Local Environmental Conservation Activities as a Key Factor for Social Interaction (Case Study: Bagh-Shater Local Community)

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Abstract

One of the most significant issues of the local communities in Tehran, the capital of Iran, is creating social interaction. The implementation of local policies is necessary to encourage residents to continue social interaction. Accordingly, the purpose of this study is to examine how to enhance social interactions based on Perceived Residential Environment Quality (PREQ) indicators in local communities. Bagh-Shater, as one of the urban local communities in Tehran, was the population of this research. Likewise, 422 residents of the Bagh-Shater were selected as the sample. The results show that the effects model of the indicators of PREQ on social interaction can explain nearly half of the changes in social interaction. Also, the results show that strengthening local capacity in environmental management can be the basis for enhancing social interaction polices. In other words, it seems that maintenance and conservation of the local environment as a concept of value can not only currently bring together a variety of actors for local upkeep and care improvement, but can also significantly create social interaction.

Keywords

Perceived residential environment quality indicators; social interaction; urban local community; urban identity

Introduction

The Urban Local Community (ULC) is more than a home and a city. It is an intermediate urban analysis level that provides a space to enable public and private behaviors and structures. Also, in the activities and the people's view, it is a bridge between their home and the city (Bonaiuto & Bonnes, 1996).

The local community, as the main cell of the traditional city in Iran, is the settlement of a particular ethnic group, race, religion or, sect. The urban community, under the influence of the tribal system, in the process of its formation, created collections known as the Local Community (LC). From the beginning of the construction of Islamic cities, each tribe and ethnic group with shared interests and kinship networks built a separate local community. For instance, familial ties were justified for inner solidarity and strived for a kind of self-sufficiency in services and facilities. Socio-cultural solidarity has created the psychological factors of attachments to a local community. Urban residents followed a special common custom and felt different than other local community residents (Masolo, 2002).

The residents of the local community had certain duties and rights; they saw themselves as part of the community, and they saw their survival and comfort in the efficiency and power of the community. This feeling of solidarity made urban communities more distinct than other settlements. The formation of the local community of Heydari Khane and Nemati Khane in the Safavid period can be considered as models of most cities of Iran (Yarshater, 1982; Zad, 2013).

The dominant social relations are defined very delicately in the texture of the local community, conveniences, and roads, the local community center, and other buildings like water reservoir (ab anbar), mosque, Hussainiya (a congregation hall for Shia commemoration ceremonies), Sagha Khaneh (a station to maintain holy water and fire in ancient Iran), and public bathrooms. Under the influence of relative self-sufficiency in each local community, special economic facilities were established along with a central location that provided all the daily and short-term amenities of residents. The physical structure of the local community as a cultural crystallization of the socioeconomic conditions of the society has a certain degree of coherence and homogeneity. In other words, the aforementioned features created the physical elements of the local community, and a set of elements in residential centers created a local environment that reflected the interactions of residents in their everyday communication (Pakzad, 2005). The dominant role of traditional culture in the constituent elements of the local community had emerged.

These conditions had undergone fundamental changes until the late Qajar dynasty (1925). The study of the structural and functional changes of the city in contemporary times shows that the nature of cities, influenced by modernism and the economic, social and political conditions prevailing in the country (Grigor, 2009; Katouzian, 1981; Sharifi & Murayama, 2013), has undergone major changes.

We are witnessing the transition from traditional systems to modern spaces in cities with the introduction of motor vehicles, the complexity of the division of social labor, and the migration from rural to urban areas. Due to exogenous development and modernism, urban local communities are losing their effectiveness. It can be said that various changes of the urban local community in Iran can be examined from two perspectives: first, changes in the local community characteristics in terms of the ruling system and inner social changes when

during different historical periods, including Islam's period, and the Qajar and Pahlavi dynasties, and after the Islamic Revolution, dominant political systems influenced urban life structure; and second, is the effects of global and technological changes on the Iranian Local Community.

Accordingly, at present, the perception and definition of the urban local community (ULC) as the smallest unit of urban division, and as a basis for identifying the local community is the formal and official definition and rules, has fundamentally changed. The modern Tehran is currently divided into 376 urban local communities, while the Tehran of the Qajar period had five local communities. Therefore, this term urban local community can be viewed from two perspectives; historical and legal. Although the term urban local community has a historical background, in this research, the legal definition of urban local community has been chosen. In the historical meaning, the local community and its territory are defined by ethnic, racial, religious, and class ties. These communities have changed over time, and we no longer see such traditional local communities and their functions in the country's urban system.

The term urban local community was legally defined in 1984 by the Islamic Parliament of Iran (IRAN, 1984). In the legal definition, a local community is a residential area with a specific territory and service buildings that residents consider themselves to belong to in terms of the social fabric. Also, an urban local community is a part of approved urban divisions, and of an urban region which is formed by joining several urban local communities. The Bagh-Shater neighborhood is one of the few urban local communities in Tehran, which is consistent with both the historical and the legal criteria. Bagh-Shater had been an old local community since villages were throughout Tehran and is now an urban local community according to the new legal rules.

Regarding increasing population growth in the local community, most of the Bagh-Shater inhabitants are new, but to some extent, the old texture has been preserved. Based on this, social interactions in their new forms can be seen. Researches, such as those presented on local community development in Tehran Municipality (2015), showed that at the local community level, the most important need of people is to create continuous social interaction, and then the need for facilities and amenities, health and wellness, participation in urban affairs, shopping centers and public transportation, security, and attachment. Accordingly, this study investigates the impacts of Perceived Residential Environment Quality indicators (PREQ) on creating social interaction among the inhabitants of the Bagh-Shater local community.

Literature review

The definition of social interaction and its types

Social interaction is a process that begins by communicating between the actors, where the presence of actors just does not only entail the formation and the pursuit of a social relationship. In this case, the actors constitute only a human gathering, while the social interaction process begins when actors are placed in a position of mutual accountability to each other. As long as this position remains, the interactive process continues and does not stop. Gabriel Tarde and George Simmel (1904-1918), the first sociologists that directly examine this process, created an approach named microsociology. Subsequently, a large group of sociologists followed suit, and during the past century, the social interaction process became

one of the most important subjects of sociology (Argyle, 1973; Clark & Robboy, 1992; Jacobsen & Kristiansen, 2015; Turner, 1988, 2002).

Among the sociologists who have examined the process of social interaction, two groups can be distinguished. The first group is the sociologists who consider the social interaction process as a key to understanding and recognizing social processes. They also believe that for a more accurate understanding and perception of the social organization of the human community, sociologists should begin with studying the most fundamental sociological concept of social action. The analysis in this context provides a suitable platform for the study of more complex social systems. In this approach, social phenomena as the consequences of the social interaction process are the subject of sociological analysis (Adler et al., 2014). The formation of new local communities and the definition of their continuous social interactions are in this category. Accordingly, in social interaction, humans learn meanings and symbols that can make this social action a basis for interpreting their environment. The second group includes sociologists as well as social psychologists who, in their investigations, instead of the consequences of the social interaction process, focuses on exploring the process itself, its formation and flowing, and its features. This group examines the social interaction process as a mechanism of mutual influence between actors (Homans, 1961, 1974).

For sociologists studying microsociology, a relationship between two individuals is the smallest and the most fundamental unit or social nucleus. This relationship is a social process, for it joins two human minds together by engaging them. This conflict continues over time. The degree and the dynamics of the social life of humans depend on how, and in which dynamics they are present (Bond, 2016; Fuhse, 2009; Scheuch, 2004). The study of such a social interaction in everyday life shines a clear light on larger social units. Larger social units, such as Urban Local Community (ULC), are sociable places.

The meaning that the actor derives from the interpretation of the position and the interpretation of another action is both a product of their wisdom based on their past experiences. The result of their emotions and feelings are relative to the other, to another action, as well as to the situation in which it is located (Homans, 1961).

All social interactions are not in the same direction, and it may be in the form of cooperation, adaptation, and matching, which is termed continuous interactions. On the contrary, they may not be aligned, and individuals and groups compete and fight for their goals and formulate discrete interaction (Koenig, 1953). Likewise, Koenig (1953) distinguishes between two types of communication, which are contact in time and space. In contact in time, the contact among the groups with the generations of the past, even the most distant generations are achieved through customs and the transfer of emotions and memories. This kind of contact has a great influence on the thoughts and behavior of the groups. However, contact in space includes communication between individuals and contemporary groups in a given region. The first sort of contact is based on friendly and close relationships, such as the relationship between family members and the relationships between close friends or relationships that exist between the first groups. The call in the next case is the indirect relationships of larger groups such as neighborhood, urban local community, city, organizations, and the like.

Relationship between social interaction and urban-local community

Several studies have argued that urban local communities can promote social interaction. People come to their communities to respond to the need for their social interaction (Marcus & Francis, 1997). Local community units should be a space that creates the possibility for individuals to interact with each other (Drucker & Gumpert, 1998). A local community is distinctive because of the specific physical or social characteristics of its place and inhabitants (Keller, 1988). The urban local community is, in fact, a real social unit that is somewhat organic, and after time, takes on a lasting shape. Shaping new local communities or the expansion of old units under the influence of rapid urbanization and modernist thoughts in Tehran has changed past social relationships. The Bagh-Shater local community is no exception. On the other hand, since urbanization is changing rapidly in the era of globalization, social relations also take various forms. Shaping urban areas in such a way as to enhance social interactions over time will be important.

The classifications of social interaction factors

Factors that can trigger social interaction in an urban local community can be divided into two categories: social variables and physical characteristics. Demographic and social characteristics affect how residents interact with each other and how they use common spaces within the neighborhoods. Factors such as the characteristics of the respondent in the life cycle (including age, marital status, and the presence of children at home), ownership status (owner or tenant), length of stay, education level, and annual income, and sociodemographic characteristics are associated with social interaction (Haggerty, 1982). The spatial and physical characteristics of the neighborhood can affect the pattern of social relations between neighbors. The pattern of the neighborhood, the location of the neighborhood, the scale and proportions, the mixed land use, and physical characteristics are among these examples.

Jacobs (2016) considers that the combination of traditional local communities is to promote social life due to physical features such as pedestrians and facilitation of social activities. Nevertheless, on the assumption of the correctness of this opinion, how can such interactions be promoted now with the current modern local communities? The viewpoints of Gehl (1986) and Newman (1972) may help respond to the previous question. They state that long-term activities occur in local streets in semi-private areas or soft edges. This view is endorsed by Newman (1972) in the theory of defensible spaces. It is argued that the sense of territory is an important mechanism for creating a residential environment and incorporates it perfectly. Therefore, it can be stated that perceived mechanisms between inhabitants play a significant role in creating social interaction, but when actors are placed in a position of mutual liability and responsibility to each other, and as long as this situation takes place, the interactive process continues.

Context of sociable places

Based on Parsons' view (1991) of social interactions, having purpose and surveillance creates the context of social interaction, with the same sense of territory and surveillance and control in a neighborhood possibly creating the context of social interaction among modern residents. Physical features can, as elements of effective design in outer space, improve social interactions, or act as a factor in preventing such actions. Physical features can persuade people to stay in space and protect and care for themselves. The more time people spend in their neighborhood, the more they are encouraged to engage in neighborhood activities

(Keefer & Knack, 2008). The presence of interesting subjects and features and enough green space will create opportunities for social activities and the improvement of social ties among residents. Accordingly, in this study, the indicators of Perceived Residential Environment Quality (PREQ) have been chosen, and it is intended to determine the effect of each of these indicators on the creation of social interaction among the inhabitants of the Bagh-Shater neighborhood.

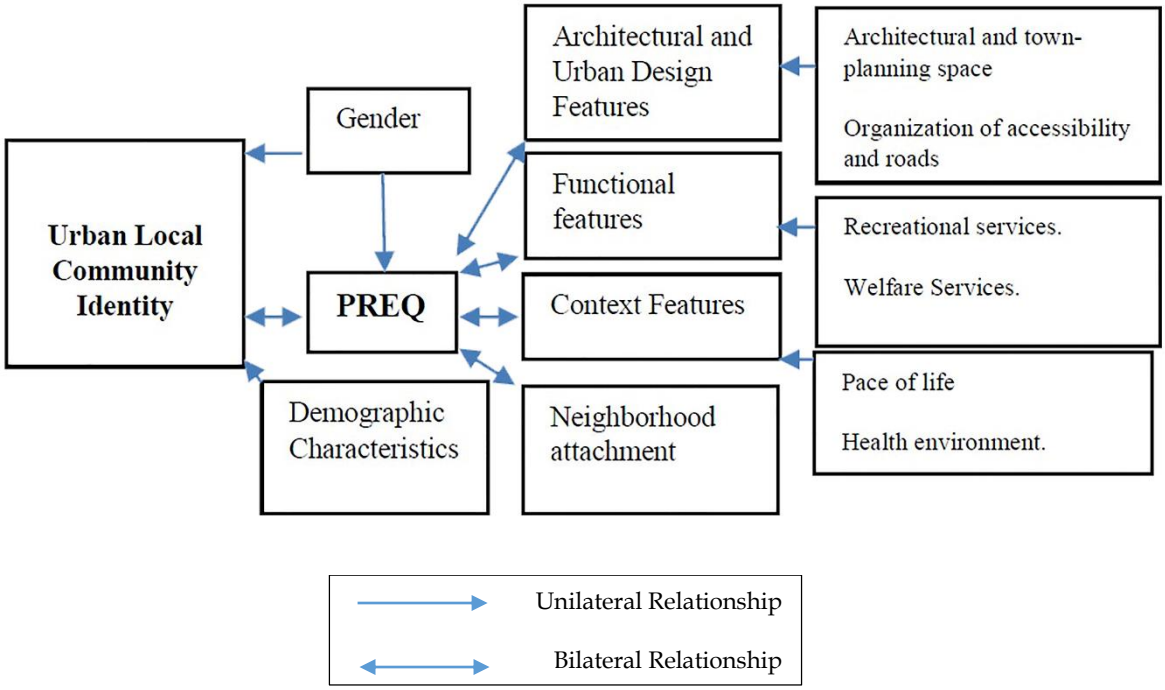
Perceived residential environment quality

Perceived Residential Environment Quality (PREQ) is understood as a multi-dimensional concept that can be measured through a list of questions with different dimensions. The environment psychology literature highlights three main aspects of local evaluation (Amérigo, 2002; Canter, 1983): the spatial dimension (architectural and urban planning features), human aspect (social relations), and functional aspects (services and facilities). The two main proposed models in the field of PREQ can be identified. First, the PREQ is considered as the criterion variable, and it seeks to determine its predictive variables and useful information for urban management and planning. In contrast to the second model, PREQ is used as the predictor variable of other relevant urban behaviors such as residential mobility or residential choices (Francescato, 2002). The need for reliable tools to measure these structures has led to a long period of information gathering and research to evaluate the factor structure of the two psychological tools used in urban areas. These two tools, respectively, include a set of measurements for determining the quality of the perceived residential environment and the measurement scale of place attachment (Adriaanse, 2007; Bonaiuto et al., 1999; Bonaiuto et al., 2003; Fornara et al., 2010).

These tools have a modular structure to manage independently relative scales based on the qualities of the environment in which researchers are interested. The initial version of the scale of PREQ was based on three criteria that reflect the three main aspects of neighborhood assessment (spatial, human, and functional). The initial quantitative analysis also showed the fourth aspect; emphasis on contextual characteristics (e.g., neighborhood lifestyle, environmental health, and pollution, maintenance, and care), which were empirically confirmed (Bonaiuto et al., 1999). Detailed data were collected, and the progressive refinement of tools was put into practice by Bonnes et al. (1997) and Bonaiuto et al. (1999). In any case, this research needed to be improved, because some scales consisted of a few items, and the content that was measured was below the required level. On some scales, the number of negative items was much higher than those of positive items, and some words had a dual meaning (for example: in this neighborhood, the buildings are beautiful and well kept.) Some were very long. The weak internal consistency of some of these indicators reflected these defects.

In as much, Bonaiuto et al. (2003) attempted to investigate the city of Rome to present a new version of PREQ and place attachment. In this study, Bonaiuto et al. (2003), for better representation of each indicator, tried to reduce the number of questions in each indicator and to emphasize the improvement of the internal consistency of the qualities by selecting more suitable questions. The results of this research confirmed the scale factor structure, which included 19 perceived quality indicators (150 items in total), and a neighborhood attachment index (8 items). This new scale raised the reliability and validity levels of the perceived environmental index and attachment significantly. As shown in Figure 1, the conceptual framework model of the research was designed, which was derived from the models of Bonaiuto et al. (2003), Bonaiuto et al. (1999), and Fornara et al. (2010).

Figure 1: Conceptual framework of perceived residential quality & social interaction



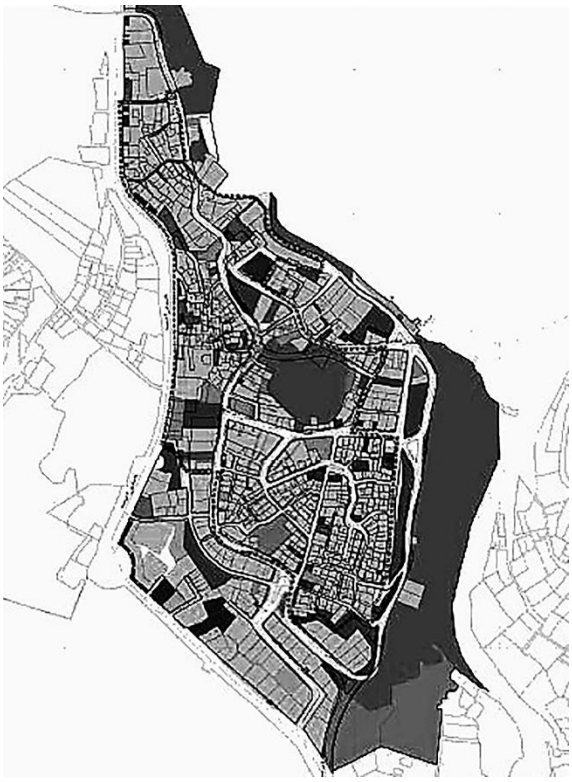
Research methodology

In order to investigate the role of the PREQ model on social interaction, a field study with a survey method and a questionnaire tool has been used.

Study area

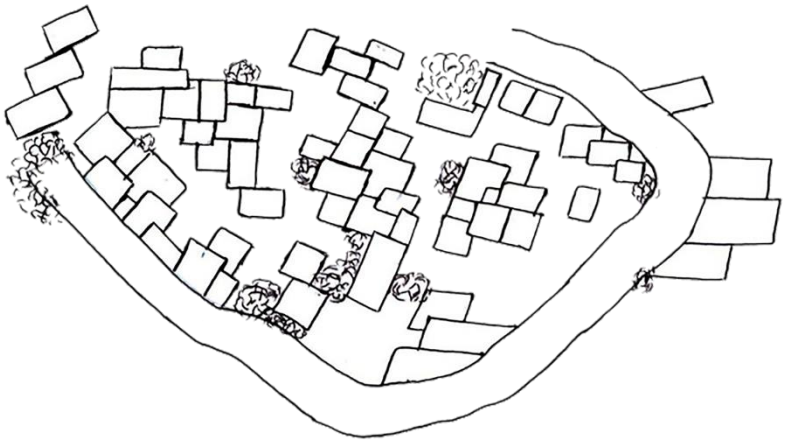
The local community of Bagh-Shater is located in the northern part of Tehran city, just south of the old local community of Darband, and at the southern slopes of Alborz Mountains. The current structure of the local community does not follow a systematic design. It seems the local community has gradually developed over time from a rural area to its present form (Figure 2).

Figure 2: Structure of Bagh-Shater



Bagh-Shater consists of a combination of a traditional (organic) texture and that of a more modern feel. Traditional parts include unstructured spaces, which are gradually formed over time and are not designed. These parts are around the Bagh-Shater central square (Figure 3). The second type includes the outer areas of the local community that was architecturally planned and was designed with a regular geometric shape that did not follow its long-standing center-oriented design (Figure 2).

Figure 3: Center square texture of Bagh-Shater



The population of Bagh-Shater is around 9,780 persons and 2,502 households (Statistical Centre of Iran, 2016). Using Cochran's formula, 422 residents of the Bagh-Shater were selected as the sample. As far as possible, efforts were made to select high-precision contributors based on their sociodemographic (e.g., gender, age) contributions. Then the questionnaire was designed based on the Persian version of the PREQ created by Bonaiuto et al. (2015). According to the questionnaire, the relationship between dependent indicator (social interaction) and independent PREQ indicators (e.g., accessibility) will be measured and determined. Twelve indicators of PREQ, with a total of 158 items, were created. The Likert-scale consisted of seven-level assessments, from "totally agree" to "totally disagree", with individual factors of gender, age, literacy rate, occupation, and the like. As shown in Table 1, the alpha coefficient of the questionnaire was calculated to be 0.793, indicating the reliability of the measurement tool.

Table 1: PREQ reliability of Bagh-Shater

	Indicators	Total Items	∝
PREQ index	Architectural. town-planning features	46	0.778
	Functional features	44	0.761
	Context features	36	0.801
	Neighborhood attachment	8	0.819
	Social Interaction	24	0.742

Results

Of the 408 respondents, 48% are male and 52% female, with about 8 percent under 20 years old, 49 percent between 20 to 40 years of age, 37 percent between 40 and 60, and 6 percent are above 60 years old. Table 2 shows the averages obtained in each indicator. Based on the results, we observe that the social interaction indicator in the Bagh-Shater community is a 'low average'; architectural, town-planning, functional features and context features are 'near moderate'; and local community attachments are 'above average.' The significant difference in meanings is shown in Table 3.

According to Table 3, it can be stated that except for the three indexes of organization of accessibility and roads and green areas which their differences were not significant. In other indicators, the differences were significant. Among the indicators, residents were not satisfied with the current situation in terms of recreational services, social interaction, and welfare services, but in other indicators, these satisfactions were acceptable.

Table 2: Averages obtained of PREQ in Bagh-Shater

Indicators	Architectural. Town -planning Features	Social Interaction	Functional Features	Context Features	Attachment
Average	3.75	3.16	3.71	3.81	4.48
Middle	3.68	3.12	3.54	4.34	4.5
Minimum	1.63	1.88	74.2	2.62	2
Maximum	4.65	4.44	44.4	5.51	5.85

Table 3: A significant means of PREQ indicators in Bagh-Shater

Indicators	T	df	Sig	Mean Difference	95% Confidence Interval	
					Highest	Lowest
Architectural. Town-Planning Features	5.165	287	0.000	0.2341	0.0918	0.2053
Architectural & Town-Planning Space (ATPS)	12.314	320	0.000	0.37692	0.3166	0.4372
Organization of Accessibility And Roads (OAR)	0.998	314	0.319	0.03787	-0.0369	0.1127
Green Areas (GA)	1.981	317	0.059	0.08745	0.0005	0.1744
Social Interaction (SI)	20.37	312	0.000	-0.3453	0.5899	0.7163
Functional Features	3.581	294	0.015	0.21051	-0.0110	0.1009
Welfare Services (WS)	-12.411	317	0.000	-0.46236	-0.5358	-0.3889
Recreational Services (RS)	3.171	331	0.002	-0.10629	0.0402	0.1723
Commercial Services (CS)	-2.791	339	0.006	0.11181	-0.1907	-0.0329
Transport Services (TS)	19.058	317	0.000	0.72365	0.6488	0.7985
Context Features	27.662	298	0.000	0.31032	0.7555	0.8715
Pace Of Life (PL)	26.266	311	0.000	0.74121	0.7781	0.9043
Environmental Health (EH)	26.089	328	0.000	0.68680	0.7274	0.8462
Upkeep And Care (UC)	19.532	333	0.000	0.24180	0.7024	0.8601
Neighborhood Attachment (NA)	25.445	340	0.000	0.99170	0.9149	1.0685

The relationship between the PREQ indicators and social interaction as shown in Table 4, indicates that there is a significant positive relationship between social interaction and upkeep and care, neighborhood attachment, the pace of life, welfare services, urban roads, recreational services, green areas, architectural and town-planning space, and environmental health. However, there is no significant relationship between the indicators of transport services and commercial services with social interaction. (As a result of the non-significant relationships between social interaction and the demographic characteristics, the findings were ignored).

Table 4: Relationship between the PREQ indicators and social interaction

		ATPS	OAR	GA	WS	NA	RS	UC	EH	PL	TS	CS
SI	**PCC**	.103	.201	.183	.109	.256	.151	.314	.101	.203	.181	.221
	Sig	.000	.000	.000	.000	.000	.000	.000	.000	.000	.057	.092
	N	408	408	408	408	408	408	408	408	408	408	408
	Rank	8	4	5	7	2	6	1	9	3	-	-

In order to measure the effect of PREQ indicators on social interaction, multiple regression models were used. The results are shown in Tables 5, 6, and 7. Using multiple regressions, the researcher can investigate the existing linear relationships between a set of independent variables with a dependent variable in which the existing relationships between independent variables are also considered. The regression helps to explain the variance of the dependent variable, and this is partly through the estimation of the participation of variables (two or more independent variables) in this variance (Kerlinger & Pedhazur, 1973). First, F-value was examined for the model's ability to predict social interaction changes, as shown in Table 5. Regarding the significance of the F-value at less than 1% error rate and its value of 303.761, it

can be stated that a regression model consisting of 9 independent variables is acceptable, and the indicators of PREQ can estimate the social interaction changes.

Table 5: Ability to explain changes in social interaction by PREQ indicators

Model	Sum of Squares	DF	Mean of Squares	F	Sig
Regression	15,730	9	3,564.4325	303.761	0.001
Residual	16,333	979	31.8874		
Total	32,063	988			

To determine the total amount of changes that occur in social interaction by PREQ variables, the adjusted R square was calculated. Table 6 shows that the correlation coefficient (R) between variables is 0.658, which indicates an acceptable correlation between variables. The Adjusted R-square is 0.474, which states that 47.4 percent of the total social interaction change is dependent on the nine independent variables used in this model. Nearly half of the variance of the social interaction variable is predicted by PREQ variables.

Table 6: Total impact of PREQ Indicator on social interaction

Model	CC	R-square	Adjusted R-square	SD
1	0.658	0.481	0.471	3.5348

The correlation coefficients of PREQ Indicators in social interaction are shown in Table 7. The Comparison of indicators with each other shows that the effect of six variables of neighborhood attachment, upkeep and care, organization of accessibility and roads, the pace of life, green areas, and recreational service is significant on social interaction. However, variables of architectural and town-planning space, environmental health, and welfare services, with a significant level of t-value above 5%, have not had an impact on social interaction.

The upkeep and care variable, with a 0.394 correlation coefficient, showed the highest impact. The attachment variable had the highest impact with a coefficient of 0.169, urban road with a coefficient of 0.142, the pace of life with a coefficient of 0.123, green areas with a coefficient of 0.112, and recreational services with a coefficient of 0.102, had impacts on social interaction. Accordingly, with increasing one of the standard deviations in the upkeep and care variable, neighborhood attachment, and the organization of accessibility and roads, the rate of social interaction in the residents will be increased by 0.395, 0.169, and 0.142, respectively.

Table 7: Impact of PREQ indicators in social interaction

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig	Correlations		
	B	Std. Error	Beta			Zero-Order	Partial Correlation	Semi Partial
Fixed	10.355	0.755		14.02	.000			
ATPS	0.078	0.036	0.08	1.41	.0632	.103	0.006	0.003
OAR	1.148	0.091	0.142	12.16	.000	.201	0.144	0.120
GA	0.105	0.111	0.112	10.71	.001	.183	0.107	0.052
PL	0.097	0.038	0.123	11.12	.000	.203	0.121	0.069
EH	0.023	0.043	0.006	0.54	.0514	.101	0.012	0.006
UC	0.714	0.048	0.394	16.88	.000	.299	0.198	0.150

NA	0.304	0.077	0.169	14.10	.000	.314	0.167	0.124
WS	-0.033	0.117	-0.026	1.06	.1854	.109	0.032	-0.01
RS	0.950	0.123	0.102	8.26	.003	.151	0.065	0.041

Conclusion

In the view of Georg Simmel, there is a reciprocal relationship between the pattern of spatial arrangement and social processes, and social forms are the frameworks that provide the possibility of the emergence of contents (Werlen, 1993). Social relations must be re-formed through the definition of space, territory, and identity. On this basis, we must create new goals and situations in the urban local communities to encourage people to local interactions. These goals and situations form new spatial identities. Based on the results, strengthening local capacity to maintain to conserve and control the local environment could be the basis for such a policy. In the new era, enhancing environmental values in local spaces can bring together a variety of actors in multi-cultural places in large cities that do not have the same characteristics of the past.

From Parson's viewpoint, the main components of action and the existence of an actor (citizen), is having a goal and a position that a part of it cannot be under his supervision and the things that are under his supervision.

Three components are visible in the upkeep and care of the residential environment and local environmental management. In other words, it seems Local Environmental Conservation Activities can put actors in a position of mutual responsibility and accountability. As long as this position remains, the interactive process will continue and not stop.

In line with the good governance concept of the UN, local environmental conservation comprises the institutions, mechanisms, and processes through which citizens and groups articulate their interests in the local environment, exercise their legal rights, meet their obligations, and mediate their differences (Bardhan & Mookherjee, 2000; Graham et al., 2003; Kemp et al., 2005; Weiss, 2000; Work, 2002). Furthermore, the empowerment of local communities in the participation and monitoring of developmental actions and local environmental management will transform the urban local community into the place of interactions and the social life of the inhabitants, and this will, directly and indirectly, have a significant impact on the PREQ. In addition, it creates a reciprocal relationship between the local inhabitants and the environment and the continuous adaptation of both person and environment to each other (Yelaja, 1985; Zapf, 2009) that during time, environmental values, and conservations can bring about the local inhabitants' interactions.

Likewise, in line with Fisher's view (1977), four types of attachments can be considered that three of the attachments are social relationships in the local institutions and with the people, and relating to the individual's sense of the environment (Feiss et al., 1977; Riger & Lavrakas, 1981). Accordingly, a part of the influence of attachment on social interaction can be attributed to environmental values. In other words, the physical environment is perceived not only in terms of its social aspects that have become part of the social environment but also is an important contextual consideration for practice (Zapf, 2009). Besides, collaborative co-operation facilitates the achievement of common interests in environmental issues. The level of social relations among social networks in a local community is both quantitatively and

qualitatively determinants of its social capital, as the quality of these relationships can represent the social norms within the network (Dempsey et al., 2010; Jenks & Jones, 2009).

Accordingly, the purpose of local community management should be decentralization, environmental localization, and community participation. If this purpose has been implemented successfully, it can play an important role concerning social interactions. If this purpose is implemented only symbolically and does not create real participation and local environmental values, it only increases administrative bureaucracy. On this basis, the following should be taken into consideration: social planning for the development and strengthening of environmental management of local community and the use of local residents' capacity; planned and codified information about different dimensions of local environmental values and their conservation; increased citizen supervision over management activities of the local community; the formation of social and cultural councils of the local community and establishing a database of local residents of expert skills for solving environmental issues; and creating vivacity and happiness in the local residents by announcing collective programs on specific days (e.g., clearing and promoting local community).

This result gives preliminary signs to suggest that environmental activities may be responsible for increasing social interaction and even local attachment in moving towards environmental sustainability. However, the current study cannot draw a line of causality between environmental activities and other attitudes and behavior. Subsequently controlled experimentation will be required to investigate the issues. Furthermore, such a perceived residential environmental quality framework is probably not sufficient as a way of fully understanding experiences of social interaction in a local community. Sometimes constraints will occur that do not relate to relationships, and sometimes possibilities will arise outside of relationships. So, it seems that adopting a qualitative approach in line with the framework can be useful for improving the results.

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