

People how Preference Places for Leisure and Recreation (Case Study: Tehran, District 2)

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ABSTRACT: Today, spending leisure time has become part of humans' lives which can take on various forms. Spending leisure time, on the one hand, and the priority of selecting a place, on the other hand, differ from each other. The main research question is How are leisure places selected and prioritized in a case study of Tehran's District 2? To answer this question, factors affecting an individual's preference for leisure and recreational places were determined. The statistical population consisted of 384 people. Using a questionnaire, residents' views on their tendency to spend their leisure time and their preference for the use of 18 leisure places across district 2 were evaluated. The theoretical framework of the research expresses that the type and quality of leisure spaces on the one hand (recreation and place aspects) and the individual's lifestyle (individual and cultural features in the geographical and social environment) are influenced by the time factor (access and availability), On the other hand, are influential in leisure time preferences. Research results indicated that individual characteristics, gender, age, and marital status were significantly correlated to selecting the type and leisure-recreation places. Also, Friedman test results suggested that as regards spending leisure time, going to cafés and restaurants held the highest thematic preference, while going to local parks had the highest location-based preference.

Keywords: Preference; Leisure; Preference The Leisure And Recreation.

INTRODUCTION

The development of leisure time and activities and the adaptation of programs to the needs of societies and different groups have always been the major concerns of governments (Sikes et al., 2018).

People have preferences for outdoor leisure to meet their goals. These preferences, combined with obligations, determine the selection of activities. How these activities are performed on a specific day and area requires a set of relevant decisions. For example, where, when, and how long will the decision makers participate in the activities (Axhausen & Gärling, 1992). On the other hand, the relationship between activities and space tends to be defined in the relationships between spaces and interpersonal relationships rather than individually defined in space properties (Ghalambordezfooly & Farzadi-Moghaddam, 2018). City residents' searches for outdoor leisure are aimed at meeting their physical and mental needs. To meet such needs, attempts should be made to create places that enjoy aesthetic and functional properties (Polat & Akay, 2015, 573). This study investigated the priorities of selecting leisure spaces among

residents of District 2 of Tehran. This article uses theoretical texts and environmental characteristics of leisure spaces, on the one hand, and individual characteristics, on the other (disregard of social-cultural, political, and economic factors) to investigate their impacts on peoples' choices within a theoretical framework. Also, based on the theoretical framework, and in response to the questions: "which leisure activities do people prioritize? and which places with what characteristic do they prefer?" a questionnaire was developed and statistically tested in the statistical society of Tehran's district 2.

In the book "Leisure in America," Max Kaplan uses his background to revise the concept of leisure and enumerates various dimensions. Leisure refers to a kind of cultural activity with a game nature. Kaplan thought that leisure should be investigated from two aspects: individual, i.e., from an internal satisfaction, and social, i.e., from a value perspective that society adopts (Asadi, 1974, 5). Neumeyer, a leading figure in leisure issues, considers the individual factors of leisure to include social tastes, emotional states, attitudes, and habits, arguing that except for hunger and thirst, humans' initial

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interests and tastes could include gaining new experiences, enthusiasm for safety, enthusiasm for gaining responses from others, enthusiasm for being known and enthusiasm for helping others. Neumeier, here, believes in the relationship between leisure and culture and maintains that leisure transforms as society and culture transform throughout history. This transformation has seen changing ethnic habits of the past into an institution in recent years, with leisure becoming part of the accepted and significant values (Momondi, 2001, 42).

Leisure and the way of spending it are thought of as the leading indicators of a lifestyle. In other words, peoples' manner of living usually manifests itself in spending leisure time. Max Weber proposed status groups to pave the way for studying lifestyles and leisure (Katz-Gerro, 1999). Spending leisure time

as a lifestyle can be influenced by specific familial status and economic, social, and cultural networks. These factors affect how leisure is spent; gender and age can also affect the level and types of leisure (Saraei et al., 2012). Leisure refers to parts of life that involve no compulsion and include daily activities. Leisure is spent to create recreation and hobbies, restore power, and remove physical and mental fatigue. Spending leisure time is affected by individual and cultural characteristics (e.g., specific familial status and economic, social, and cultural networks, as well as age and gender), which somehow indicate peoples' lifestyles. Table 1 gives a summary of research done on leisure time.

The semantic range of the concept of recreation is vast. It is classified depending on the following: people's physical, mental

Table 1: A summary of research done on leisure time

| Theorist | Research findings | Emphases |
|-------------------------------|--|--|
| Hami (2018) | Little attention is paid to the quality of spaces and interior design of shopping malls based on popular preferences. This study proposes to design shopping malls entirely as large public spaces and public areas | The effect of green space, sitting space, and commercial activity |
| Ahmad & Ghaem (2013) | Many urban problems relating to public spaces in the center of Cairo affect their functioning. Because most of the squares are designed as traffic-specific squares, such as the famous "Al-Tahrir" square, public space is lacking. | The effect of public space and urban open space on the pedestrian presence |
| Saraei et al., (2012) | Satisfaction with the level of leisure time positively affects the level of spending it. Social capital has a positive effect on the level of spending leisure time. The individual's social class has a positive effect on the level of spending leisure time, as this may differ in men and women. | The effect of gender, social class, and social capital on leisure time |
| Năstase (2018) | Research findings reveal that people tend to choose their recreation and hobbies in green spaces as regards spatial preference models. | The effect of green space on recreation |
| Kaucic et al., (2016) | Models of movement and daily leisure activities are associated with local access to recreational facilities and private and semi-private green spaces. | The difference between the models of leisure time movement and daily movement |
| Anderson et al.,(2019) | The research states that the space's public movement model differs from their daily movement models. In the model of daily trips, such as a trip to the workplace and educational spaces, two factors of access and duration have a higher effect on movement models for leisure purposes. | Effects of age |
| Harris et al., (2018) | Populations of less than 55 years prefer countryside areas, while higher age groups prefer central places. | The effects of the diverse landscape of green space |
| Ahmadi-Fard & Mirafzal (2021) | The study suggests that green spaces and vegetation complexity form popular preferences for public parks and residential gardens. | The effect of gender on spending leisure time |
| Safiri & Modiri (2010) | Spending leisure time in districts 19 and 22 is more significant in men than women. The other point is that individuals and inactively spending leisure time in district 19 compared to district 22 due to fewer leisure uses, lower accessibility, and lack of necessary leisure amenities of space-oriented leisure activities. | The effect of accessibility and diversity of leisure places on the level and manner of spending leisure time |
| | The level of spending and ways of spending it are affected by gender. This is significant in spending leisure time. Men's leisure time level is more significant than women's. Leisure priorities differ in men and women, as family-directed leisure is more noticeable in women's spending of their leisure time. The highest priority for women is to be at home and be with the family, while for men, movement leisure, especially sports activities, assume higher priorities. | Gender differences in spending leisure time |

Continuie of Table 1: A summary of research done on leisure time

| Theorist | Research findings | Emphases |
|--------------------------------------|--|--|
| He et al.,(2019) | Different types of leisure activities in street networking involve distinct spatial preferences | She is examining the relationship of spatial class between different urban recreational activities and street configuration through the analysis of spatial design networks. |
| Mohammadi Deh Cheshme et al., (2018) | There is a significant difference between indoor and outdoor leisure models in the three districts. Results suggest that outdoor physical environment variables have the highest effects compared to other variables, while demographic variables have the lowest effects on the geography of leisure. | The effect of the spatial model of leisure |
| Movahhed et al.. (2013) | The variables of gender, residence, social class, and parents' education are significantly related to young people's leisure time level. | Effect of the variables of gender, residence, education, family income, social class, parents' education, and the level of religious imitation on the young people's spending of leisure time. |

and social condition; the body's readiness for physical effort; the person's age, sex, and interests; the area where recreation takes place, the purpose, type and form of exercise, as well as motivation (Broadhurst, 2001; Baud-Bovy, 2002; Tribe, 2005; McLean & Hurd, 2012, 3). A conventional classification of recreational activities was presented by Winiarski (2011, 16). Based on that classification; the author has attempted to create her typology (Fig. 1). She leans towards understanding recreation as a form of active rest. Another category is self-development (e.g., learning foreign languages or participating in courses as a leisure activity). It should be emphasized that currently, at the time of socioeconomic changes, computer-based entertainment (virtual recreation) is also gaining significance (McLean & Hurd, 2012, 4).

Effects of People's Characteristics on Place Preferences

People's subjective preferences for the needs of their residence are not the same on spatial scales (Ghalambordezfooly, 2013, 37). Factors affecting the selection of leisure will also create a spatial model of leisure; as these factors fall under several main categories: the first category of these factors relates to the individual, themselves, i.e., in which stage of life the individual is, what their needs and tastes are, etc. The second category relates to environmental factors and conditions which comprise the individual, i.e., the urban and rural texture of which the individual is a part. The third category relates to the social texture of which the individual is a part, i.e., the time s/he has and the type of income and gender. Torkildsen regards this category as social and economic factors. The last category refers to situations and services which are provided to the individual. They include resources, facilities, plans, activities, and how they are managed (Torkildsen, 2003, 172).

Types of Leisure Spaces in the City

Leisure activities are inherently spatial, with many social and

underlying factors affecting peoples' preferences and leisure time (Hou, 2010, 2).

Most recreational landscapes comprise urban green infrastructure elements, such as parks, public gardens, or urban forests (Tyrväinen et al., 2007). Implementing GI has positively changed the quality of life in urban areas worldwide. GI can help to improve human well-being, both from physical and psychological perspectives, especially in urban areas where the demand for such recreational spaces is increasing. Green spaces offer relaxation and stress relief opportunities and influence health behaviors (physical activity, social interactions, mental health). Green spaces are also positively correlated with the perception of people's health, especially for the demographic groups of elderly and young people and people with a secondary level of education who spend much of their time close to their place of residence (Năstase et al., 2019). The harmony between environment and behavior as a feature of behavioral settings has a substantial role in shaping the perception and behavior of users of a space (SharifKazemi & Ghalambor Dezfuly, 2021).

Public urban spaces like parks, public squares, green routes, social gardens, playgrounds, shopping malls, sidewalks, and streets, have not been investigated in the leisure literature, despite their relationship with daily leisure experiences. These spaces are leisure places that require the attention of leisure researchers. Understanding the complexity of space as a concept will help better understand the relationship and controversial nature of the public urban space (Johnson & Glover, 2013, 191). Part of the open space (green space) allotted for leisure is called the "green lungs" of the spaces with high density in urban centers (Yang et al., 2019).

Considerable terminology problems result from identifying or distinguishing between the terms recreation and tourism, overlapping concepts (Hall & Page, 2006). Recreation controversially does not involve traveling and moving

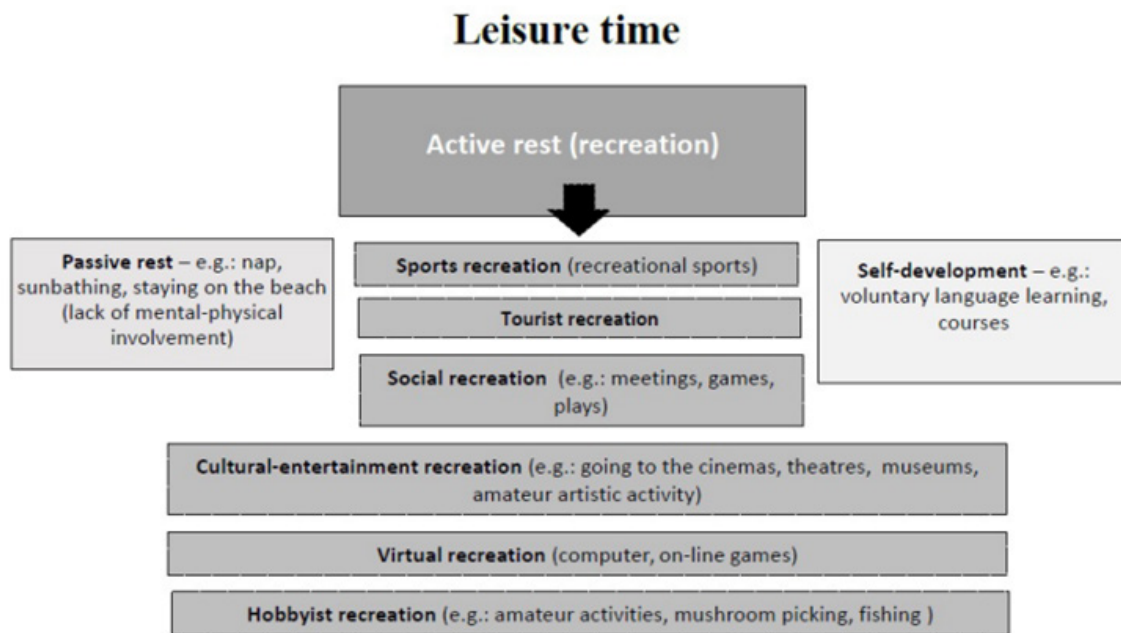


Fig.1: Classification of recreation and leisure phenomena (Source: Mokras-Grabowska, 2018)

within a space, which makes it different from tourism. Many authors, however, tend to understand recreation in a way that encompasses tourism forms. This rightly makes recreation superior to tourism (Broadhurst, 2001).

Therefore, understanding of types of urban tourism can help identify types of leisure places. From a motive and goal point of view, tourism includes cultural, religious, pilgrimage, commercial and trade, health, sports, political, natural, adventurous, recreational, and historical issues. As stated, types of leisure can be divided into nine categories (Table 2).

Theoretical Framework

This research was aimed at investigating leisure time in a space out of the place of residence (i.e., outdoors) and did

not include indoor recreation. Suppose the house is seen as the point of departure and origin of movement. In that case, the selected place can be, based on the individual's tendency, within the place of residence or neighborhood or at more considerable distances inside the place of residence or even outside the city. This decision is affected by the time the individual wants to allot for recreation. Factors such as density, mixed land use, land use distances from each other, street networks, transportation system, and traffic could also affect the selected distance of the recreational spaces (Fig. 2). For example, in a metropolis like Tehran, where traffic is higher on weekdays, people usually select recreational spaces close to their residences or places they can reach with less traffic. In the meantime, choosing recreational spaces with greater distances

Table 2: Types of leisure time and leisure places

| Theorist | Types of leisure time and leisure places |
|---------------------------|---|
| Johnson & Glover (2019) | Public urban spaces like parks, public squares, green routes, green social gardens, playgrounds, shopping malls, sidewalks, and streets |
| Azani et al., (2012) | Mosques, cultural centers, green spaces, parks, tourist centers |
| Ahmadifard et al., (2021) | Types of leisure spaces include the following places such as catering (e.g., restaurants, hotels, cafes, etc.), sports (e.g., clubs, stadiums, etc.), religious (mosques, Imam offspring shrines, etc.), recreational (e.g., playgrounds, children centers, clubs, etc.) cultural (cultural centers, public libraries, etc.), and green spaces (e.g., parks, gardens, etc.). Leisure also includes doing sports activities, companionship with friends, listening to music, watching TV, walking and recreation, trips, going to parks and cultural centers, shopping malls, and restaurants, visiting relatives, cyberspace, sight and seeing, pilgrimage, non-curricular studies, the Internet and computer games, religious activities, going to cinema and theater, use of urban open spaces, partition in various associations, learning languages, participation in various ceremonies and activities, works of art and cultural activities, doing puzzles, music, and signing. |

Continue of Table 2: Types of leisure time and leisure places

| Theorist | Types of leisure time and leisure places |
|-------------------------------|---|
| Fakuhi & Ansari (2013) | Indoor and outdoor leisure |
| Saraci <i>et al.</i> , (2012) | Individual dimensions (e.g., making works of art, listening to the radio, watching TV, listening to music, watching video clips, using a computer, playing computer games, and watching satellite receiver channels), and social dimensions (e.g., participation in friend parties, participation in religious assemblies, companionship with relatives, going to parks, travel, going to cinema and theater companionship with friends) |
| Mokras & Grabowska (2019) | <ol style="list-style-type: none"> 1) Personal achievements such as learning foreign languages; 2) inactive rest such as sleeping; 3) active rest (recreation) such as sports recreation, tourism, social (e.g., visits and playing), cultural-recreational (e.g., going to the cinema, theater, museums, art galleries, etc.); virtual entertainment (e.g., computer and online games), recreational entertainment (e.g., non-professional activities, picnics, and fishing). |
| Kian (2015) | Studying, watching TV, doing sports, listening to music, doing religious activities, going to the cinema and theater, artworks, music, visiting relatives, doing puzzles, learning the language, singing, companionship with friends, taking a walk, and recreation. |
| Safiri & Modiri (2010) | Watching TV, companionship with friends, doing sports, going home, reading, playing computer games, parking, visiting relatives, music, shopping, making handicrafts, travel, the internet, cinema, mountain, restaurant, family leisure (home and visit of relatives), movement leisure (sports, park, travel, mountain), purposeful leisure (study and companionship) |
| Johnson & Glover (2013) | Private-public spaces; spaces with private ownership, such as cafes and restaurants. Common public space is a space with private ownership for its users. Space with public ownership with entrance limitations such as gym membership fees. A public space; public ownership such as an outdoor park. |
| From the tourism perspective | From a motive and goal point of view, tourism includes cultural, religious, pilgrimage, commercial and trade, health, sports, political, natural, adventurous, recreational, and historical issues. |

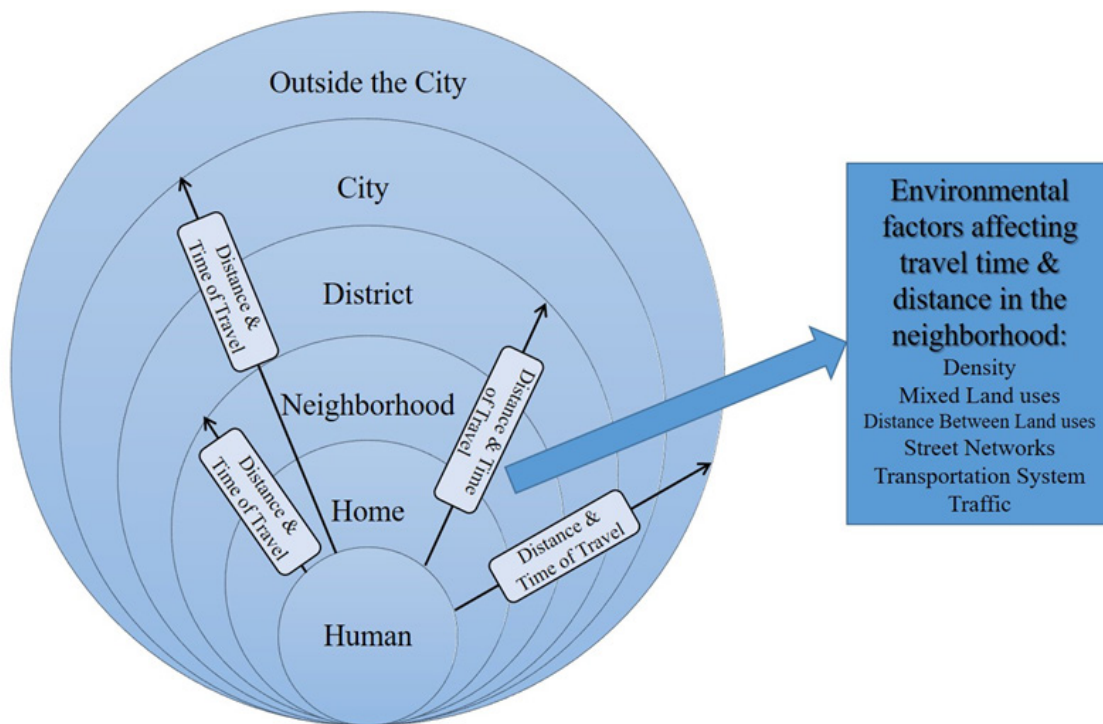


Fig. 2: Relationship between the place of leisure time and travel distance and time

and time is more possible on holidays.

One of the sentences often heard is, "I have no free/leisure time." This sentence signifies the agent of time. This connection, accessibility, and achievement are two spatial and personal factors. People have the right to choose; for example, they can choose between a lengthy stay in a nearby place of activity for doing one or several activities and a short stay at a far distance.

Both accessibility and achievement express the possibility of using places of activity differently: from the place of activity and a unique position. Accessibility is usually defined as the ability of a place of activity, expressed as several people who can choose the activity as a destination at a reasonable time. In contrast, the achievement is a personal characteristic that refers to several places or activities that the person can choose as destinations at reasonable time costs (Digest & Vidakovic, 2000).

On the one hand, man, in his residence, is affected by his characteristics such as age, gender, etc., and on the other hand, by cultural properties that he acquires in the society, family, working environment, and social situation, thus choosing the type of recreation and place of recreation using two factors of accessibility and achievement. This place preference lies within a communal space between the lifestyle (individual properties) and leisure time, i.e., a place that conforms to individual characteristics and needs.

Leisure involves two aspects: recreation (e.g., going to parks,

shopping, etc.) and place (e.g., the position of selection). Leisure motives, on the one hand, and place attraction, on the other hand, affect place preferences (Fig. 3).

MATERIALS AND METHODS

Survey Design and Data Collection

Calculating the sample size is very important in statistical inference and findings. In this research, the Cochran model has been used. This model estimates the sample size with statistical population information and a 5% estimation error. Given the population of 701303 people in the study area, to collect information, 384 people should be interviewed based on the calculation of the Cochran model. The statistical population was 384 who randomly been selected from the inhabitants of District 2. Finally, SPSS software was used to analyze statistical data, classify, perform tests, and convert them into analyzable information. Cronbach's alpha test in SPSS was used to evaluate the reliability and validity of the questionnaire used in this study. The results obtained in this test are presented in Table 3, which with an alpha value of 0.854, was acceptable in terms of reliability (Table 3). The data collected from the responses were suitable inputs for other statistical tests and data analysis. Friedman's test was used for inferential data analysis in the SPSS (version 26) software.

To answer the question: "What is the relationship between individual characteristics and thematic characteristics of leisure?" the normality of the data was first investigated to

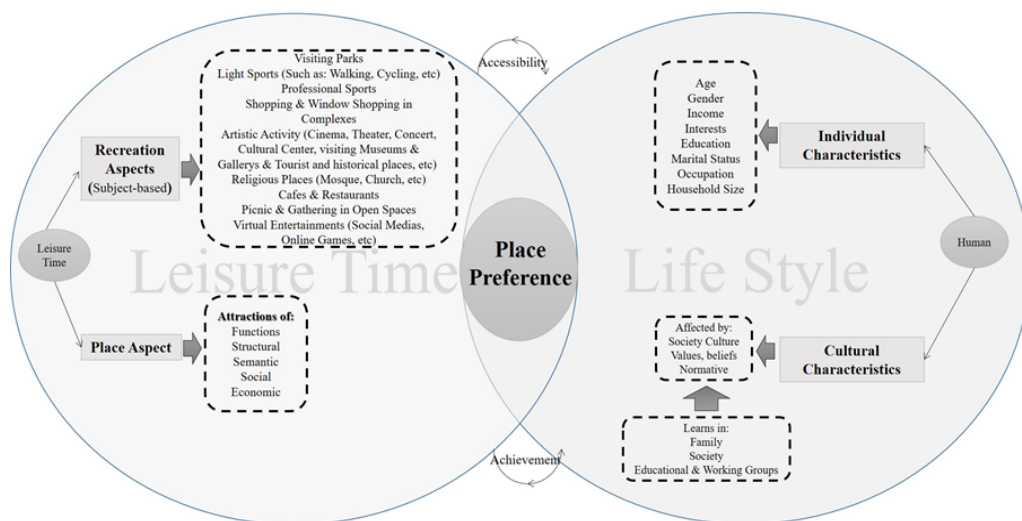


Fig. 3: Diagram of the theoretical framework of the research

Table 3: Cronbach's alpha calculation (Reliability Statistics)

| Cronbach's Alpha | No. of Items |
|------------------|--------------|
| 0.854 | 27 |

determine whether the test was parametric or non-parametric. The best method for the Likert scale data and the questionnaire was the skewness and kurtosis of the data. Data distribution in this test is normal, and it is possible to use parametric tests such as the ANOVA test.

Tehran Municipality, District 2 is one of 22 districts of Tehran Municipality, located Northeast of Azadi Sq. It stretches from West to Northwest, Azadi St. to South, to AshrafiEsfahani Highway, Mohamad Ali Jenah to West, and Chamran Highway to East. Today, it is mainly a residential area with social-cultural, economic, touristic, and research-scientific potentials. The district covers an area of over 64 km² (Fig. 4).

In District 2, which enjoys an acceptable number of leisure spaces in Tehran, as many as 18 places were selected to investigate the people's tendency to spend their leisure time. Out of the parks, six parks of Pardisan, Nahj Al-Balagheh, Fadak, Parvaz, and Goftegou, and finally, the local park, and out of the commercial complexes, the commercial complex of Golestan and Iran Zamin, the commercial complex of Milad-e-Nour and Platinum, as well as shopping malls of Sadeghiyeh Bazaar like Goldis, commercial complex of Opal, the traditional bazaar of Sattar Khan, the commercial complex of Sattarkhan, commercial complex of Gisha, and out of cafes and restaurant, the Farahzad restaurants, Sattarkhan restaurant

complex, and other leisure complexes such as Ibn Sina cultural center, Yardman complex, as well as Yadman complex, Milad Tower and hiking complex in Darake were selected (Fig. 5).

RESULTS AND DISCUSSION

Investigating Respondents' Thematic Preference for Spending Leisure Time in District 2 of Tehran

Friedman ranking test was used to determine the thematic preference of people for spending free time. The p-value is equal to 0.00, which is smaller than the significance level of 0.05. It is concluded that there is a significant difference between the questions of the questionnaire in terms of importance. From the respondents' point of view, these activities do not have the same value and importance.

According to Table 4, Friedman test results indicated that going to cafes and restaurants had a value of 5.92, the highest value and thus holds the highest significance, whereas going to religious sites holds the lowest preference for leisure time.

Investigating the Priority of Preference of Prominent Places for Spending Leisure Time in District 2 of Tehran

Consistent with the Friedman test, there is a significant difference between the mean ranks of independent and dependent groups. In other words, since the p-value is 0.00,

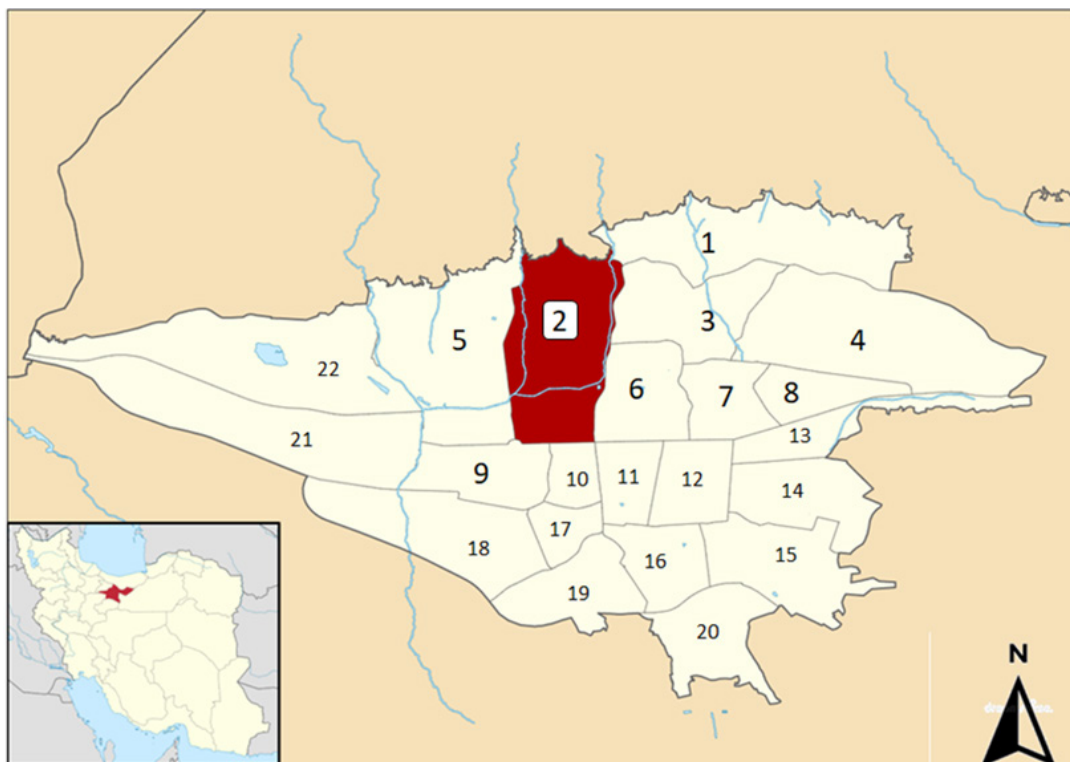


Fig. 4: The location of the case study in Tehran (Source: Tehran Municipality, District 2, 2022)

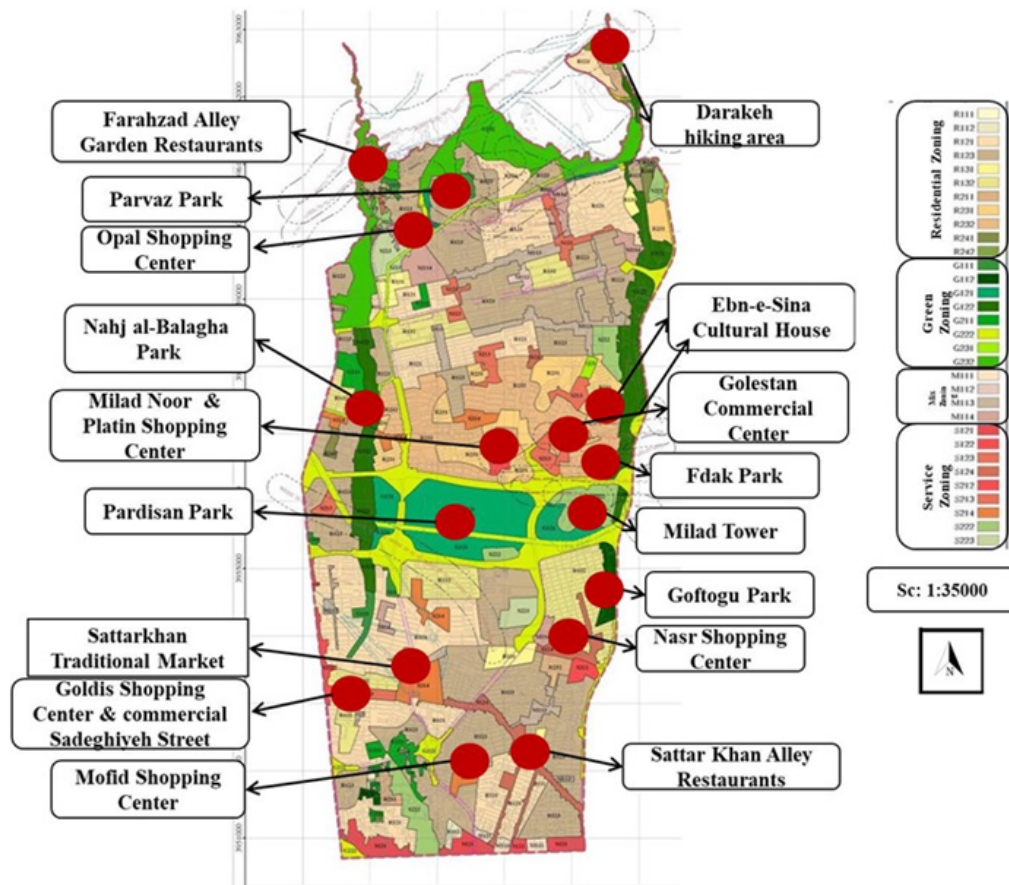


Fig. 5: Leisure and Recreational POI in district 2

which is smaller than the significance level of 0.05, it is concluded that there is a significant difference between leisure places from a significance point of view, as respondents suggested that those places did not have the same value and significance. As given by the table of quartiles, the local park held the value of 12.13, considered the most significant ranking score, and thus holds the highest preference. Table 5 gives the high-to-low priorities of prominent places in district 2 for spending leisure time (Table 5).

People's thematic preferences for leisure time include light sports, gatherings, and going to parks. The local parks are their priority of place preference due to their ease of access and accessible costs. Local parks provide a suitable context for light sorts such as walking and exciting body-building devices. They can also be good places for being together. Due to their functional scales, local parks are most often used by neighborhood members of a social class.

Hiking in Darakeh occupies the second priority of place preference, due to the diversity of walking routes, on the one hand, and its topographic situation, on the other hand, which makes people enjoy the light and heavy sports activities simultaneously. This diversity of activities allows people of

different age groups to use different devices and use cafes and restaurants as they wish.

The commercial complex of Opal is the third priority that residents of district 2 prefer; this is where some people spend their leisure and is one of the luxury shopping malls that is economically unaffordable. The commercial complex of Opal holds the highest thematic preference among shopping malls.

Two commercial complexes of Golestan and Opal, which provide goods, also serve as spaces for entertainment. At the Golestan complex, which is relatively older, we have an expansive outdoor space (i.e., a courtyard) where festivals and music are held at night. At the Opal complex, upstairs include entertainment and gaming spaces such as bowling and billiard, as well as a playground for children. Also, a food court there has managed to attract customers of different ages.

The next priority of place preference goes to prominent parks of the district, namely, Parvaz, Fadak, and Iran Zamin parks, Nahj Al-Balaghah and Goftogou gardens, and the jungle park of Pardisan.

In the next stage, ANOVA analysis was used to determine the effects of individual characteristics on the thematic preferences in district 2 of Tehran (Table 6). Individual characteristics of

Table 4: The priority of respondents' thematic preference

| Leisure and Recreation | Mean Rank |
|--|-----------|
| Cafe and restaurant | 5.92 |
| Light sports (such as walking, cycling, etc.) | 5.83 |
| Picnics in public open spaces | 5.69 |
| Going to park | 5.47 |
| Professional sports (such as the gym, swimming pool, ...) | 5.46 |
| Shopping and Window shopping in the commercial complex | 5.36 |
| Art (such as going to the cinema, cultural center, theater, concert, or visiting a museum and gallery, etc.) | 4.73 |
| Virtual entertainment, such as online games | 3.89 |
| Going to a religious place such as a mosque | 2.65 |

Table 5: The priority of preferences of prominent places for spending leisure time in district 2 of Tehran

| Leisure and Recreation place in District 2 | Mean rank |
|---|-----------|
| Local Park | 12.13 |
| Darakeh hiking area | 11.43 |
| Opal Shopping Center | 11.23 |
| Golestan Commercial Center | 11.16 |
| Parvaz Park | 10.38 |
| Milad Noor & Platin Shopping Center | 10.25 |
| Fdak Park | 9.91 |
| Nahj al-Balagha Park | 9.88 |
| Goftogu Park | 9.4 |
| Pardisan Park | 9.26 |
| Farahzad Alley Garden Restaurants | 8.84 |
| Nasr Shopping Center | 8.79 |
| Milad Tower | 8.74 |
| Sattarkhan Traditional Market | 8.54 |
| Sattar Khan Alley Restaurants | 8.41 |
| Goldis Shopping Center & commercial Sadeghiyeh Street | 7.85 |
| Ebn-e-Sina Cultural House | 7.6 |
| Mofid Shopping Center | 7.19 |

this research include gender, age, marital status, education, income levels, and dependent children. People's gender characteristics also affect their thematic preferences in such activities as shopping, artistic activities, going to cafes and restaurants, picnics, and virtual activities. Here, women are more likely to spend their leisure in outdoor activities than men. The income level and the thematic and local preferences do not affect leisure time. The ANOVA test indicated that the thematic preference of age groups for all leisure activities is significant except for light sports activities and picnics. Considering the marriage status and thematic preference for leisure time, it is

concluded that the mean thematic preference of single people is greater than that of married people, as the former groups have more time to spend their leisure time.

CONCLUSION

According to the research findings, the following can be suggested to understand the model of individual characteristics-based place preferences for spending leisure time:

- 1.Regarding commercial centers, findings suggested that compared to men, women prefer such places more.
- 2.As regards the relationship between peoples' age groups and

Table 6: The results of ANOVA analysis: of the effects of individual characteristics on the thematic preferences

| Leisure Place | Individual Attribute | Gender (Sig) | Income (Sig) | Age (Sig) | Education (Sig) | Marital Status (Sig) | Child Under 18 (Sig) |
|---------------------------|----------------------|--------------|--------------|-----------|-----------------|----------------------|----------------------|
| Paridsan Park | | 0.797 | 0.786 | 0.001 | 0.433 | 0.235 | 0.020 |
| Nahjolbalaghe Garden | | 0.286 | 0.641 | 0.001 | 0.841 | 0.270 | 0.942 |
| Fadak Garden | | 0.611 | 0.300 | 0.004 | 0.038 | 0.624 | 0.399 |
| Parvaz Park | | 0.460 | 0.056 | 0.001 | 0.179 | 0.284 | 0.184 |
| Goftegu Park | | 0.426 | 0.492 | 0.199 | 0.542 | 0.616 | 0.237 |
| Local Park | | 0.238 | 0.122 | 0.000 | 0.048 | 0.000 | 0.631 |
| Golestan Complex | | 0.000 | 0.548 | 0.000 | 0.061 | 0.817 | 0.033 |
| Miladnour Complex | | 0.002 | 0.763 | 0.000 | 0.545 | 0.171 | 0.036 |
| Sadeghieh Avenue | | 0.143 | 0.223 | 0.075 | 0.630 | 0.345 | 0.824 |
| Opal Complex | | 0.000 | 0.158 | 0.000 | 0.012 | 0.051 | 0.016 |
| Satarkhan Complex | | 0.134 | 0.062 | 0.049 | 0.401 | 0.565 | 0.129 |
| Mofid Complex | | 0.022 | 0.126 | 0.059 | 0.670 | 0.511 | 0.230 |
| Gisha Complex | | 0.008 | 0.777 | 0.000 | 0.841 | 0.159 | 0.005 |
| Farahzadi Restaurants | | 0.740 | 0.475 | 0.005 | 0.952 | 0.026 | 0.531 |
| Ebne Sina Cultural Center | | 0.000 | 0.855 | 0.071 | 0.013 | 0.735 | 0.002 |
| Milad Tower | | 0.466 | 0.107 | 0.006 | 0.944 | 0.953 | 0.129 |
| Satarkhan Restaurants | | 0.915 | 0.569 | 0.007 | 0.158 | 0.028 | 0.132 |
| Darakeh Climbing | | 0.761 | 0.170 | 0.000 | 0.064 | 0.079 | 0.107 |

preference for leisure time, findings revealed that as age rises, the mobility and tastes of people could vary.

3. Marriage makes the place preference model inclined towards greater activities and presence in parks and near-house cheap shopping malls.

In sum, the model of the preference for the studied places)

Based on the ANOVA and Friedman tests) is illustrated in Figure 6.

The model of place preferences for spending leisure time using individual characteristics of residents in District 2 (Fig. 6) can be described as follows: Gender affects the selection of commercial centers as leisure places, and women are more

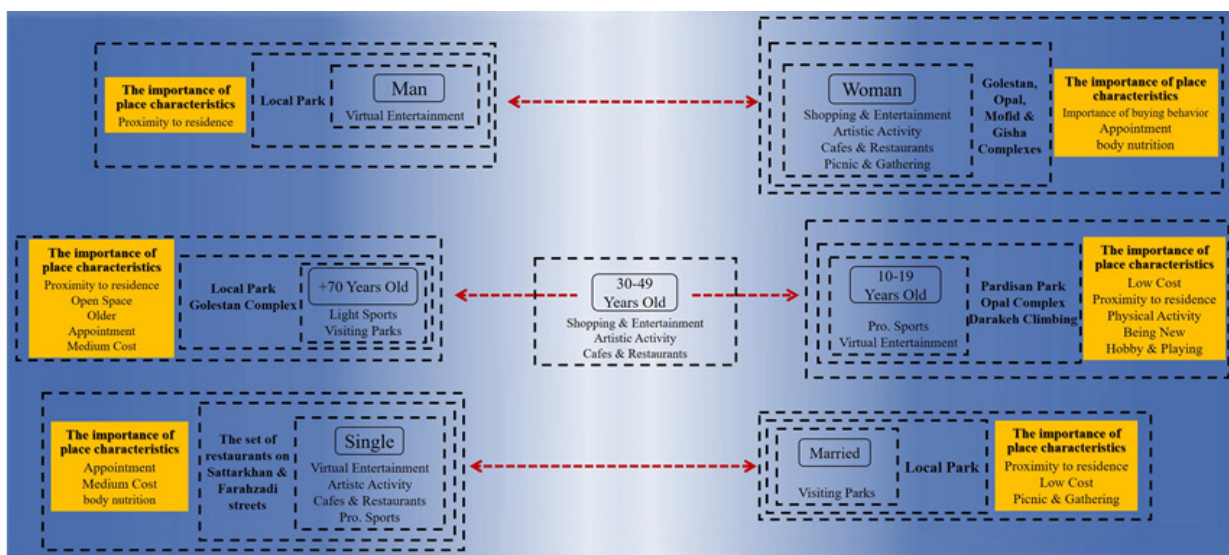


Fig. 6: The model of place preferences for spending leisure time using individual characteristics of residents in District 2

likely to have more preferences for these selections. Also, men are more likely to tend to virtual entertainment. On the other hand, proximity and access to leisure places hold more importance. In the meantime, the following can be proposed to analyze leisure paces in district 2:

1. Place preferences for spending leisure time at commercial complexes of Opal and Golestan in district 2, as compared to other shopping malls, indicate that the functional diversity and collective spaces can encourage residents to use spaces; thus, characteristics of these spaces can be used for new developments.

2. Questionnaire results can be inferred to suggest that in addition to prominent leisure places in the district, novel and large-scale complexes and various services offered at accessible or inaccessible malls or parks can affect the priority of residents' place preferences. Thus, consistent with the research findings, places across Tehran such as Iran Mall, Chitgar River Complex and Bam Land, Hyperstar, located on Shahid Bakeri Highway, Palladium Commercial Complex, and Kourosh Mal, are attractive for travel and for spending leisure time. In sum, these places can serve as successful experiences for urban policy-making in new urban developments.

AUTHOR CONTRIBUTION

F. Abed performed the literature review and experimental design, analyzed and interpreted the data, and prepared the manuscript text and edition. R. Ghalambor Dezfooly supervised the experiments, literature review, data compiling, and manuscript preparation.

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CONFLICT OF INTEREST

The authors declare no potential conflict of interest regarding the publication of this work. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and, or falsification, double publication and, or submission and redundancy, have been completely witnessed by the authors.

ABBREVIATIONS (NOMENCLATURE)

| | |
|-----|---------------------|
| K-S | Kolmogorov- Smirnov |
| Sig | Significance |

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