendly City concept, parks and green areas are important places that meet the needs of both children and adults. In his study, Ilgar (2022) found that parks and green areas in Çanakkale city are mostly preferred by families with children for their children to spend time, while other individuals use these areas for resting and spending time.

3.1. Sinan Cemgil Park

Sinan Cemgil Park, the features of which are given in Table 1, has the possibility of being preferred due to its different facilities and proximity to residential areas.

Table 1. Features of Sinan Cemgil Park

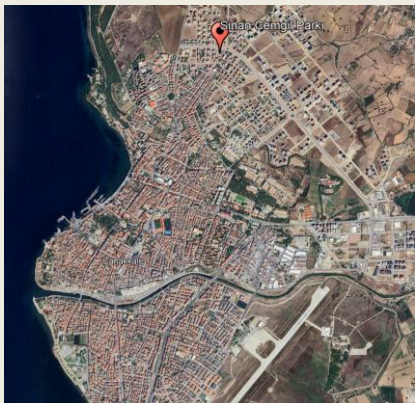

Sinan Cemgil Park	
Location and Environmental Features  	<p>It is located in the Esenler neighborhood. The distance to the nearest residential area is approximately 6 meters.</p> <p>It is surrounded by vehicle roads. Ahmet Piriştina Street in the north has heavy traffic. There is a taxi stand in the south.</p> <p>There is a pedestrian crossing to reach the southwest and north entrances.</p>
Extent of the Area	Approximately 4500 m ²
Number of Entries and Directions	Total 6 entrances: 2 from north, 2 from east, 1 from west, 1 from southwest.
Existing Structures and Facilities	3-hoop basketball court, outdoor sports equipment, children's playgrounds (with different surfaces), green areas, cafeteria, transformer building.
Vegetal Structure of the Area	<i>Cercis siliquastrum</i> , <i>Photinia serrulata</i> , <i>Pinus pinea</i> , <i>Melia azedarach</i> , <i>Platanus orientalis</i> plants are predominantly found in the area.

Table 1 continued



Although there are pedestrian crossings near the southwest and north entrances, the absence of any traffic lights in the area poses a safety risk, especially for children reaching the area alone. The children's playgrounds in the park have rubber, cube stone, concrete and sand surfaces.

The seating units in the park are shadeless and backless, which negatively affects the comfort of the users. In addition, considering the facilities of the area, the seating units are not sufficient. The presence of plants in the park is a positive feature that encourages children to interact with nature. However, the needle leaves falling from the Pinus pinea trees in the park can create slipperiness in areas where outdoor sports equipment is located.

The absence of any security elements in the park also reduces the possibility of children playing safely in the area. The lack of lighting in the park is another negative feature in terms of night use and safety.



3.2. Sağlıklı Yaşam Park

The Sağlıklı Yaşam Park, whose features are given in Table 2, is a park designed to encourage sports and physical activity. The fact that there is no pedestrian crossing to the park and no traffic lights in the area may pose security risks, especially if children try to access the park alone. In addition, the heavy vehicle traffic on Lozan Street next to the park may pose a security problem.

High human circulation in the units located in the immediate vicinity of the park supports the intensive use of the park. The facilities in the park have sand, concrete and tile semolina floors. The seating units in the park are unshaded and inadequately designed, which does not provide a comfortable resting area for both children and adults.

Since the park's vegetation is not yet developed, there is not enough shade in the park. In addition, the absence of any security elements in the park makes it difficult for children to play safely in the area. Lack of lighting also creates a security gap in terms of night use.

Table 2. Features of the Sağlıklı Yaşam Park

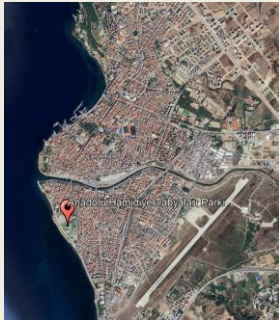
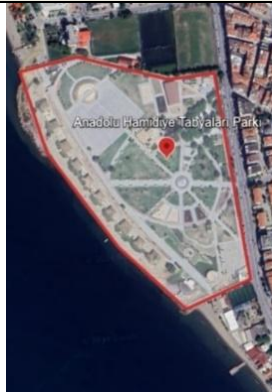









Sağlıklı Yaşam Park	
Location and Environmental Features   <p>It is located in Barbaros neighborhood. The distance to the nearest settlement is approximately 170 meters. It is surrounded by vehicle roads. Airport in the north, 17 Burda AVM in the northwest, Terzioğlu Girls KYK Dormitory in the southeast. Lozan Street has heavy vehicle traffic (from northwest to southwest).</p>	
Extent of the Area	Approximately 12.000 m ²
Number of Entries and Directions	There are 3 entrances in total: West, East and Southeast.
Existing Structures and Reinforcements	Fitness and yoga center, volleyball and basketball courts, outdoor sports equipment, 4 m wide walking and running tracks, children's playground, green areas, skateboard units in a 250 m ² closed area.
Vegetal Structure of the Area	<i>Magnolia grandiflora</i> , <i>Photinia fraseri</i> 'Red Robin', <i>Cupressus arizonica</i> , <i>Festuca glauca</i> , <i>Fraxinus excelsior</i> , <i>Platanus orientalis</i> plants are predominantly found in the area.



3.3. Anadolu Hamidiye Tabyaları Park

The Anadolu Hamidiye Tabyaları Park, the features of which are given in Table 3, serves a large user base from all age groups with its historical, cultural and social facilities.

Table 3. Features of the Anadolu Hamidiye Tabyaları Park

Anadolu Hamidiye Tabyaları Park		
Location and Environmental Features		 
		<p>It is located in Barbaros neighborhood.</p> <p>The distance to the nearest residential area is approximately 16 meters.</p> <p>There is Dardanel Sports Joint Stock Company Facilities in the north, Dabakoğlu Facilities in the south, Aziziye Street in the east, and the sea in the west. Aziziye Street has heavy vehicle traffic.</p> <p>There is a pedestrian crossing to reach the entrances in the west.</p>
Extent of the Area		Approximately 77.450 m ²
Number of Entries and Directions		There are 3 entrances in total: All 3 are from the west.
Existing Structures and Reinforcements		Open exhibition areas, theme park, sitting/relaxation areas, observation terrace, children's playgrounds, ceremony area, prayer room, toilet, cafeteria, car park, administration building.
Vegetal Structure of the Area		In the field; <i>Acacia dealbata</i> , <i>Aesculus carnea</i> , <i>Abelia grandiflora</i> , <i>Buxus sempervirens</i> , <i>Albizia julibrissin</i> , <i>Salix babylonica</i> , <i>Pinus pinea</i> , <i>Prunus cerasifera</i> 'Atropurpurea', <i>Catalpa bignonioides</i> , <i>Cupressus arizonica</i> 'Fastigiata', <i>Acer negundo</i> 'Flamingo', <i>Lagerstroemia indica</i> 'red rocket', <i>Cercis siliquastrum</i> , <i>Cedrus atlantica</i> , <i>Cedrus deodora</i> , <i>Gaura lindheimeri</i> , <i>Acer plamatum</i> , <i>Fraxinus excelsior</i> , <i>Tilia americana</i> 'nova' <i>Wisteria sinensis</i> , <i>Viburnum opulus</i> , <i>Pittosporum tobira nana</i> , <i>Hydrangea macrophylla</i> , <i>Rosa spp.</i> there are mainly plants.
  		
  		
  		

Although there are pedestrian crossings on the access route to the park, the lack of traffic lights creates a significant safety risk due to the heavy vehicle traffic on Aziziye Street, especially when children go to the park alone. The children's playgrounds are separated according to age groups and are equipped with safe and modern play equipment placed on rubber flooring. These features support both the physical and social development of children. The seating units in the park are sufficient in number and ergonomically designed, allowing both adults and children to spend long periods of time in the park. In addition, the plant design of the park is planned in a density and variety that will encourage children's interaction with nature, which contributes to their processes of discovering the environment and developing nature

awareness. In addition, the presence of security guards in the park and their active supervision of the area provides a safer environment for children to play in, providing a safer environment compared to other parks. The walking paths and open areas in the park are designed to meet the resting and socializing needs of both adults and children. With these features, the park offers a more comprehensive and safe option for users compared to other areas in the vicinity.

3.4. Prof. Dr. Telat Koç Park

Prof. Dr. Telat Koç Park, the features of which are given in Table 4, is a park organized for users with a wide range of functional areas. There are no pedestrian crossings or traffic lights on the roads surrounding the park. Security measures can be increased due to the park's location being far from the city center. The park consists of a basketball court, fitness area, football field, children's playgrounds, outdoor sports equipment and green areas. Vehicle traffic is intense in reaching the park, and there are no traffic lights or pedestrian crossings. There are few seating units for users in the park, and there are not enough resting areas. The fact that the children's playground material is sand can pose a danger to children's health. The lack of plant design does not meet the users' need for shade. The walking paths are wide enough and the paths are supported by the entrance of the park. The inadequacy of the plant presence in the park does not create a suitable environment for children to interact with nature. Since the majority of the grass surfaces are dry, grass plants suitable for climatic conditions should be selected. Inadequate lighting and garbage bins can negatively affect security and environmental health, therefore the necessary precautions should be taken. Although there are generally sufficient functional areas for users, the inadequacy of the plant design greatly reduces the functionality of the park.

Table 4. Features of Prof. Dr. Telat Koç Park

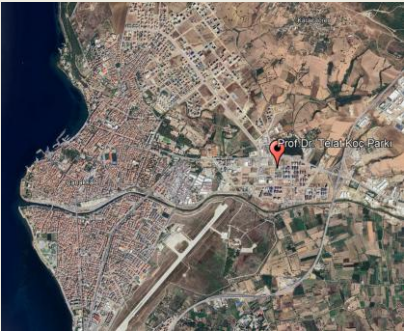

Prof. Dr. Telat Koç Park	
Location and Environmental Features 	 <p>It is located in İsmetpaşa neighborhood. The distance to the nearest residential area is approximately 20 meters. The area is surrounded by two-lane roads on all four sides. İzmir Street is in the north and this route is heavily used by public buses. There are mass housing in the east. Çanakkale Fruit and Vegetable Market is in the west.</p>
Extent of the Area	Approximately 6.000 m ²
Number of Entries and Directions	Total 4 entrances: North, South, East and West.
Existing Structures and Reinforcements	Basketball court, outdoor sports equipment, fitness area, children's playground, green areas, seating and lighting elements, walking path.
Vegetal Structure of the Area	In the area; developing <i>Chamaerops excelsa</i> , <i>Ligustrum lucidum</i> , <i>Platanus orientalis</i> plants are predominantly found.



Table 4 continued



3.5. Özgürlük Park

Özgürlük Park, the features of which are given in Table 5, is a park frequently visited by users, with a walking and running track, a wide variety of children's playgrounds, a cafe and sitting areas, a performance area where events take place, and multi-purpose recreation areas.

Table 5. Features of Özgürlük Park

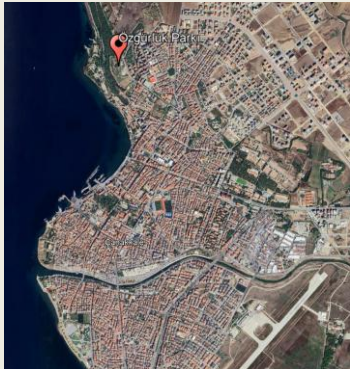
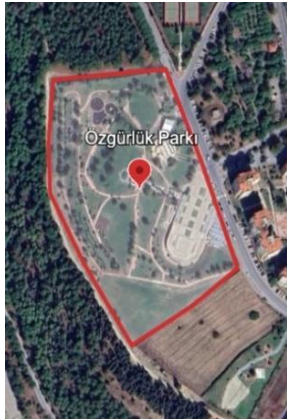
Özgürlük Park	
Location and Environmental Features 	 <p>It is located in the Esenler neighborhood. The distance to the nearest settlement is approximately 20 meters. The east side is a vehicle and pedestrian road, and access to the area is provided from this direction. In the north is the Martyr Kıvanç Kaşıkçı Healthy Life Center, in the south is Masal Park, in the west and northwest is the Military Area, and in the east is Özgürlük Caddesi, which has heavy traffic.</p>
Extent of the Area	Approximately 40.000 m ²
Number of Entries and Directions	There are 3 entrances in total; all 3 are in the northeast direction.
Existing Structures and Reinforcements	Walking and running tracks, children's playground, cafe, observation terrace, bicycle path, performance area, car park, multi-purpose recreational areas and seating units.
Vegetal Structure of the Area	<i>Prunus cerasifera</i> , <i>Berberis thunbergii</i> , <i>Qonethera lindheimeri</i> , <i>Juniperus horizontalis</i> , <i>Magnolia grandiflora</i> , <i>Aesculus hippocastanum</i> , <i>Thuja orientalis</i> , <i>Platanus occidentalis</i> , <i>Cupressus arizonica</i> var. <i>Glauca</i> , <i>Osmanthus heterophyllus</i> 'Variegatus' plants are predominantly found in the area.

Table 5 continued



Since it is not located in the city center of Çanakkale, it is not an area with heavy vehicle traffic. The lack of decisive signs and pedestrian crossings in reaching the area is a negative factor for children. The large size of the park area offers a more comfortable and relaxed environment for users.

Various equipment in children's playgrounds (tracks, sports equipment, slides, etc.) change children's perspective on play and allow their perceptions to develop. The abundance of plant diversity in children's playgrounds is important in terms of landscape aesthetics. The lack of shaded areas in the resting areas in the playgrounds creates an uncomfortable environment for parents.

The use of sand as a construction material in some places is also a factor that negatively affects children's health. The lack of security at every entrance to the area was evaluated as another negative factor. The park is generally described as an area with sufficient green areas, a suitable environment for child-parent relationships, and various playgrounds.

3.6. Halk Bahçesi

Halk Bahçesi, whose features are given in Table 6, offers both recreation and socialization opportunities for users with its large area, various facilities and rich vegetation. The presence of pedestrian crossings near the entrances of the park makes access to the area safe and easy. The fact that the area has a large children's playground contributes to the park being preferred especially by families.

The children's playground attracts attention with its modern equipment and rich variety of facilities. The fact that the ground is covered with artificial grass provides ease of use for children. The benches located around the playground allow parents to spend time comfortably while watching their children.

In addition, the variety and density of the park's vegetation is a positive feature that supports children's interaction with nature. However, the absence of a security guard in Halk Bahçesi and the heavy traffic in the area pose a threat to children's safety. This situation negatively affects the general security of the park.

Table 6. Features of the Halk Bahçesi

Halk Bahçesi	
Location and Environmental Features 	 <p>It is located in the Cevat Paşa neighborhood. The distance to the nearest settlement is approximately 10 meters. In the north is the Çanakkale Governorship, in the west is the Pier, in the south is the Çanakkale Mehmet Akif Ersoy State Hospital Additional Service Building, in the east is the 18 March Atatürk Stadium. In the northwest is Kayserili Ahmet Paşa Street. In the southeast is İnönü Street, which has heavy traffic.</p>
Extent of the Area	Approximately 36,500 m ²
Number of Entries and Directions	There are 5 entrances in total; Northeast, Northwest, Southeast and 2 in the Southwest direction.
Existing Structures and Reinforcements	Cafeteria, Animal shelter, Animal Park, Sports area, Buffet, Toilets and Children's playground.
Vegetal Structure of the Area	In the field; <i>Acer negundo</i> L., <i>Albizia julibrissin</i> , <i>Acer pseudoplatanus</i> , <i>Aesculus hippocastanum</i> ., <i>Melia azedarach</i> , <i>Catalpa bignonioides</i> , <i>Ulmus minor</i> Mill., <i>Elaeagnus angustifolia</i> , <i>Cupressus sempervirens</i> , <i>Fraxinus excelsior</i> , <i>Gleditsia triacanthos</i> , <i>Morus alba</i> , <i>Populus alba</i> , <i>Sophora japonica</i> , <i>Hibiscus syriacus</i> , <i>Lauris nobilis</i> , <i>Ligustrum japonicum</i> , <i>Nerium oleander</i> , <i>Viburnum opulus</i> , <i>Platanus orientalis</i> , <i>Salix babylonica</i> , <i>Cercis siliquastrum</i> , <i>Lagerstroemia indica</i> , <i>Punica granatum</i> , <i>Robinia pseudoacacia</i> , <i>Nerium oleander</i> , <i>Cedrus libani</i> , <i>Thuja occidentalis</i> , <i>Viburnum tinus</i> , <i>Ulmus campestris</i> L. and <i>Pinus brutia</i> plants mainly there are.
	
	
	

4. Conclusion and Recommendations

In terms of social development and sustainable urban development, it is important to plan in cities that will meet the needs of children. Children's development, playing and perception of the environment are

the basic elements that should be taken into consideration in urban planning. Playgrounds are important areas that support children's social, emotional, physical and cognitive development. Parks offer children the opportunity to learn about nature, engage in social interaction and do physical activities. In the design of playgrounds, they should be arranged according to children's play needs and safe, accessible areas that offer various activities should be created. Physical, cognitive, perceptual, emotional and social parameters are among the factors that increase the quality of playgrounds. In addition, parks should be safe and accessible, contain natural elements and be equipped with play equipment suitable for different age groups of children. This study aimed to evaluate the current status of six parks located in the city center of Çanakkale within the framework of the child-friendly city approach and to present suggestions that can be developed in this direction.

Accessibility to parks should be addressed first. One of the biggest problems children face when accessing parks is traffic density and lack of security. Traffic lights, pedestrian crossings and speed reduction measures should be increased on the roads around parks. Soft and shock-absorbing materials such as rubber should be used on the grounds of playgrounds instead of sand or cube stones. This material cushions children's falls and reduces the risk of injury. In this way, a safer environment is created. Children's playgrounds should be designed according to age groups, as in the Anatolian Hamidiye Tabyaları Park. Accordingly, appropriate equipment should be selected for each age group.

In areas where the vegetation is insufficient, the vegetation should be increased. This will both create shaded areas and allow children to have close contact with nature. The natural species of the area should be used predominantly when designing vegetation. This will ensure that sustainable and economic areas with low maintenance costs are designed. In addition, the use of thorny plants, pollination-enhancing and allergy-triggering plant species should be avoided.

Creating a safe environment in parks is important in terms of allowing children to spend time freely. In this respect, security elements in parks should be increased. In addition, lighting should be designed to be suitable for night use. Seating units in parks should be designed comfortably and ergonomically. Shaded and backed equipment will be more ergonomic for users. Play equipment that will contribute to children's creativity and cognitive development should also be preferred. Play area designs should not be limited to equipment such as slides, swings, etc. (Figure 2).



Figure 2. Santiago, Chile: This street was transformed for children by the Global Design Cities Initiative (GDCI), a program of the National Association of City Transportation Officials (NACTO) (Changing Transport, 2024).

When designing child-friendly cities, urban spaces need to be considered as a whole. Transportation options in the city should be shifted from cars to pedestrians and cyclists. In this case, accessibility for children can be prioritized. Transportation can be made safer for children by increasing the number of protected pedestrian crossings (Figure 3).

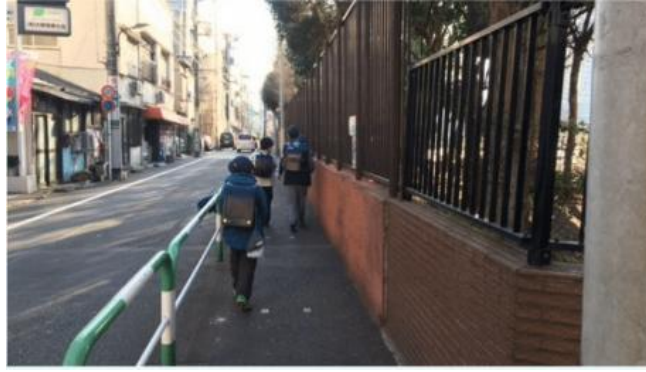


Figure 3. Safe pedestrian paths designed for children in Japan (Savvy Tokyo, 2021).

Traffic calming elements such as raised pedestrian crossings, speed bumps, traffic circles should be close to schools and children's playgrounds. Similarly, in Japan, with the "Kodomo 110-ban" system, children can take shelter in the "Emergency House" when they do not feel safe, thus increasing security measures (Figure 4).



Figure 4. Raised pedestrian crossing and 'Emergency House' for children (Changing Transport, 2024 and Savvy Tokyo, 2021).

One of the important features of child-friendly cities is mobility. Creative, social and physical spaces that will enhance children's play development should be created. Public squares and rooftops that can provide urban landscape environments for children can be developed. Nature-related play groups and sensory play areas that can be designed in public areas offer children the opportunity to develop cognitively (Figure 5). Ways for children to access schools and libraries through play can be developed.



Figure 5. A playground where children can explore nature by playing games and engaging in physical activities (Landscape Structures, 2024).

The process of building child-friendly cities is a detailed process, requiring interdisciplinary work and ensuring that children's needs are considered at every stage of urban planning. Urban areas should

prioritize children's health and well-being, considering play, learning, mobility and safety. Cities can foster the creation of more inclusive and healthy communities by creating child-friendly housing, schools and public spaces. This process supports the sustainability of society in today's rapidly increasing urbanization. Ultimately, creating child-friendly cities contributes to the long-term growth of strong and healthy urban communities.

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