Araştırma Makalesi / Research Article Peyzaj Mimarlığı / Landscape Architecture

DOI: 10.21597/jist.467563

#### Comparative Analysis of Park User Preferences in Konya (Turkey) and Kirkuk (Iraq) Cities

Walaa Ghassan ALABBAS<sup>1</sup>

Ahmet Tuğrul POLAT<sup>1\*</sup>

**ABSTRACT:** Parks provide different benefits to the city apart from being an open area only. Parks are open and green area system components that have effects on the city in many dimensions such as physical, social and economic structures and livability, ecological environment protection, urban aesthetics, education, recreation and contributions to children's education. It is known that parks are valuable for urban sustainability and supporting quality of life and it is seen that the parks have become an important quality objective of cities in terms of both quantity and quality. A park is not only a green area in the city but also an area from which different users can benefit equally as a public space. Park areas are expected to provide services for the needs and requests of different age groups, genders and occupational groups separately. Because of this reason, in planning, it is necessary to consider primarily the designs that give peace and confidence to users, enable them to relax and rest, and most importantly, to be pleased. Planning oriented decisions should be made by systematizing criticisms, reactions, requests of users, various observations, researches such as monitoring, investigation. In this study; park visits of park users in Konya and Kirkuk, their purpose of using parks, units and equipment that should be available in parks, benefits of parks and preferences for activities were determined. Later, different cultures, geographies, social life habits and preferences of park users in Konya and Kirkuk cities have been compared based on the findings obtained. This comparison also shows what kind of changes park planning and design works may undergo on universal and regional scales according to the preferences of park users. The statistically significant differences were determined for preferences related to park visit frequencies (p:0.03), park visit hours (p:0,00), park visit durations (p:0.04), means of transport while going to parks (p:0.00), purpose of using parks (p:0.01), units that should be available in parks (p:0.03) and benefits provided by parks (p:0.00). Suggestions were made to sharers of the subject based on the results obtained.

Keywords: Konya, Kirkuk, Park, Park user, Preferences

Geliş tarihi / *Received*:05.10.2018 Kabul tarihi / *Accepted*:30.11.2018

<sup>&</sup>lt;sup>1</sup>Walaa Ghassan ALABBAS (**Orcid ID:** 0000-0001-7672-5196), Ahmet Tuğrul POLAT (**Orcid ID:** 0000-0002-0980-3243), Selçuk Üniversitesi, Ziraat Fakültesi, Peyzaj Mimarlığı Bölümü, Konya, Türkiye

<sup>\*</sup> Corresponding Author: Ahmet Tuğrul POLAT, e-mail: atpolat@selcuk.edu.tr

This study was produced from Master's thesis of Walaa Ghassan ALABBAS and published as a summary at congress named 1st International Conference on "Agriculture, Forestry & Life Sciences" 6-8 September 2018 in Budapest.

### **INTRODUCTION**

Parks are open and green areas of cities. Parks provide different benefits to the city apart from being an open area only (Polat and Önder, 2004; Önder and Polat, 2012). Parks are adaptation of nature-like place to urban life and its combination with cultural activities. Those are areas built for people increasingly getting away from the nature in cities in order to bring nature to them (Ören, 2015). Parks are open and green area system components that have effects on the city in many dimensions such as physical, social and economic structures and livability, ecological environment protection, urban recreation aesthetics. education. and contributions to children's education (Onsekiz and Emür, 2008). It is known that parks are valuable for urban sustainability and supporting quality of life (Mutiara and Isami, 2012) and it is seen that parks have become an important quality objective of cities in terms of both quantity and quality (More, 1990). Parks have potential to enrich urban life by eliminating monotony and homogeneity of city surrounding (Renklidağ, 2000). Parks are functional elements of green areas in city plannings, where recreational activities take place (Cosaner, 2009). According to Woolley (2003), as representative of urban green areas, parks play an excellent role in balancing the need for city protection against degradation of urban environment while maintaining rapid development of urban growth (Iamtrakul et al., 2005). Parks play a vital role in sustainable urban environments. Urban parks provide significant environmental benefits, enable air and water treatment and reduction in heat islands (Jeon and Hong, 2015).

Parks are complex systems containing many factors. When factors of plants, soil, water, air, color and smell, seasons, visible and sensory experiences, visitors come together, they form a complex parking system (Yücel, 2005). Today, parks gain importance as areas where individuals from every social class (old, young, rich, etc.) are together besides their flora and fauna features (Al-Qudah, 2006). Different parts of parks are used by different user groups and different groups of people use different types of parks (Yücel, 2005). A park is not only a green area in the city but also an area from which different users can benefit equally as a public space (Goličnik, 2008).

As a symbol/reflection of nature in the city, parks allow urban people to maintain their relations with nature, diversify constantly in direction of new use needs arising in time and gain new meanings (Özkır, 2007). Park areas are expected to provide services for the needs and requests of different age groups, genders and occupational groups separately. Because of this reason, in planning, it is necessary to consider primarily the designs that give peace and confidence to users, enable them to relax and rest, and most importantly, to be pleased. Planning oriented decisions should be made by systematizing criticisms, reactions, requests of users, various observations, researches such as monitoring, investigation (Kart, 2002). Studies carried out in the field of park planning and recreation caused use of parks to be analyzed from multiple aspects. Questionnaires conducted about use of parks are used in order to determine satisfaction levels of visitors and therefore, performance level of parks, users' claims, needs and tendencies. Data obtained from park user questionnaires are utilized during the preparation of park management plans (Oğuz, 1998).

In this study; park visits of park users in Konya and Kirkuk, their purpose of using parks, units and equipment that should be available in parks, benefits of parks and preferences for activities were determined. Later, different cultures, geographies, social life habits and preferences of park users in Konya and Kirkuk cities were compared based on the findings 

 Walaa Ghassan ALABBAS and Ahmet Tuğrul POLAT
 Journal of the Institute of Science and Technology, 9(2): 1128-1143, 2019

 Comparative Analysis of Park User Preferences in Konya (Turkey) and Kirkuk (Iraq) Cities

obtained. This comparison also shows what kind of changes park planning and design works may undergo on universal and regional scales according to the preferences of park users. Suggestions were made to sharers of the subject based on the results obtained.

#### MATERIALS AND METHODS

#### Material

Users of Konya and Kirkuk urban parks were selected as main research material. The reason for the selection of Konya and Kirkuk provinces is that they allow comparison of two different cities from a climatic and cultural point of view. Konya Province is located in the south of Central Anatolia Region which is in the middle of Anatolian Peninsula. Surface are of Konya is 38 873 km<sup>2</sup> and its altitude is average 1 011 m. Population of Konya is 2 180 149 according to 2017. Summers are hot and dry, winters are cold and rainy in Konya, having a climate (Anonymous, continental 2014). (Anonymous, 2014). Kirkuk city is boarded by Sulaymaniyah to the east, Koy Sanjaq and Erbil to the north, Mosul to the west, Baghdad to the southwest (Anonymous, 2017a). Surface area of Kirkuk is 9 676  $\text{km}^2$  and its population is 1.26 million (Anonymous, 2017b). In Kirkuk, average annual rainfall is 365 mm and mean yearly temperature is 21.6 <sup>o</sup>C (Anonymous, 2018). There are approximately 20 urban parks in Konya Province and 5 urban parks in Kirkuk Province. Images of parks in Konya Province are given in Figure 1., images of parks in Kirkuk Province are given in Figure 2.



Figure 1. Images of Parks in Konya (Original)



Figure 2. Images of parks in Kirkuk (Original)

Literature such as books, journals, articles, papers, master's and doctoral theses published related to urban parks and preferences of urban park users and internet resources were used as research material. Also, A4 size questionnaire form consisting of 4 pages, Office 2016 and SPSS 22 softwares are other materials of the research.

### Method

Research method was carried out in 4 stages. First of all, topic was determined. In the second stage, the literature was investigated. In the third stage, a questionnaire was designed and implemented and obtained data were organized, frequencies were calculated with SPSS 22 software and statistical analysis was made. Survey questions include users' demographic characteristics (gender, age, educational level, income level and occupation). Parameters relating to park visits according to park users' preferences, their purpose of using parks, units and equipment that should be available in parks, benefits of parks and activity were determined according to information based on literature. Questionnaire was tried to be made easy, applicable. Questionnaire study was conducted by using face-to-face interview method in Konya and Kirkuk cities in Turkish/Arabic languages in March and April 2018.

Questionnaire was made in the parks of related cities on weekends and in the daytime. Sample size was determined from formula  $n=N.P.Q.Z2\alpha/(N-1).d^2$  according to Özdamar (2003). According to this, it was calculated as 96 people for each of Konya and Kirkuk cities. However, it was tried to increase the number of questionnaires to be made as much as possible by considering that there might be invalid questionnaires. Ouestionnaire which was conducted with 212 participants in Konya Province and 103 participants Kirkuk Province, was used in the research.

After questionnaire was completed, questionnaire forms were arranged by means of Microsoft Excel software and frequencies of data obtained were calculated by means of SPSS 22 software. Then, Man Whitney U statistical test was applied to this data. As a result, differences between preferences of park users in Konya and Kirkuk cities were tried to be determined.

#### **RESULTS AND DISCUSSION**

#### **Demographic Characteristics of Participants**

Demographic characteristics of participants are given in Table 1 within the scope of questionnaire study. According to this; approximately half of the participants in Konya Province are male and half of them are female. Approximately half of the participants are students between the ages of 19 and 25, most of them are university graduates, their average income level is between \$ 0 and 300. Approximately half of the participants in Kirkuk Province are male and half of them are female. Nearly half of the participants are between the ages of 18 and 25 and income level of more than half of them is between \$ 300 and 1 100. More than half of the participants are university graduates and about one third of them are public personnel (Table 1).

**Table 1:** Demographic characteristics of participants.

	Konya		Kirkuk		
Gender	Number of People	%	Number of People	%	
1. Female	102	48	48	49	
2. Male	110	52	55	51	
		Age			
1.0-18	22	10	14	15	
2. 19-25	95	45	26	26	
3. 26-35	38	18	18	17	
4. 36-50	31	15	12	13	
5. 51-65	24	11	18	23	
6. 65 and older	2	1	8	6	
Educational status					
1. Illiterate	2	1	9	10	
2. Primary school graduate	16	8	13	13	
3. High school graduate	65	31	17	19	
4. University	106	50	49	50	
5. Postgraduate	22	10	8	8	
Occupation					
1. Student	96	46	20	20	
2. Public personnel	31	14	30	34	
3. Self employed	32	15	12	10	
4. Unemployed	8	4	4	4	
5. Housewife	14	7	15	14	
6. Worker	10	5	9	10	
7. Retired	19	9	7	8	
Average monthly income					
1. \$ 0-300	80	46	22	29	
2. \$ 300-600	58	28	22	26	
3. \$ 600-1100	35	16	22	32	
4. \$ 1100 and more	21	10	9	13	

### **Findings Based on Preferences**

Within the scope of the questionnaire, participants were asked how often they visited parks located in the city where they lived and responses were shown with graphics given in Figure 3. In the light of this data, approximately half of participants in Konya Province visit parks more frequently. Only one third of participants in Kirkuk Province visit parks more frequently. When it was considered in terms of less frequent visit (once a month and once every 15 days), it was found that participants in Kirkuk Province visit less frequently than participants in Konya Province.



Figure 3. Distribution of preferences according to participants' park visit frequencies

# Distribution of preferences for participants' park visit days

Days when participants visited the parks were researched and obtained results were given in Figure 4. According to this, majority of participants in Konya and Kirkuk Provinces preferred to visit parks on weekend days. However, when it was looked at weekday response, it was determined that rate of participants in Kirkuk Province was very low when compared to Konya Province. It is thought that such result has been obtained as a result of access problems to parks in Kirkuk Province.



Figure 4. Distribution of preferences for participants' park visit days

# Distribution of preferences for hours when participants visit parks during the day

Findings about in which hours participants visited the parks during the day were given in Figure 5. When graphics given in Figure are viewed, it was determined that participants in Konya and Kirkuk Provinces preferred to visit parks in the afternoon during the day. It is seen in the striking result that about half of the park users in Kirkuk Province prefer evening hours. It is thought that this results from geographical position of Kirkuk Province and therefore, region's climatic conditions.



Figure 5. Distribution of preferences for hours when participants visit parks during the day

# Distribution of preferences according time periods when participants be present in the parks

Duration their stay was researched when users in Konya and Kirkuk Provinces visited the

parks located in the cities where they lived and findings were given in Figure 6. According to these results, it was determined that majority of participants preferred to spend average of 2-3 hours when they visited the parks in both cities.





# Distribution of preferences of participants for means of transport during their visit

Participants were asked which transportation options they preferred while visiting parks and responses were given in Figure 7. When these answers are examined, very interesting results are seen. While more than half of participants in Konya Province visit parks on foot, about half of the participants in Kirkuk Province visit parks by their private cars. Use of private cars and taxis as a transportation option is widespread in throughout Kirkuk Province. Public transportation vehicles are not preferred in Kirkuk Province much. One of the most important reasons for this is the low fuel prices.



Figure 7. Distribution of preferences of participants for means of transport during their visit

## Distribution of preferences of participants for with whom they visit the parks together

It was investigated with whom park users in Konya and Kirkuk Provinces make their visits together and data obtained are given in Figure in 8. According to this data, a large majority of participants in both cities participating in the research go to parks with friends and families. Also, low rate of people going to parks together with their pets emerged as a dramatic result.



Figure 8. Distribution of preferences participants for with whom they visit the parks together

# Distribution of preferences according to participants' purpose of using parks

Graphics including responses of participants to question regarding participants' purpose of using parks are given in Figure 9. Responses to this question were requested from the participants with 3 preferences according to their importance. According to this, participants in Konya Province stated that they visited parks for purpose of enjoying a scenery at the first significance level, walking at the second significance level and resting/relaxing at the third significance level. Likewise, participants in Kirkuk Province stated that they visited parks for purpose of entertainment at the first significance level, cultural visit at the second significance level and resting/relaxing at the third significance level. When this situation is evaluated, it is understood that park users in Kirkuk Province prefer parks for the purpose of entertainment while aesthetic based on plant is on the forefront for park users in Konya Province. Also, it was revealed that participants Kirkuk Province preferred places and in materials on which reflection of culture was seen and cultural activities in the parks more while participants in Konya Province visit parks for the purpose of walking activity.



Figure 9. Distribution of preferences according to participants' purpose of using parks

### Distribution of preferences of participants for units that should be available in parks

Within the scope of the questionnaire, participants were asked their preferences for units that should be available in parks and responses were shown with graphics given in Figure 10. Responses to this question were requested from the participants with 3 to their importance. preferences according Participants in Konya Province stated their preferences saying that walking and jogging tracks should be available in parks at the first significance level and toilet units should be available at the second and third significance levels. Participants in Kirkuk Province stated their preferences saying that sitting areas should be available in parks at the first significance level, open grass areas should be available at the second significance level and pool, waterfall and artificial lake units should be available at the third significance level. In parallel with their purposes of using parks, participants in Konya Province stated that they preferred walking and jogging tracks among units that should be available in parks at the first significance level. Problems related to lack of toilets in Konya parks emerged in this section. Due to lack of sitting areas in parks located in Kirkuk Province, participants preferred sitting units at the first significance level in here. It is thought that preference for grass areas at the second significance level is caused by maintenance and sustainability problems of grass areas in Kirkuk parks. It is thought that geographical position and climate conditions of Kirkuk Province play an important role in preferences of participants in Kirkuk Province in direction of units based on water at the third significance level.



Figure 10. Distribution of preferences of participants for units that should be available in parks

# Distribution of preferences of participants for park equipment

Results obtained related to equipment that park users prefer to find in the parks located in the cities where they live, are given in Figure 11. It is seen that participants in Kirkuk Province prefer bench and lighting equipment while participants in Konya Province prefer equipment of pergola and flower beds. It is guessed that reason of preferring equipment determined by these results is insufficiency of them in both urban parks.



Figure 11. Distribution of preferences of participants for park equipment

# Distribution of preferences of participants for benefits provided by parks

Graphics including responses of participants to question regarding benefits provided by parks are given in Figure 12. Responses to this question were requested from the participants with 3 preferences according to their importance. Participants in Konya Province stated their preferences saying that parks in the cities where they live should provide beautiful images at the first significance level, provide quietness and peace at the second significance level and provide benefits for clean air and environment at the third significance level. Likewise, participants in Kirkuk Province stated their preferences saying that parks in the cities where they live should provide beautiful images at the first significance level and provide benefits for clean air and environment at the second and third significance levels. Participants in Konya Province set forth their preference for provision of beautiful images among benefits provided by parks in parallel with their purposes of using parks. Participants in Kirkuk also stated their preference similarly at the first significance level. Participants in Kirkuk Province stated that benefits for clean air and environment at the second significance level while participants in Konya Province stated that parks provided quietness and peace at the second significance level. An important finding emerging in this section is the fact that all participants indicated their preferences in direction of parks providing clean air and having environmental benefits.

# Distribution of preferences of participants for activities that they want to carry out in the parks

Within the scope of the questionnaire, participants were asked their preferences for activities that they wanted to conduct in parks and responses were shown with graphics given in Figure 13. Responses to this question were requested from the participants with 3 preferences according to their importance. Participants in Konya preferred walking and jogging at the first significance level, meeting with friends at the second significance level, and riding bicycles and children's play at the third significance level. Participants in Kirkuk Province preferred walking and jogging at the first significance level and picnic at the second and third significance levels. According to these results, it has been found that park users in both cities prefer especially walking and jogging in parks. This confirms awareness the of relationship between physical activity and personal health, which has been also on the world's agenda recently. In this regard, it also emphasizes that parks also provide an opportunity as a place. Also, high preference rate of participants in Kirkuk Province for picnic activity can be shown as the result of adoption of picnic culture in the region. It is also a surprising result that participants in Konya Province did not specify their preference for picnic activity among the first 3 significance levels.

## Comparative Analysis of Preferences of Park Users in Konya and Kirkuk Provinces

Within the scope of research carried out Konya and Kirkuk Provinces, questions were asked to park users for their preferences and responses of park users in both cities were compared in this section of the research. This comparison was applied to data obtained through Man Whitney U which is a statistical method and results were interpreted by being evaluated.

When data for the preferences of parks users in Konya and Kirkuk are compared; statistically significant differences were determined for preferences related to park visit frequencies (p:0.03), park visit hours (p:0.00), park visit durations (p:0.04), means of transport while going to parks (p:0.00), purpose of using parks (p:0.01), units that should be available in parks (p:0.03) and benefits provided by parks (p:0.00) (Table 2). But however, statistically significant differences were not determined for preferences of parks users in Konya and Kirkuk related to park visit days (p:0.05), with whom they make their park visits together (p:0.69), equipment that should be available in parks (p:0.08), activities that might be carried out in the parks (p:0.15) and rest areas in the parks (p:0.13).





Figure 12. Distribution of preferences of participants for benefits provided by parks



Figure 13. Distribution of preferences of participants for activities that they want to carry out in the parks

Park users in Konya visit parks more frequently when compared to park users in Kirkuk. Park users in Kirkuk visit parks in the evening while parks users in Konya visit parks in the afternoon. According to park visit durations, park users in Kirkuk spend more time than park users in Konya. While park users in Konya reach parks by walking and public transport vehicles, park users in Kirkuk mostly reach parks by private cars and taxis. It has been determined that there are various differences in park users' purposes of using parks in Konya and Kirkuk. While units preferred by park users in Konya appeared as walking and jogging tracks, park users in Kirkuk preferred sitting area units. When preferences for equipment were compared, it was determined that park users in Konya preferred shade equipment and the flower beds, however park users in Kirkuk preferred lighting equipment and benches. In terms of benefits provided by parks, preferences of park users in Kirkuk vary more while park users in Konya preferred visual quality and quietness. When comparative analysis was made, only responses at the first significance level were analyzed statistically.

Park Use Preferences	Mann-Whitney U	Wilcoxon W	Ζ	Asymp. Sig. (2-tailed)
Park visit frequency	8 736.50	31 314.50	-2.97	0.00*
Park visit days	9 598.00	32 176.00	-1.92	0.05
Park visit hours	6 823.50	29 401.50	-5.79	0.00*
Park visit durations	9 607.00	32 185.00	-1.97	0.04*
Means of transport while going to parks	6 746.50	29 324.50	-5.71	0.00*
With whom they make their park visits together	10 640.50	33 218.50	-0.39	0.69
Purpose of using parks	9 158.50	14 514.50	-2.38	0.01*
Units that should be available the in parks	9 378.50	31 956.50	-2.07	0.03*
Equipment that should be available in the parks	9 620.00	14 976.00	-1.74	0.08
Benefits provided by parks	6 375.00	28 953.00	-6.35	0.00*
Activities that might be carried out in the parks	9 903.50	32 481.50	-1.41	0.15
Rest areas in the parks	9 797.50	32 375.50	-1.51	0.13

Table 2. Comparative analysis of preferences of park users in Konya and Kirkuk provinces

### CONCLUSION

Within the scope of the research, questionnaire study was conducted to determine preferences of park users in Konya and Kirkuk Provinces for parks which were located in cities where they lived. Although sample size was calculated as 96 for both cities, questionnaire was conducted by making one on one interviews with more people. However, number of valid questionnaires was determined as 212 in Konya Province and 103 in Kirkuk Province and research was carried out according to these numbers. In the questionnaire conducted, a balanced rate was provided in terms of demographic characteristics of the participants. Participants' preferences for parks were determined in both cities. In the last part of the study, data obtained from Konya and Kirkuk Provinces were statistically compared and analyzed. According to this, statistically significant differences were determined for preferences related to park visit frequencies, park visit hours, park visit durations, means of transport while going to parks, purpose of using parks, units that should be available in parks and benefits provided by parks.

In the part of study related to personal characteristics of the participants; it is seen that number of participants who are young and high school graduate students is higher in Konya Province than Kirkuk Province, however, more public personnel participated in questionnaire in Kirkuk Province than Konya Province. In terms of the income levels of the participants, participants in Kirkuk Province have higher income.

According to the results for preferences in the questionnaires; participants in Konya Province visit parks once a week or more, majority of participants in Kirkuk Province visit parks once a week or less. It was determined that participants visited parks on weekends in general. Participants in Konya Province visit parks in the afternoon, participants in Kirkuk Province visit parks in the evening. It shows that all participants stay in parks for 1-3 hours mostly. While participants in Konya Province reach parks by walking and public transport vehicles, participants in Kirkuk Province reach parks by private cars and taxis. Majority of participants prefer to go parks together with their families and friends. While participants in Konya Province use parks for the purpose of scenery, entertainment, walking, resting and relaxing, participants in Kirkuk Province use parks for the purpose of entertainment, cultural activity, walking, resting and relaxing. While participants in Konya Province prefer walking track, toilet and sports areas, participants in Kirkuk Province prefer sitting areas, water elements and walking, jogging tracks. While shade equipment appears as a park equipment that is preferred by participants in Konya Province to be available, participants in Kirkuk Province prefer benches. It has been determined that parks provide beautiful sceneries, quietness, peace and a clean environment to the participants in Konya and Kirkuk Provinces. Majority of participants preferred to walk, jog, read books and have a picnic in the parks. Participants in Konya Province prefer to rest in open grass areas in the parks and participants in Kirkuk Province prefer to rest in areas under the trees.

Results prove that users with different characteristics have different preferences. Such studies allow preference profile of park users to be developed at local and regional scales. With satisfaction data obtained, important information will be provided for park renovation works by making inferences for park designs.

Designing parks for people living in a specific cultural environment and geography according to their preferences is also an important point to consider about building livable and sustainable cities. In general, user

# Walaa Ghassan ALABBAS and Ahmet Tuğrul POLAT Journal of the Institute of Science and Technology, 9(2): 1128-1143, 2019 Comparative Analysis of Park User Preferences in Konya (Turkey) and Kirkuk (Iraq) Cities

preferences and parks' quality criteria can be listed as accessibility, activity diversity, appealing different age groups, being available every season, being secure and well maintained. Determination of these preferences with necessary studies and creation of user profiles should be indispensable in planning and design stages of public institutions offering parks to users.

With the inclusion of park users in park planning, design, implementation and management studies, plans containing urban management decisions will have an integrity and all parking spaces in the city will be created so as to provide continuity and flexibility for the changes that may occur in time.

Perception and preference studies based on location and region, and comparative analysis as in this study are recommended to those who are engaged in scientific researches related to the subject. With such studies, local and regional user profiles can be developed and differences can be used in park planning and design works.

### REFERENCES

- Al-Qudah YM, 2006. Amman (Ürdün) Kent Parklarının Peyzaj Erişilebilirliği Yönünden Irdelenmesi, Amman (Ürdün) Parklarının Peyzaj Erisebilirliği Kent Yönünden İrdelenmesi, Ankara Üniversitesi Bilimleri Fen Enstitüsü, Yüksek Lisans Tezi.
- Anonim., 2014. Konya Hakkında Bilgi, <u>http://www.cografya.gen.tr/tr/konya/</u> (Erişim Tarihi: 24.04.2018).
- Anonymous., 2017a. كوكرك عقت نيأ <u>http://mawdoo3.com/%D8%A3%D9%8A</u> <u>%D9%86\_%D8%AA%D9%82%D8%B9</u> <u>%D9%83%D8%B1%D9%83%D9%88%D</u> <u>9%83</u>. (Erişim Tarihi: 20.03.2018).

- Anonim., 2017b. Kerkük'ün Nüfusu Ne Kadar? https://www.yenicikanlar.com.tr/kerkukunnufusu-ne-kadar-1221/ (Erişim Tarihi: 22.04.2018).
- Anonymous., 2018. İklim: Kirkuk, <u>https://tr.climate-data.org/location/2920/</u>: (Erişim Tarihi: 22.04.2018).
- Coşaner M, 2009. İstanbul İli Şişli İlçesinde Bulunan Bazı Parkların Peyzaj Tasarım İlkeleri Açısından İrdelenmesi, Namık Kemal Üniversitesi Fen Bilimleri Enstitüsü, Yüksek Lisans Tezi.
- Goličnik B, 2008. Parks and their users. Urbani izziv. 19 (2): 133-139.
- Iamtrakul P, Teknomo K, Hokao K, 2005. Public park valuation using travel cost method, Proceedings of the Eastern Asia Society for Transportation Studies, 5:1249-1264.
- Jeon JY, Hong JY, 2015. Classification of urban park soundscapes through perceptions of the acoustical environments, Landscape and urban planning, 141: 100-111.
- Kart N, 2002. Emirgan Parkında Kullanıcıların Memnuniyet Derecelerinin Belirlenmesi, İstanbul Üniversitesi Fen Bilimleri Enstitüsü, Yüksek Lisans Tezi.
- More TA, 1990. Factors affecting the productivity of urban parks, US Department of Agriculture, Forest Service, Northeastern Forest Experiment Station 7 p., 630.
- Mutiara S, Isami K, 2012. Characteristic of public small park usage in Asia Pacific countries: case study in Jakarta and Yokohama City, Procedia-Social and Behavioral Sciences, 35: 412-419.
- Oğuz D, 1998. Kent Parkı Kavramı Yönünden Ankara Kent Parklarının Kullanım Olgusu Üzerinde Bir Araştırma. Doktora Tezi Ankara Üniversitesi Fen Bilimleri Enstitüsü.

 Walaa Ghassan ALABBAS and Ahmet Tuğrul POLAT
 Journal of the Institute of Science and Technology, 9(2): 1128-1143, 2019

 Comparative Analysis of Park User Preferences in Konya (Turkey) and Kirkuk (Iraq) Cities

- Onsekiz D, Emür SH, 2008. Kent parklarında kullanıcı tercihleri ve değerlendirme ölçütlerinin belirlenmesi, Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 1(24): 69-105.
- Önder S, Polat AT, 2012. Kentsel ve açık ve yeşil alanların kent yaşamındaki yeri ve önemi, Kentsel Peyzaj Alanlarının Oluşumu ve Bakım Esasları Semineri, 19 Mayıs 2012, Konya.
- Ören Ö, 2015. Kent parklarının engelli standartları açısından değerlendirilmesi (Recep Yazıcıoğlu ve Adalet Parkları-Denizli), Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü, Siyaset Bilimi ve Kamu Yönetimi Anabilim Dalı Dönem Projesi.
- Özdamar K, 2003. Modern Bilimsel Araştırma Yöntemleri. Eskişehir: Kaan Kitabevi, 116-118, Eskişehir.

- Özkır A, 2007. Kent parkları yönetim modelinin geliştirilmesi. Ankara Üniversitesi Fen Bilimleri Enstitüsü, Peyzaj Mimarlığı Anabilim Dalı, Doktora Tezi.
- Polat AT, Önder S, 2004. Kent Parkı Kavramı ve Konya Kenti İçin Bir Kent Parkı Örneği, Selçuk Tarım Bilimleri Dergisi. 18 (34): 76-86.
- Renklidağ Ö, 2000. The Urban Park: An Extension of Nature and Urban Culture, Orta Doğu Teknik Üniversitesi, Şehir ve Bölge Planlama Bölümü Yüksek Lisans Tezi.
- Woolley H, 2003. Urban open spaces, Spon Press, London.
- Yücel GF, 2005. Kent Parkları İle İlgili Kalite Kriterlerinin Oluşturulması, İstanbul Teknik Üniversitesi Fen Bilimleri Enstitüsü, Doktora tezi