An Examination of the Effect of Social Dimensions on Peoples’ use of Urban Public Spaces (Case Study: Chamran Recreational Site of Shiraz Located Between Shahidan Sheikh and Niayesh Bridge)

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Received: 16 December 2017- Accepted: 07 June 2018

Abstract

Space and society are clearly interrelated in such a way that conceiving of the former without the latter as well as understanding society without its spatial components is impossible. Public urban spaces provide the grounds for citizens’ social interactions and communication. More importantly, active presence of people in these areas promotes levels of social interaction, sense of cooperation and citizenship. The urban public spaces enjoy favorable social dimensions. The present study initially investigated the distinction between public and private spaces and then examined the effect of social dimensions of public spaces including concepts such as people and regions, territoriality, trust, security, informal monitoring and social network on the degrees of peoples’ use of such areas as Chamran promenade located in Shiraz. To collect the necessary data, the library and field methods were employed and 150 subjects were chosen and surveyed as the research statistical sample. Finally, the data were analyzed through logistic regression analysis using SPSS. The results indicated that social dimensions, i.e. territoriality and social networks play a key role in the degrees of peoples’ use of public urban areas.

Keywords: Urban public space, Territoriality, Social network, Logistic regression

1. Introduction

Urban public space is the scene where people daily visit and is defined in contrast to private living space. The significance of public space is because of the role it plays in developing democratic society. In other words, in case equal access to public spaces is granted to all members of society, threat, discrimination and social isolation will decrease and, moreover, the established cultural variety can turn public space to a place where individuals and various groups can cooperate in observing self-selected rules (Modiri, 2006, 12).

Overall, definitions presented for public space highlight unlimited access to the space or different activities, the most obvious of which is social interaction resulted from unrestricted access to the public places. The dimensions concerning availability of space and activities can be completed with two other ones, namely, brokerage and benefit. Accordingly, public space can be defined as a space which allows people access to it and activities performed there. It also refers to a place managed by a public organization and run so as to provide public interest (Madanipour, 1379, 215-216).

According to Cooper (1997), spending time in public spaces is not just for enjoying the pleasures. But, it is an important element of a healthy life. When it comes to urban designers’ task of creating urban public spaces, mostly physical dimensions of the spaces, without any consideration of human needs and social aspects, are taken into account. In Europe, most designers place emphasis on medieval spaces and organic urban squares or urban public spaces such as orderly squares belonging to European Renaissance era. In Iran, longing for traditional urban spaces is the main guide to action (Abbaszadegan, 2005, 71). Nonetheless, public spaces created in Western countries (Whyte W.H.1998) have indicated that more attention to physical features (form and shape), without taking account of content and social dimensions, does not necessarily provide a favorable space. In general, social dimensions of public spaces are mutually related

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Fig.1. Social dimensions effects in people’s use of urban public spaces (source: Authors)

The present study was carried out aiming to examine the effect of social dimensions on the degree, to which people use urban public space (a case study of Shiraz Chamran Recreational site). It also aimed at differentiating between public and private spaces as well as identifying the most effective social dimensions so as to have the most attractive public spaces which can absorb a greater number of people, leading to a creative city.
1.1. An approach to the examination of public spaces

Nowadays, urban public spaces are among the most significant issues from the perspective of scholars. In urban design, the concept has been examined under titles including “public domain”, “urban space”, and “public place”. The simplest definitions of public domain encompass social and political groups, in which all individuals are entitled to attend (Tabrizi, Mokhtabad, and Feizi, 2014, 259).

The newest edition of Oxford Dictionary (1993) presents much the same definition: “public and in its all senses antonym of private”. Similarly, according to Oxford it means “of or concerning the people as a whole, open to or shared by all the people of an area or country, of or provided by the local or central state”. In accordance with these definitions, for instance, a public street belongs to and concerns all the people as a whole, is open to all, is not limited, is provided by government, and is related to it. These concepts are reflected in various definitions of public spaces (Madanipour, 2000, 213).

Urban design sometimes includes design of buildings. However, it often concerns with architecture of buildings to the extent that facades and functions of buildings, particularly in ground floor, are defined a public domain (Lang, 2005, 22).

Almost every definition presented for urban design shows that urban design pertains to public domain and its constituent elements. From the perspective of Michael Walzer, public space is the place we share with strangers, who are not our relatives, colleagues, and friends. It is also a space for politics, religion, trade, sports, peaceful coexistence, and non-personal interactions (Tabrizi, Mokhtabad, and Feizi, 2014, 260-261).

The most fundamental distinction between private and public spaces is the difference between human inner space and the world’s outer space. The private nature of a space mostly refers to private property. In other words, private space is a part of one’s life as a personal area managed without any kind of interference from people, government and official authorities (Madanipour, 2008, 26-27).

Chermaaye and Alexander divide urban space hierarchy or community and privacy to six categorizations:

- **Individual private spaces**: personal rooms belonging to family members
- **Family private spaces**: spaces in a house used by families for eating, entertaining etc.
- **Private spaces of one group**: less significant places monitored by an administrative institute on behalf of public sector or private sector for natural and legal tenants such as public gardens, warehouses etc.
- **Public spaces of one group**: places using public and private services such as post, electricity, water etc.
- **Urban semi-public spaces**: particular urban places used publicly but supervised by government or institutes like municipality, courts etc.

2. Research Methodology

In the theoretical fundamentals section, the present study employed descriptive method, secondary data analysis (document-based) while in the research case sample a descriptive-analytical research method is used so based on the population of space users, using Morgan table sample size got 150 persons, and 150 questionnaires were filled. Then they were categorized and analyzed through logistic regression analysis in SPSS by taking social dimensions, namely, territoriality, people-space, informal monitoring, trust, safety, and social networks as the independent variables and people’s use of public space as the dependent variable.

The study was carried out in three stages:

1. The approach to distinguishing between public space, semi-public, private, and semi-private spaces
2. Examination of social dimensions and applications effective on people’s use of urban public space
3. Examination of case sample and conclusion-prioritizing significant social dimensions affecting people’s visits to public spaces in order to have a creative and dynamic city.

2.1. Hypothesis

It seems that social dimensions (territoriality, people-space, trust, safety, informal monitoring, and social network) have a significant effect on people’s use of urban public space

2.2. Social dimensions effective in the people’s use of public spaces

2.2.1. Space and human.

Understanding the relationship between people (society) and their environment (space) assumes great importance in urban planning. Since physical factors do not have unique or necessarily major impacts on behavior, environmental opportunities have an obvious effect on what they do and do not do. Thus, inherently based on situation and place, human behavior is in the perceptual, social and physical environment (Carmona, 2006, 104).

To consider a space as a favorable environment, it should satisfy humans’ basic needs (Maslow Pyramid: physiological needs, safety needs, love and belonging, esteem, self-actualization and self-transcendence). Most of the people usually behave based on Maslow’s hierarchical needs even though many behavioral exceptions exist as well. In some cases, humans’ behaviors and incentives do not follow Maslow’s hierarchical model due to cultural-religious reasons or some other special factors (Abbassadegan, 2005, 71-72).

Lawson (2001) holds that people, who are socially located in an area, tend to establish rules supervising their use of that place. Although some of the rules and regulations are
cultural, social and local contracts, most of them reflect humans’ deep and long-standing (primary) spiritual and institutional needs. Our civilization and culture considerably allows us to cooperate with each other (Madanipour, 2008, 72).

Public domain encompasses “physical” (space) and “social” (activity) dimensions. Physical public domain refers to spaces and environments which support and facilitate public life and social interaction. Activities and events occurring in those spaces can be regarded as public, social, cultural domain (Carmona, 2006, 106).

2.2.2. Informal monitoring

One of the fundamental principles of space syntax theory is that free flow of movement within the urban context and merging inhabitants with strangers not only is not acceptable from an architectural and social standpoint, but it also causes problems when it comes to crime prevention. This idea is partly in line with Crime Prevention Through Environmental Design (CPTED) and defensible marking and territoriality. The space protected against strangers is safer from their perspective. However, a considerable amount of experimental evidence indicates that increase in foot traffic improves the odds that the attacker has seen the target, leading to rises in crime alongside easy escape routes in interwoven spaces (Schneider & Kitchen, 2007, 43).

However, Hillier, B (1996) asserts that the presence of people, whether familiar or stranger, improves the safety and security of public spaces. Therefore, he is in search of physical characteristics of a space which increase human presence and decrease crime (Goli, 2011, 150).

Crime Prevention Through Environmental Design (CPTED) share common elements with new thinking. The main idea is that physical environment can be modified to reduce unfavorable events and fear of crime by lessening the support needed for and leading to secret behavior. Similarly, in the “Defensible Space”, Newman suggests regeneration of urban environments that can be inhabitable just in this way such that these spaces are not controlled by police, but rather by people sharing a common area (Carmona, 2006, 115).

Jacobs (1961, 40) highlights the need for activities to create monitoring and regional identification to distinguish between public and private spaces. He asserts that the necessity a successful neighborhood is that an individual should feel safe on the street among all strangers.

Overall, all the above-mentioned theories suggest that crime prevention is the result of people’s relationship with their society and conformity to public values, leading to informal monitoring which individuals are encouraged to possess in all public spaces and areas as a basic and major need.

2.2.3. Territoriality

Altman has suggested that there are three types of territories. Primary territories are private places where the owner has exclusive rights to use the space. Primary territories, such as places in the home, are easily personalized. Secondary territories are semipublic places where a person interacts with acquaintances or neighbors on a relatively regular basis. Conflicts between user groups can occur in secondary territories if these territories are not personalized by the owners or regular users. Examples of secondary territories are backyard, country club, and neighborhood bar.

Public territories are spaces where almost anyone is allowed temporary access, providing they observe the relevant regulations. Examples include a nearby recreation area or park. Altman postulated that the main dimensions along which these three types of territories vary are centrality or control (how central that space is in the life of a person or group) and temporal duration (how much time a person or group spends in the space), (Taylor, Stough, 1978, 418).

To increase interest in a space, the visitors to the place should be allowed to claim part of it. People claim parts of public space to achieve territory and privacy in special conditions. Proshansky H.M. (1976) contends that claiming a territory permits its beneficiaries to widen their choices, maximizing their free range of options and their freedom in the space. People may claim a part of public space due to four reasons, which are similar to Westin’s (1970) four space privatization stages (other-control to self-control): Solitude: it is the stage, in which an individual is completely free from other people’s watching him/her; Intimacy: it is the stage, in which an individual wants to be with someone else and at the same time free from the outer world; Anonymity: it is the stage, in which an individual wants to be both among the crowd and anonymous; Reserve: it is the stage, in which an individual controls unwanted nuisances by employing psychological obstacles (Abbaszadegan, 2005, 78).

Territoriality is a part of every human’s nature and encourages self-defense, shared interests, and accountability among individuals in a community. It is obvious that what is called “No Man’s Land I” or a land not having a specified user and goal is harmful to social performance. When a group of people is recognized by a particular place and feel responsible about it, they tend to more protect it (Barreto, 2002, 14).

According to what is presented above, a public territory defined as social places and living environments and encompassing some concepts of “public space” acts as a field for political behavior as well as a common and neutral ground for social interaction, relations, and a stage for social knowledge, personal development and information exchange (Carmona, 2006, 106).

2.2.4. Safety

As a basic need in human communities, safety holds a special place. Trying to identify factors threatening safety in public spaces, social planners and designers as well as urban designers strive to provide visitors to these
spaces with safety and security. According to Moeen Encyclopedia, safety refers to the state of being protected and having no fear. A safe individual is full of motivation and prepared for any kind of development. One of the leaders of humanistic psychology, Abraham Harold Maslow classified human incentives in an interesting way. He introduced a hierarchy of needs starting from biological ones to more complicated mental motivations at higher levels, playing a significant role after primary needs are met. In Maslow’s needs hierarchy, the need for safety and feelings of protection take precedence over physiological ones. By safety he means that an individual requires peace, that is fear-free and anxiety-free feelings. According to Maslow, safety is a mental need and in case it is not satisfied, human psyche will be irritated (Farahmand, 2013, 6).

In terms of one’s attitude towards self and society, safety is divided into two subjective safety and objective safety. The former refers to the state when individuals feel safe to express their thoughts while the latter means one’s feeling of safety for their life and property. Accordingly, any kind of damage inflicted upon life and property is a type of lack of safety (Farahmand, 2013, 7). Social safety is the comfort and peace of mind every society is responsible for providing in the personal, economic, political and environmental, particularly in public spaces. Hillier (1988) places emphasis on increasing safety through rising movements in urban spaces. Therefore, places with less capacity for movement (presence of people) are more prone to crime. As an urban space becomes larger, its safety will improve by increase in the presence of people and establishing movement patterns in privatized spaces (Goli, 2011, 143-151).

As mentioned by Ellin, N (1997), “if people do not use a place on grounds of inconvenience and fear, public domain will be destroyed”. Lack of safety, awareness of fear and victimization not only threatens use of public space but it also endangers establishing successful urban places. Thus, the feeling of safety and peace of mind is an inevitable and essential condition for urban design (Modiri, 2006, 13).

### 2.2.5. Trust

One of the most important indexes of social capital, social trust plays a key role in constructive interactions. Theorists like Putnam (1992), Fukuyama (1995), Barber (1983), Giddens (1992), Bourdieu (1986), Ritzer (1996), Turner (2000) and Luhman (1997) have all taken account of social trust in some way. According to Giddens, “pure relationship” emerges just for the reward yielded from the relationship itself. Pure relationship requires a priori commitment considered as a special kind of trust, that is self-commitment, and commitment to other individuals. Demand for intimacy is an inseparable part of pure relationship, which is the result of the former trust (Giddens, 2003, 113).

Trust is rooted in emotional attachment such that when emotions and feelings are developed and transferable among people, trust is established and improved. With regard to how feelings are transferred, Giddens believes that expressive interactions or warm relations play a major role. Contrary to instrumental interactions, expressive interactions communicate emotions, friendship, intimacy, and trust. Georg Simmel regards trust as one of the essentials of exchange, holding that society will disintegrate if people do not put public trust in each other. From his perspective, trust can have a variety of dimensions: a) trust in honesty and decency, adherence to ethical principles, b) trust in efficiency and effectiveness and the ability to fulfill duties, c) precedence of collective interest over individual interest (Bidel, Mahmoudzadeh, and Sadeqi, 2013, 178-179).

Generally speaking, trust refers to the belief that other people take measures to contribute to our welfare and avoid harming us (Mohseni Tabrizi, Agha Mohseni, 2010, 150).

#### 2.2.6. Social network

Social bond is another component of social capital which refers to objective links between individuals and/or their relationship with each other. Such bonds include:

A) People can establish relationship with each other in an informal way through making friends and developing network-based bonds. In other words, every individual possesses a social network, which encompasses a variety of relationships like friendship and emotional bonds, nearness in distance such as neighborhood and workplace and kinship ties etc. Each one of these bonds reflects one’s social capital resources. To sum up briefly, they include informal friendships with old friends and colleagues. A friend can improve an individual’s social capital through providing social support.

B) Apart from informal relationships with others, individuals can form links with each other through formal membership in associations and voluntary groups. Formal bonds and informal networks are defined based on the type of relationships between individuals. However, the survival of formal ties is far beyond inner social network (Khakpour, 2009 quoted by Mousavi, 2006).

Since social capital is not provided through individual measures, that is, a group or a social network should be established in order for social capital to be produced and re-produced, collective cooperation and social network is an essential principle for developing social capital. The other necessary element is trust in group. The next component is the social integration and solidarity between the group members which are based on the group’s special and agreed values and norms. In should be noted that experts are not unanimous in how to measure social capital (Rafipour, 2010).

Based on conceptual model, physical and social dimensions are common index between space public territoriality and space-human relations but in this
research, social dimension is the only one that is investigated.

3. Case Study

Shiraz has many tourism and recreational attractions, which are often used as public spaces by non-Shiraz citizens and tourists. Such spaces include natural recreational sites and unique antiquities and, moreover, a special pavement-Chamran Blvd- is one of the most striking features of this city.

Located in the north west of Shiraz with a length of 7 km and width of 42 m, Chamran Blvd was founded in the 2001 as the main road. The reason why Chamran Blvd assumes great importance is that it connects Shiraz central context to new ones like Golestan town and Mali Abad area. The gardens adjacent to the Shiraz Dried River, peripheral highlands, design of northern edges, presence of public domains and recreational uses have made Chamran Blvd play the role of a dynamic public space, becoming one of the Shiraz recreational sites (Soltani, Zargari Mondi, and Namdarian, 2013, 93).

Spaces such as four main medical centers, gardens, restaurants, sidewalks, ski and cycling resorts, the biggest seasonal summertime book exhibitions, counseling sites, and the tallest hotel in Shiraz have provided Chamran Area with a variety of physical dimensions making it enjoy vast social characteristics as distinct groups of people with varying thoughts attend the place.

Presence of parties, organizations and hangouts for speech, prayer and sit-in during elections have all turned Chamran Blvd into a place for political behavior and a common ground for social interactions and exchange of information, favorably performing as a public realm.

Therefore, given active and dynamic social activities, people tend to more use public spaces and are motivated to protect them.

Table 1.
The most well-known experts in the field of urban spaces (Source: KashaniJav, 2010, 97)

<table>
<thead>
<tr>
<th>Approach Column</th>
<th>Theorist</th>
<th>Year</th>
<th>Theory/Work</th>
<th>Key Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthening social Interactions</td>
<td>Hannah Arendt</td>
<td>1985</td>
<td>The Human Condition</td>
<td>Public realm the main factor in extroversion and political and public life</td>
</tr>
<tr>
<td></td>
<td>Jane Jacobs</td>
<td>1980</td>
<td>The Death and Life of Great American Cities</td>
<td>Sidewalks the factor in providing safety and strengthening social interactions</td>
</tr>
<tr>
<td></td>
<td>William-H Whyte</td>
<td>1980</td>
<td>Social life in small urban spaces</td>
<td>Emphasis on social role of urban spaces</td>
</tr>
<tr>
<td></td>
<td>Claes Oldenburg</td>
<td>1989</td>
<td>Good place, cafes, coffee shops and other hangouts at the heart of a community</td>
<td>Highlighting urban public domains as the third place (home and work as the first and second places)</td>
</tr>
<tr>
<td></td>
<td>Clare Cooper Marcus</td>
<td>1990</td>
<td>People Places</td>
<td>An assessment of residential environment and introduction of seven urban spaces</td>
</tr>
</tbody>
</table>

Fig. 2. Research conceptual model (Source: Authors)
4. Results and Discussion

The present study employed a descriptive-analytical research method such that it firstly examined social dimensions affecting the degrees to which people use public spaces. Then, the extracted social dimensions were included in a questionnaire so as to directly study the research case (Chamran Recreational Area). The data collected from a number of 150 questionnaires were categorized and then analyzed through logistic regression using SPSS.

In double linear regression a variable is used to predict another one whereas logistic regression analysis measures the relationship between several independent variables (in the present study territoriality, informal monitoring, safety, trust and social network) and a dependent variable (here daily, weekly, monthly and more than monthly use of public spaces). Logistic regression is a special type of multiple regression, in which the dependent variable is discrete. As previously mentioned, the present research case was Shiraz Chamran Recreational site which was examined using 4 hypotheses.

The Hypothesis: It seems that social dimensions (territoriality, people-space, trust, safety, informal monitoring, and social network) have a significant effect on people’s use of urban public space. To test this hypothesis, logistic regression analysis was employed and its results are presented in the following

![Fig. 3. Chamran public space location in Shiraz (Source: Authors)](image)

![Fig. 4. Section of chamran public space in Shiraz (source: Authors)](image)
As Table 2 depicts, as regards territoriality, regression model fitting is statistically significant as Chi Square equaled 26.072 while regarding social network the value of chi square decreased. It should be noted that the table is similar to variance analysis table in linear regression. In other words, the value 38.401 resembles total sum of squares in regression where its greater value (26.072) and 12.329 are explained by territoriality and social network, respectively.

In Table 3, there are two important statistics which bear resemblance to coefficient of determination (R-squared) in linear regression. According to Cox and Snell R Square, the value of territoriality and social network for predicting people’s daily use of urban public spaces equals 0.226 while NagelKerke’s R Square for the same variables (territoriality and social network) equals 0.392. Other social dimensions are not included in the model as they do not make any significant change in the coefficient of determination.

According to Table 4, the higher the Sig. level of Hosmer–Lemeshow test, the better the Hosmer–Lemeshow test. Fitting of the present model and its chi square value equal p=0.506 and 7.283, respectively.

Column B shows coefficient of variables in logistic regression equation. However, it should be noted that variables do not contribute in logistic regression unless their Wald coefficients are significant.

**Weekly use of urban public space** It seems that social dimensions (territoriality, people-space, trust, safety, informal monitoring, and social network) have a significant effect on people’s **weekly** use of urban public space.

**Monthly use of urban public space** It seems that social dimensions (territoriality, people-space, trust, safety, informal monitoring, and social network) have a significant effect on people’s monthly use of urban public space.

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### Table 2
**Testing the hypothesis through Omnibus test (Source: Authors)**

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Step</th>
<th>Chi Square</th>
<th>df*</th>
<th>Sig. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Block</td>
<td>26.072</td>
<td>1</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Model</td>
<td>26.072</td>
<td>1</td>
<td>0.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2</th>
<th>Step</th>
<th>Chi Square</th>
<th>df*</th>
<th>Sig. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Block</td>
<td>38.401</td>
<td>1</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Model</td>
<td>38.401</td>
<td>1</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*Degree of Freedom

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### Table 3
**Social dimensions of the hypothesis in Cox and Snell test (Source: Authors)**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Logarithm of Odds -2</th>
<th>Cox and Snell R Square</th>
<th>Nagelkerke’s R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>102.462*</td>
<td>0.160</td>
<td>0.277</td>
</tr>
<tr>
<td>2</td>
<td>133.90*</td>
<td>0.226</td>
<td>0.392</td>
</tr>
</tbody>
</table>

---

### Table 4
**Social Dimensions of the Hypothesis in Hosmer–Lemeshow test (Source: Authors)**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Chi Square</th>
<th>df</th>
<th>Sig. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.906</td>
<td>4</td>
<td>0.924</td>
</tr>
<tr>
<td>2</td>
<td>7.283</td>
<td>8</td>
<td>0.506</td>
</tr>
</tbody>
</table>

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### Table 5
**Coefficient of variables in logistic regression analysis (Source: Authors)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sig. Level</th>
<th>df</th>
<th>Wald</th>
<th>S.E.</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>Territorial</td>
<td>0.000</td>
<td>1</td>
<td>20.577</td>
<td>0.188</td>
</tr>
<tr>
<td></td>
<td>Fixed Value</td>
<td>0.001</td>
<td>1</td>
<td>11.654</td>
<td>1.325</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Territorial</td>
<td>0.000</td>
<td>1</td>
<td>24.264</td>
<td>0.230</td>
</tr>
<tr>
<td></td>
<td>Social Network</td>
<td>0.002</td>
<td>1</td>
<td>10.063</td>
<td>0.074</td>
</tr>
<tr>
<td></td>
<td>Fixed Value</td>
<td>0.843</td>
<td>1</td>
<td>0.039</td>
<td>1.789</td>
</tr>
</tbody>
</table>
As Table 6 depicts, as regards territoriality, regression model fitting is statistically significant as Chi Square equaled 6.155. It should be noted that the table is similar to variance analysis table in linear regression. In other words, the value 6.155 resembles total sum of squares in regression where it is explained by territoriality variable.

According to Cox and Snell R Square in Table 7, the value of territoriality for predicting people’s monthly use of urban public spaces equals 0.040 while Nagelkerke’s R Square for the same variable (territoriality) equals 0.054. Thus, nearly 4 (5) percent of variance in people’s monthly use of urban public spaces is explained by social dimension of territoriality. Other social dimensions are not included in the model as they do not make any significant change in the coefficient of determination.

Table 9 shows coefficient of variables in logistic regression equation. However, it should be noted that variables do not contribute in logistic regression unless their Wald coefficient are significant.

More than once a month: It seems that social dimensions (territoriality, people and space, trust, safety, informal monitoring, and social network) have a significant effect on people’s use of urban public space more than once a month.

As Table 10 depicts, as regards territoriality, regression model fitting is statistically significant as Chi Square equaled 10.88. In column belonging to Phase2, chi square value lessened as the next variable (social network) was included.
included. In other words, the value 9.32 resembles total sum of squares in regression where its greater value (10.88) and 9.32 are explained by territoriality and social network, respectively.

According to Cox and Snell R Square presented in Table 11, the value of territoriality and social network for Predicting people’s use of urban public spaces more than once in a month equals 0.126 while NagelKerke’s R Square for the same variables (territoriality and social network) equals 0.223. Nearly 13 (22) percent of variance in people’s use of public spaces more than once in a month is explained by social dimension of Territoriality. Other social dimensions are not included in the model as they do not make any significant change in the coefficient of determination.

The figures presented in Table 12 indicate that the higher the Sig. level of Hosmer-Lemeshow test, the better the fitting of the model. Accordingly, fitting of the present model and its chi square value equal p=0.987 and 1.769, respectively.

Column B shows coefficient of variables in the research fourth hypothesis. It should be noted that variables do not contribute in logistic regression unless their Wald coefficients are significant.

### Table 11
Social dimensions of more than once a month use of urban space in Cox and Snell test (Source: Authors)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Logarithm of Odds -2</th>
<th>Cox and Snell R Square</th>
<th>Nagelkerke’s R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>114.182²</td>
<td>0.070</td>
<td>0.124</td>
</tr>
<tr>
<td>2</td>
<td>104.859²</td>
<td>0.126</td>
<td>0.223</td>
</tr>
</tbody>
</table>

### Table 12
Social dimensions of more than once a month use of urban space in Homster-Lemeshow test (Source: Authors)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Chi Square</th>
<th>df</th>
<th>Sig. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.251</td>
<td>4</td>
<td>0.517</td>
</tr>
<tr>
<td>2</td>
<td>1.769</td>
<td>8</td>
<td>0.987</td>
</tr>
</tbody>
</table>

### Table 13
Coefficient of variables in logistic regression analysis (Source: Authors)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sig. Level</th>
<th>df</th>
<th>Wald</th>
<th>S.E.</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Territorialy</td>
<td>0.003</td>
<td>1</td>
<td>9.059</td>
<td>0.202</td>
<td>0.608</td>
</tr>
<tr>
<td>Fixed Value</td>
<td>0.000</td>
<td>1</td>
<td>15.046</td>
<td>1.746</td>
<td>-6.773</td>
</tr>
<tr>
<td>Territorialy</td>
<td>0.000</td>
<td>1</td>
<td>12.747</td>
<td>0.253</td>
<td>0.902</td>
</tr>
</tbody>
</table>

| Phase 2   |            |    |      |      |    |
| Social    | 0.004      | 1  | 8.353| 0.059| -0.170|
| Fixed Value | 0.012 | 1  | 6.368| 1.958| -4.941|

### 5. Conclusion

In today’s societies, spending leisure time in urban public spaces is one of the pillars of healthy life. It seems that lack of public spaces which can satisfy social interactions between individuals is greatly felt in communities compared to those of past decades since most contemporary designs are developed without any attention to social content and dimensions. Public space is in opposition to private one. That is, public space is not private and can be used by all people with ease and in a convenient way. People perform their duties in physical space, which is humans’ environment as they live there. Humans regulate their life by establishing social rules. Therefore, public space is the place where environment and human activities intersect. Presence of people in a public space provides it with more safety, resulting in informal monitoring, which leads to reduction in crime. It seems that stronger presence of people in public spaces makes them feel more attached to such places and try to protect them against various aspects. In other words, when people use a public space for a long period of time, they claim all or parts of it as their territory and tend to protect it. Safety provides members of society with peace and people like it when their thought, life and property are secured. Social safety refers to collective and public aspects of security and every society is required to supply it. On the other hand, increases in the presence of people in a public space rises safety of visitors to that place. Accordingly, in terms of safety and peace of mind, public spaces should be designed so that they can attract more people. However, peaceful presence of people in public spaces is impossible without social trust. A society will disintegrate unless its members trust in each other. Public space is of the places which measure and evaluate social trust and provide the grounds for development. Therefore, they should be designed in such a way that could
increase human participation, friendships and emotional ties between people and social groups.

Findings of the present study yielded from data analysis through logistic regression for Shiraz Chamran Recreational site suggest that territoriality and social network have the greatest effect on people’s use and the number of times they visit Chamran Recreational area. It should be noted that the number of visits, ease of access and feeling of safety in Chamran have been effective in people’s attachment to this place. Chamran Recreational site is of utmost significance as a public space from different aspects including sports and hiking, family, citizen participation in cultural-social activities, and friendship ties. Accordingly, while the characteristics of chamran recreational site are unique and it doesn’t have the possibility of generalization but it is suggested that urban designers revise it on the basis of social dimensions presented in this study so as to have a creative and dynamic city.

References