The Analysis of the Quality of Livability in Zanjan City Center Area with Emphasis on Activity Attraction in Public Areas

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Abstract. Public areas in central areas of cities are assumed necessary issues and a way of creating more interaction among citizens. Successful public areas should be a place for various attractive activities. The purpose of the current study is analyzing the activity attraction of public areas in Zanjan city center area of in different periods of time throughout the day and the night in order to provide the possibility of creating a lively and desirable environment through refinement of current activities in Zanjan city center area. This is a descriptive-analytical and applied study. Data collection was done, using library and field studies. The field studies include observations and questionnaires. Research sample includes 153 citizens of Zanjan. Research results show that current activities of public areas in the Zanjan city center area, on average, are capable of attracting 52.2 percent of citizens of Zanjan in certain periods of time. Considering the activity desirability of citizens of Zanjan, the restrictions on development of less desirable activities in favor of development of high desirable activities will lead to improvements in the quality of livability in Zanjan city center area.

Keywords: livability, public areas, city center area, activity attraction, Zanjan

1. INTRODUCTION

Considering the role of urban sociable and human oriented spaces in urban structures has had a long history in urban development and such spaces have been presented in various forms in different periods of time and have led to the forming of lively urban contexts surrounding and around them. The issue of production, reinforcement and development of suitable, active, dynamic and lively urban spaces has been considered as one of the strategic objectives of improving the environment quality in urban artificial environment and the study of this issue has always been considered as the priority for urban planners and designers. The importance of this issue is due to its influential role on society (Parsi, 2002). In this regard, the human aspects of public areas have been taken into consideration more than before and even people in response have eagerly attended and participated in such spaces (Gehl and Gemzoe, 2004).

Various researchers have conducted several studies on the public spaces of the cities. For example: Jane Jacobs (The Death and Life of Great American Cities, 1961) in North America, Jan Gehl (Life between Buildings, 1971) in Scandinavia, and William. H. Whyte (The Social Life of Small Urban Spaces, 1980) in New York. The other authors are Clare Copper Marcus and Vendy Sarkissian (Housing as if People Mattered, 1986) and Project for Public spaces (How to change the Surrounding Space) and an instruction to create successful public spaces (1999). These works are rooted in the relation between functions and spaces. As it is recommended in the Project for Public spaces (PPs, 1999), by observing the space, it will be discovered how space is actually used instead of imagining space applications. The Conducted researches share the fact that public spaces of cities should be a place for social interaction and life.

2. STATEMENT OF THE PROBLEM

The study and evaluation of the public spaces of the city is issued as a basic necessity in management, planning and urban development (Khademi et al., 2010) and is an indication of space reproduction in cultural, social and physical aspects of the city. Today, public areas in

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comparison with private areas in central areas of the cities are not proportional to population growth. Lack of urban open spaces and unbalanced dispersion has shown extensive changes in public spaces and areas of cities (Zekavat and Farshad, 2011, p. 255). The revolution in technology and communications has resulted in us separating ourselves more from public spaces and life. The public areas of the cities that once were the place of identity authentication and social life are disappearing and daily life is exiled to inside of the house lives, in essence.

Zanjan has not been far from these recent changes. Zanjan city center areas appear to be the least attractive of all times and in the case of quality and quantity have received less attention and downgraded; while, the population growth in recent decades, technological changes and seriousness of social justice has resulted in an increase in the sensitivity of the issue of presence in public areas of Zanjan.

The purpose of the current study is analyzing the activity attraction of public areas in the Zanjan city center area of in different periods of time throughout the day and the night in order to provide the possibility of creating a lively and desirable environment through refinement of current activities in Zanjan city center area. It is clear that the importance of the attraction of current activities in public areas of the city is doubled, considering the activity desirability of citizens of Zanjan. Neglecting the desires of the citizens in establishment of activities in public areas of the city can only result in the sense of dolefulness and lack of identity in public areas. Therefore, the activity attraction in Zanjan city center area has been proposed in relation to diversity of desirable activities done by citizens and the research questions are as follows:

1. Which activities are functioning in Zanjan city center area in the scale of the whole city?
2. How much is the activity attraction in Zanjan city center area in various periods of time?
3. How is the activity attraction in Zanjan city center area in relation to the diversity of desirable activities of citizens of Zanjan?

Citizens can spend their time on necessary or optional activities. By attraction in this research we generally refer to both optional and necessary references.

3. RESEARCH METHODOLOGY

This is a descriptive- analytical and applied study. Data collection was done by library and field studies. Observations and questionnaires were field methods used in this study.

The statistical population of this study included citizens who had visited the central area of Zanjan to meet their own and their family’s various needs. The aforementioned citizens are divided into four categories: the first category includes people whose residential area is in Zanjan city center area (local residents); the second category includes people whose residential area is outside Zanjan city center area. The third and fourth categories include practitioners in current activities and tourists and travelers from outside Zanjan who have entered the central area of the city, respectively. The subjects of the study were selected by simple random sampling among citizens who deal with current activities in the central area of the city. A total number of 153 people were selected, using Cochran formula.

Urban activities can be divided into two categories, regarding their location. Therefore, the patterns of each category and its relation to the other one can be taken into consideration in activity analysis:

1. Formal activities that take place in specific registered places are clarified by city officials and based on their terms and conditions in a prethought manner. 2. Informal activities are not done in registered physical places, but in public spaces (Parsi, 2002). In current study, by activities we refer to formal activities because based on the observations, the number of informal activities is
much fewer than formal activities. Therefore, they are not significant and no specific space is
dedicated to them in the field of study. The formal activities are activities that provide services
for areas beyond Zanjan city center area. Therefore, in this study, the central area of the city is
studied as the overall structure functioning throughout the city, not as a part of the city texture.
Hence, residential applications are not taken into consideration. Research activities include at
least one of the following properties:

a) Regarding the type and nature of the activity, they should be considered in the scale
of the whole city. Like cinema, etc.
b) They should be related to the service-commercial functions.
c) The average of (activities) per capita in the central area of the city should be more
than the average of the same activities’ per capita throughout the city.

Research activities related to each land use are selected based on their presence or absence in
Zanjan city center area and based on the observations and categorized theories.

Theoretical Framework

Livability and Activity

Various definitions have been proposed to define livability in English, some of which are Vitality,
Viability, Livability and Liveliness. In Robert Cowan’s urban dictionary (2008, p. 442) livability
and vitality are beside each other and are defined as follows: “Vitality and Viability” are
properties of the center of successful small and big cities; the livability of the city is a reflection
of its various rush hours in different areas; in case vitality is a scale to evaluate its capacity of
fundraising for survival, improvement and accommodation of changing needs”.

The general definition of livability can be considered as the capability of the place to meet a
diversity of activities and users (with various backgrounds of commercial, social and cultural)
with the aim of a diversity of experiences and social practices in such a way that security, equality
and convenience is granted for all the users (Dadpour, 2012). In fact, livability and dynamicity of
the city space versus its dolefulness is a reflection of the number, activity and event types that
take place in the space (Pakzad, 2007, p. 31). For a better understanding of the concept of
livability, an investigation of the concept of activity appears to be necessary. In this regard, all
human actions done to meet his needs are called activity (ibid, p. 41). “Activity” is the main aspect
and element of any place and each place and human being is a result of objects and activity
textures. On the other hand, they are specific elements and components and human activities that
can enliven and personalize the space (Parsi, 2002). According to Jan Gehl, activities in public
spaces can be divided into three categories: necessary activities, optional activities and social
activities.

“Necessary activities” include activities that are more or less necessary, such as going to school
or work, going shopping, waiting for the bus or somebody and mailing. It is better to say that all
the activities that the participants somehow have to take part in are considered to be a necessary
activity. These activities are done throughout the year and under any circumstances and are more
or less independent of the external environment. The participants do not have any other choices
either.

“Optional activities” are activities that participants take part in due to their personal interests and
in case of having free time and space. These activities have totally a different scenario. This
category includes activities such as walking to get fresh air, standing away and enjoying life, or
lying down and sunbathing.

“Social activities” are activities that are depended on others presence in public spaces. Social
activities include children playing, greetings and conversations, various group activities and
finally the most comprehensive social activities, social relations, inactive connections, that is the simple seeing and hearing (Zakavat and Farshad, 2011, pp. 239-240).

Public Area or Urban Public Space

According to Oxford English Dictionary, the word “Public” means general and in most senses it is the opposite of the word “Private”. Also another definition is presented which is related to people as a whole. In the new version of Oxford English Dictionary, a similar definition is presented:

Of or concerning the people as a whole, open to or shared by all the people and presented by the local or central government. Based on this definition, for example a public street is of and concerning people as a whole; it is open to them; it is an entity that is not limited and is presented by the government and related to it (Khademi et al., 2010, p. 27).

Public spaces are life force of cities. Apart from their physical entities, public spaces are places for interactions. Interactions in which people sometimes have to interact with the ones they don’t like or criticize them (Nemeth and Hollander, 2010). This space can be considered the crystallization and gathering of people with various behavioral patterns. Human beings participate in urban areas and personalize the urban space and fabric with their social activities and interactions (Rafiiyan and Khodaii, 2009). Public areas are the main focus of urban life and the stage of citizens’ social activities which invites people to logically interact and confront with one another. This is available for everyone, regardless of any conditions. “Public areas of the city are in fact places for residents’ thoughts, conversations and verbal speech. Based on this assumption that problems related to liberty, justice, equality and rationality are present in public areas, it can be expected that with greater presence of citizens in urban public spaces and areas, these concepts will be realized” (MahmoudiNejad, 2009, p. 122).

It might be said that public areas are the most important parts of cities and urban areas. The highest rate of interaction between people exists in these areas. Public areas are comprised of streets, squares, public sidewalks, parks and open spaces and even river margins and seaside. All of these spaces are a part of a bigger community. It should not be neglected that their presence is due to their application, usefulness and attractiveness (Zekavat and Farshad, 2011, p. 31). Tibbalds considers the development of human presence in social activities as the guarantee of dynamism and attractiveness of these spaces. He believes that improving the quality of human presence in urban space or urban areas has a relationship with the amount of integration uses. Land uses and activities are more important in urban life or urban area than the buildings. An increase in diversity, results in a more dynamic and healthy environment (AhmadiNejad, 2004, p. 48). The best urban areas are those in which the land uses are integrated and a diversity of land uses and specialties are created. The reason for the public areas’ attractiveness and security is that they can recall various people in different times and for various purposes and this not only results in the mobility and livability of the environment, but also allows for informal monitoring of public areas (ibid. p. 58).

Public Areas Applications

A wide range of public areas applications include a chance to forgather and encounter, a political role in free forums of a democracy, a stage for exhibitions and festivals, a medium in which individual and group identities are developed (Mitchell, 1996). Successful public spaces can improve the opportunities of collaborative participation (Carr et al., 1993, p. 344) and if they are well-organized, they can increase the communion by eliminating the routine and focusing on others (Amin, 2008). Urban public spaces are stages at which citizens’ lives are openly displayed and, common grounds for applicable activities and ceremonies to link people together. Type, quality and sociability of urban spaces can be important in forming constructive social interactions.
and citizen participations or forming and organizing a social capital in urban structures (PourMohammadi and Koushaneh, 2013).

Many urban theorists believe that urban public spaces as major elements play an important role in a healthy city. This belief is beyond the functional role of public spaces which refer to the time when these spaces increase social capital once the rate of social interactions is high.

In related theoretical concepts, the importance of public spaces in citizenship policy studies have been emphasized, insofar as they are considered necessary and essential in generalizing urban policies. Lefever believes that each community in its own history, has created a specific social space in which all requirements of the community – from economic to social products - were met (Khademi et al., 2010, p. 35).

Identification of Research Area

Zanjan city, on the road of Tehran-Tabriz, is one of the eastern cities in Zanjan Province. Its area is 6169 km² (Armanshahr Consulting Engineers, 2006). According to the general population and housing census, the population of this city in 2011 was 386851 people (Management and planning organization of Zanjan province, 2013). According to the detailed plan review of Zanjan (2006), Zanjan city center area constitutes 4 areas of the five urban areas in Region 1 of Zanjan and 318 hectares. This area is relatively in the geometric center of the city and is a combination of the following spaces:

a) Unregistered historical sites with cultural heritage policy in which any interactive operation should be applied regarding the expected terms.

b) Maintainable spaces that are not registered, but should be considered special due to reasons of identity.

c) Old spaces that are not maintainable (Meshkini and AhadNejad Roshti, 2008, p. 33).

Regarding the fact that the detailed plan review of Zanjan has not addressed the second central city in Zanjan city and has attempted to decrease the problems in current situation, the area mentioned in detailed plan review is determined as the basic area of study.

Map 1. The situation of Zanjan city center area in relationship with the general structure of the city and the Major Road Network (MRN).

Source: authors by the use of data collected from the detailed plan review of Zanjan, 2006

Data Analysis

Based on the observations and investigations, the diversity of activities available to study in Zanjan city center area can be divided into 5 major land use categories. Of the land uses under study, only Zanjan city center area had higher amount of commercial per capita land use compared
to commercial per capita in other areas. The amount of per capita, land use distribution and research activities are as follows:

<table>
<thead>
<tr>
<th>Table 1. Research land use per capita in Zanjan city center area.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Row</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
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<tr>
<td></td>
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<tr>
<td>5</td>
</tr>
</tbody>
</table>

**Source**: Authors’ estimations by the use of data collected from the detailed plan review of Zanjan, 2006

The research sample is comprised of 7.8 percent of local residents of the city center area, 58.2 percent of residents of other areas and 34 percent of current activities’ practitioners in Zanjan city center area. Travelers and tourists that enter Zanjan are not counted. In average, the research activities can attract 52.5 percent of the current sample in order to do various activities. The highest rate of attracting people to the city center area is related to commercial land use with the attraction of 78.83 percent which is mostly done by retail stores. The lowest rate of attraction is related to administrative land uses with the attraction of 30.5 percent which is mostly done by state departments and agencies. No activity is detected in the research area that can attract citizens
during the night. After the last hours at night no activity is done in the area except the traffic. During the last hours of the night, mostly activities such as catering, entertainment and leisure like visiting parks, green spaces and catering centers take place. Based on the observations and studies conducted, research activities have been inflexible and each location is dedicated to a specific activity which is not changed overnight. The amount of attractiveness and the diversity of the time of activities are presented in the following table:

Table 2. The rate of citizens attracted to Zanjan city center area by research activities throughout the day and night (percent).

<table>
<thead>
<tr>
<th>Land uses</th>
<th>Activities</th>
<th>Temporal distribution of the ratio of people attracted by each activity throughout the day</th>
<th>Attracted by activities</th>
<th>Attracted by land uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>Personal offices</td>
<td>Morning to noon: 26, Noon to afternoon: 23.3, Evening: 0, Late at night: 0, Throughout the night: 0</td>
<td>49.3</td>
<td>30.5</td>
</tr>
<tr>
<td></td>
<td>State departments and agencies</td>
<td>Morning to noon: 11.7, Noon to afternoon: 0, Evening: 0, Late at night: 0, Throughout the night: 0</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>Banks</td>
<td>Morning to noon: 73, Noon to afternoon: 0, Evening: 0, Late at night: 0, Throughout the night: 0</td>
<td>73</td>
<td>78.83</td>
</tr>
<tr>
<td></td>
<td>Large shopping centers and stores</td>
<td>Morning to noon: 18.6, Noon to afternoon: 33.7, Evening: 23.15, Late at night: 4.65, Throughout the night: 0</td>
<td>80.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Various retail stores</td>
<td>Morning to noon: 17.2, Noon to afternoon: 33.8, Evening: 25.2, Late at night: 7.2, Throughout the night: 0</td>
<td>83.4</td>
<td></td>
</tr>
<tr>
<td>Catering, entertainment and leisure</td>
<td>Various reception centers, restaurants, coffeehouses, juice shops, etc.</td>
<td>Morning to noon: 3.3, Noon to afternoon: 16.6, Evening: 41.7, Late at night: 19.2, Throughout the night: 0</td>
<td>80.8</td>
<td>54.53</td>
</tr>
<tr>
<td></td>
<td>Parks and green spaces</td>
<td>Morning to noon: 2.7, Noon to afternoon: 12.6, Evening: 17.2, Late at night: 19.2, Throughout the night: 0</td>
<td>51.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Game and entertainment centers</td>
<td>Morning to noon: 1.35, Noon to afternoon: 7.3, Evening: 14.55, Late at night: 7.9, Throughout the night: 0</td>
<td>31.1</td>
<td></td>
</tr>
<tr>
<td>Cultural</td>
<td>Cinema</td>
<td>Morning to noon: 0, Noon to afternoon: 8, Evening: 8.6, Late at night: 2.6, Throughout the night: 0</td>
<td>19.2</td>
<td>32.23</td>
</tr>
<tr>
<td></td>
<td>Centers supplying cultural and artistic products, books, pictures, movies, etc.</td>
<td>Morning to noon: 11.9, Noon to afternoon: 26.5, Evening: 19.2, Late at night: 5.3, Throughout the night: 0</td>
<td>62.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Libraries</td>
<td>Morning to noon: 10.6, Noon to afternoon: 4, Evening: 0, Late at night: 0, Throughout the night: 0</td>
<td>14.6</td>
<td></td>
</tr>
<tr>
<td>Health care</td>
<td>Physicians’ private clinics</td>
<td>Morning to noon: 10, Noon to afternoon: 41, Evening: 18, Late at night: 3.2, Throughout the night: 0</td>
<td>72.2</td>
<td>72.2</td>
</tr>
<tr>
<td></td>
<td>The average percentage of temporal distribution of people attracted by each activity throughout the day and the night</td>
<td>Morning to noon: 15.53, Noon to afternoon: 17.23, Evening: 13.97, Late at night: 5.77, Throughout the night: 0</td>
<td>52.5</td>
<td>52.5</td>
</tr>
</tbody>
</table>

Source: authors based on data collected from the questionnaire
The Analysis of the Quality of Livability in Zanjan City Center Area with Emphasis on Activity Attraction in Public Areas

Figure 1. Various retail stores in Zanjan city center area.

Source: authors

Time diversity of the activities indicates that the start time of the activities has been almost the same and in the afternoon with the state organizations and agencies and banks being closed, other activities continue functioning. Libraries and personal offices are closed at the first hours of the night as well. Therefore, the diversity of the activities decreases from the evening, especially from the first hours of the night. Even at the last hours of the night only 5.77 percent of the total number of visitors to Zanjan city center area visits the expected area. From noon until sunset the amount of activities is at its highest point. The schedule of the activities shows that state organizations and agencies and banks have more limited hours than other activities. However, this time limitation does not lead to Zanjan city center area being less crowded when the activities are stopped.

High attractiveness of the activities in the research area shows the extensive commercial uses of this area throughout the city. This fact is understandable considering the high per capita of commercial activities in city center area compared to other areas of the city. Low attractiveness of administrative activities is justifiable considering the low per capita of these activities. Regarding the high attractiveness of healthcare activities, it is noteworthy that considering the nature of this activity, it receives unexpected visits and has longer periods of time compared to other activities.

Considering the unity of Zanjan city center area and the residence of citizens of various areas of the city who have moved to the city center, the desired diversity of activities beside other requirements of urbanism, a more favorable and pleasant environment can be created for all the residents of this city. Regarding the optimal diversity of activities in Zanjan city center area, it can be seen that citizens prefer that their city center be a consensus for commercial activities such as large shopping centers and stores. The inclination towards establishment of administrative land use of the state organizations and agencies type is the least favorite one. In order to realize the comparison between attractiveness of current activities and the diversity of desirable activities of citizens of Zanjan, we started to standardize the preference of establishing various activities. Activity attraction of Zanjan city center area is presented below namely the most attractive activities compared to the diversity of activity in Zanjan:
<table>
<thead>
<tr>
<th>Row</th>
<th>Activity</th>
<th>Activity type</th>
<th>Current activity attraction</th>
<th>Citizens preference</th>
<th>Analysis of the current situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Various retail stores</td>
<td>Necessary</td>
<td>83.4</td>
<td>76.5</td>
<td>Despite its high desirability of this activity, the citizens seem to tend to substitute large shopping centers and stores with retail stores. Current necessary attraction for buying from retail stores is more than its desirability.</td>
</tr>
<tr>
<td>2</td>
<td>Various catering centers: restaurants, coffeehouses, juice shops, etc.</td>
<td>Optional</td>
<td>80.8</td>
<td>74</td>
<td>The citizens are less willing that the catering centers be established in city center areas. It seems that the necessary nature of some catering centers such as restaurants and their accumulation in city center is not very desirable.</td>
</tr>
<tr>
<td>3</td>
<td>Large shopping centers and stores</td>
<td>Necessary</td>
<td>80.1</td>
<td>83.5</td>
<td>Despite this activity’s high attraction, the citizens prefer that large shopping centers and stores be placed in city center areas and this indicates that the desirability of establishing large shopping centers and stores is high.</td>
</tr>
<tr>
<td>4</td>
<td>Banks</td>
<td>Necessary</td>
<td>73</td>
<td>74</td>
<td>There is not any significant difference between the current situation and the desirable situation.</td>
</tr>
<tr>
<td>5</td>
<td>Physicians’ personal clinics</td>
<td>Necessary</td>
<td>72.2</td>
<td>50</td>
<td>Despite the high attraction of physicians’ personal clinics and less inclination of citizens towards the establishment of this activity, it can be stated that citizens do this activity unwillingly in city center area.</td>
</tr>
<tr>
<td>6</td>
<td>Centers supplying cultural and artistic products, books, pictures, movies, etc.</td>
<td>Necessary</td>
<td>62.9</td>
<td>64.5</td>
<td>There is not any significant difference between the current situation and the desirable situation.</td>
</tr>
<tr>
<td>7</td>
<td>Parks and green spaces</td>
<td>Optional</td>
<td>51.7</td>
<td>74</td>
<td>This activity in current situation lacks the amount of land use compared to its desirable situation in city center areas. Citizens are more willing that the parks and green spaces be established in the city center area.</td>
</tr>
<tr>
<td>8</td>
<td>Personal offices</td>
<td>Necessary</td>
<td>49.3</td>
<td>48.5</td>
<td>There is not any significant difference between the current situation and the desirable situation.</td>
</tr>
<tr>
<td>9</td>
<td>Games and entertainment centers</td>
<td>Optional</td>
<td>31.1</td>
<td>48</td>
<td>This activity in current situation lacks the amount of land use compared to its desirable situation in city center areas. Citizens are more willing that the games and entertainment centers be established in the city center area.</td>
</tr>
<tr>
<td>10</td>
<td>Cinemas and theaters</td>
<td>Optional</td>
<td>19.2</td>
<td>69</td>
<td>This activity in current situation lacks the amount of land use compared to its desirable situation in city center areas. Citizens are more willing that the cinemas and theaters be established in the city center area.</td>
</tr>
<tr>
<td>11</td>
<td>Libraries</td>
<td>Necessary</td>
<td>14.6</td>
<td>50</td>
<td>This activity in current situation lacks the amount of land use compared to its desirable situation in city center areas. Citizens are more willing that the libraries be established in the city center area.</td>
</tr>
<tr>
<td>12</td>
<td>State organizations and agencies</td>
<td>Necessary</td>
<td>11.7</td>
<td>37.5</td>
<td>This activity in current situation lacks the amount of land use compared to its desirable situation in city center areas.</td>
</tr>
</tbody>
</table>
4. CONCLUSION

City center areas as the beating heart of cities and places that indicate the deep link between community members and their country are mostly known and defined by their public areas; areas that are conceptualize by components of current activities. An investigation of current activities in Zanjan city center area indicates that activities in the city scale are divided into five major categories of general services land use (administrative, commercial, catering, entertainment and leisure, cultural and healthcare). Research land uses are comprised of 12 activities.

Current activities in Zanjan city center area can attract 52.5 percent of citizens of Zanjan on average in certain periods of time. An investigation of activity balance shows that there is a relative balance between activity times from morning to noon with the attraction of 15.53 percent, from noon to evening with the attraction of 17.23 percent and during the early hours of the night with the attraction of 13.97 percent. The last hours of the night with an attraction of 5.77 percent and overnight with an attraction of 0 percent are significantly different from other periods of time throughout the day. The relative activity balance during the day and the early hours of night is one of the properties that lead to the livability of Zanjan city center area during the aforementioned periods of time. Absence of activities throughout the night and low rate of optional activities are properties of activities in Zanjan city center area that result in the absence of nightlife in this area.

High commercial per capita has led to commercial services and the highest rate of attraction is by commercial activities which is 78.83 percent. Activity attraction condition in Zanjan city center area is such that none of the subjects of the sample are travelers and tourists from outside the city and the residents outside the city center area, who constituting 58.2 percent of the total number of subjects compared to other subjects of the sample, have the highest rate of presence in city center area.

Zanjan city center area attracts citizens of Zanjan mostly by necessary activities and optional activities such as parks and green spaces, cinema and theater and game and entertainment centers are more desirable than the current rate of attraction. The difference between the desirability of various activities and the attractiveness of each one of them shows that some activities such as large shopping centers and stores, parks and green spaces, games and entertainment centers, cinema and theater, libraries and state organizations and agencies are more prone to develop in the central area of the city. However, activities such as retail stores, various catering centers and physicians’ personal clinics have the advantages of being substituted or limited in development. Therefore, it can be stated that in order to improve the quality of livability in public areas, Zanjan city center area requires a refinement of current activities so as to become a more pleasant and fun place for the citizens and attract more people for optional activities. As was observed, at the last hours of the night only 5.77 percent of citizens of Zanjan are attracted to the city center area and usually to the optional land uses such as parks and green spaces. Therefore, by the increase of optional activities, the quality of livability will increase not only throughout the day and the early hours of the night, but also during the last hours of the night and more people will go to the central areas of the city during these periods of time. It is clear that by the increase of the number and presence of citizens in optional activities, the background will be available for social activities as well. Thereby, current public areas will better play their roles and do their functions.

It is obvious that the study of activity attraction is considered as a limited aspect of attraction and livability aspects of public city center areas; however, it is by the great importance and various usages of public areas that this dimension plays its part beside other factors influencing the livability of public areas.
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