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Modeling the Effects of Enclosure Components in Ekbatan and Ati Saz Residential Complexes

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Research Article

Abstract

Examining the physical-perceptual structure of architecture creates a context for users to understand the goals and meaning of architecture by being in the space, on the other hand, it creates the precise proportions of the spatial body, in which meanings can be understood. Movement in space, both internal and external, which is created by the presence of the body, deepens the users' understanding of architecture. Functional body structure also refers to the activities that take place inside the space and means a proportional body that creates a suitable space for certain activities. This research is of a nested combination of qualitative and quantitative to extract components and dimensions after a semi-structured interview and then from PN modeling for the degree of factor effect and comparing the component effect system as well as the matrix. Correlation sampling is used for the snowball system interview, and in the quantitative stage, the upper limit of the Morgan table is used. The facilitating software's are ATLASTI8 and JMPSAS17. The results show that access coherence, user coherence and environmental coherence have the highest dimension and a larger factor contribution that has significant relationships, but coherence in creating security despite the influence coefficient of Bal has a significant relationship. does not have Coherence in municipal laws has a larger factor share than the first three cases, but it has a less significant amount. In general, based on the scope of the effect of the components of confinement and also its

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focus, it shows the continuity of the relationship between the components. Based on the relational correlation, it is determined that each dimension has a relationship with the other two dimensions and can be predicted, and the third dimension, which will be added to the blue color, has far less predictability than them. It is important to pay attention to the dimension of cohesion in both sets, which has no predictability based on other dimensions and has acted separately and should be considered in the first stage for planning and design. In general, the dimensions of confinement in the collection of Ati Saz and Ekbatan have a correlation of 0.772 in the way of application.

Keywords: Enclosure Dimensions; Ekbatan Residential Complex; Ati Saz Residential Complex; Combined Method.

1. Introduction

The scientific and philosophical study of the concept of space shows that space is mostly a subjective matter. The empirical understanding of space confirms that space is not the object itself, but the relationship between objects, or the container of objects or the radiation of objects, and the artistic work of architectural space is interpreted with words such as enclosed, sacred, transparent, personal, collective, which have a mental and perceptive aspect (Negin Taji, 2011). Architectural space generally refers to the spaces between building materials, the purpose of which is to create safety for human activities, so that sometimes this space is known to have special qualities (Falahat and Shahidi, 2015). The distance between the physical elements of the building creates a sense of confinement, and confinement has a direct effect on behavior. Enclosed spaces strengthen social relationships, and the lack of enclosure leads to people moving away from each other. Accurate perception of the elements that create enclosure will be of great help in evaluating the desirability of the space in the analysis stage. Any element or phenomenon that is placed in space separates it and gives it a spatial identity. This element or phenomenon can have physical, social or mental properties. Depending on the effect of power in each of the mentioned dimensions, the identity and nature of a space is formed by emphasizing that feature (Seydian and Abafat Yeganeh, 2007). Examining the physical-perceptual structure of architecture creates a context for users to understand the goals and meaning of architecture by being in the space. On the other hand, the precise proportions of the body create a space where meanings can be understood. If the spatial coherence in the movement in the space, both inside and outside, with the presence of the body, it will deepen the knowledge of the users of the architecture (Falahat and Shahidi, 2015).

As one of the enclosed communities in the city of Tehran, Ati-Saz town has special importance due to its special environmental and social distinctions, its location in the second district of Tehran and its proximity to Saadat Abad neighborhood, which today, due to the neglect and inappropriateness of management methods and lack of Paying attention to socio-cultural issues in it has become a ground for the formation of socio-cultural and even economic conflicts in the region.

Ekbatan town is an example of these enclosed communities that have been formed in Panj district of Tehran. The existence of conflict with the immediate layer of this area, both physically and socio-culturally, has caused concerns and wide disturbances in this area. The fact that this site has a suitable geographical location and is located in one of the important areas of Tehran metropolis, on the one hand, and the inappropriate management and lack of extensive supervision of the municipality on this area, emphasizes the need to review the management policies and makes this matter appear vital. As a result, this research aims to answer the following question:

What are the components of spatial confinement on the network of coherent spaces of residential neighborhoods, including Ekbatan and Ati-Saz? And what priority do they have to influence the coherence of the studied area?

2. Theoretical Foundations

2.1. Confinement and Cohesion

In re-reading the concepts and definitions of the urban space, enclosure and dimensions related to it, the most important factor of physical identity is considered according to Zucker, the physical nature of the urban space is related to the shape of the body of the enclosing buildings, uniform and uniform or diverse, the absolute dimensions of the bodies compared to the width and in For the space involved, the angle of the passages or streets that reach the square, the location and location of historical monuments, etc. are dependent (Low, 2004). DK Ching believes that the strongest type of space definition is when four vertical planes completely enclose an area of space. According to him, four levels can define a visual and spatial range that self-organizes the mass in the middle and the surrounding buildings are considered to belong to the internal range and make the enclosed space active and dynamic. Finally, the leading transic defines space or anti-space in terms of mass and volume (Judd, 1995). In fact, the legibility of a space is created in contrast with its context. In this regard, according to the perspective of the urban planner who considers mass or space positively, form and space become important as a relationship between form and context (Levinson and Christensen, 2003). In the past, the open space was designed in a positive way, with clear boundaries and clear enclosures. There was no ambiguity. The initial proper functioning of the space depended on the facilities available in relation to the demand, the characteristics of the surrounding uses, the users (Levinson and Christensen, 2003).

This point, which is one of the main aspects of the difference between modern and traditional urban planning, is directly affected by the confinement or lack of it in urban spaces. In modern urban planning, the mass is considered as a positive factor and because the single object is placed in the space, therefore, formless urban spaces are created that have a distorted identity from the physical dimension (Low, 2004). These spaces, which often have a large and inhuman scale, are devoid of any enclosure, in contrast to traditional urban planning, space is considered a positive factor, in fact, mass is considered a consequence of space, in other words, space is the principle and mass is secondary; Therefore, the urban spaces of this thinking are organized and defined (Sassen, 2018). The main factor in this idea is the shaping of the space by the mass. This physical feature is objectified both on the surface and in space. The confinement in two dimensions' acts as the boundary of the object; Therefore, maximum confinement is achieved in minimum separation (Judd, 1995).

This feature defines spatial boundaries in three dimensions and makes the space perceptible to the citizens in such a way as to induce the feeling of being in the space. In such a space, a strong experience is created in the citizen who is able to understand his relationship with the environment and with the elements and components. It happens in the environment. In this regard, the comparative study of the qualitative and quantitative factors of spatial confinement in the traditional urban planning of Europe and Iran shows the influence of cultural and climatic factors on the degree of spatial confinement. In other words, the historical background of culture and climate is very effective in determining the desired enclosure (Vesselinov and Le Goix, 2012). In order to achieve an attractive urban place, the space must be enclosed in a desirable way, and in fact, it can

be said that the first principle governing the design of urban places is It is confinement (Levinson and Christensen, 2003).

From the small dimension, the feeling of being enclosed in space is based on the relationship between the distance of the observer's eye and the height of the body enclosing the space. Some western sources have calculated this relationship based on the angle between the perpendicular line from the observer's eye to the body and the distance between the observer's eye and the upper edge of the body. Therefore, confinement has been presented as a constant and universal principle with four general rules: (McKenzie, 1994)

1. About 45 degrees (1:1 ratio) full enclosed feeling
2. About 30 degrees (ratio 1:2) the threshold of feeling enclosed
3. About 18 degrees (ratio 1:3) minimum feeling of confinement
4. About 14 degrees (ratio 1:4) lack of feeling of being enclosed in space

Table 1 Integration criteria from the perspective of researchers (Source: Ismaili et al., 2013; Hatami and Ziyai Naji, 2017; Zakavot, 2015; Alikaei and Zamani, 2014; Berkman and Kawachi, 2014; Hamouche, 2009; Yip, Sarma, and Wilk, 2016; Qin, Wang, and Cho, 2021 Murillo, Echeverria, and Vasquez, 2016)

Natural order develops from the unconscious integration of man with the laws of nature. Harmonious order implies multiplicity within unity. Geometrical order is the rule of the oldest system of cities (Esmaili et al., 2014).	Unity through the organization of space/natural-geometric-harmonious order/unity of mass and space	Ardalan and Bakhtiar, 1974
The principle of enclosing space - the principle of scale and proportion - the principle of spatial diversity - the principle of territory - the principle of composition, the continuity of spatial continuity - the continuity of neighborhood centers and urban centers - the combination of buildings with urban elements - the combination of residential units and urban elements (Hatami and Ziaee Naji, 2017).	The principle of enclosing space - the principle of scale and proportion - the principle of spatial diversity - the principle of territory - the principle of composition	Mahmoud Tusli, 2002
Man's way of thinking towards the whole, that is, his worldview, is essential for the overall order of his mind (Zakavat, 2017).	Holistic coherence	Novin Tolai, 2007
Functional organizationalists believe that the combination and compatibility between the components of the city form should play a role in its performance, causing sufficient participation of the components to achieve the goal and responding to the needs of a large number of residents (Zakavat, 2017).	Organizational coherence	
The unity of the shape of the enclosure of the space - the rhythmic continuity of the elements in the city - the balance of mass and space - the visual overlap - the proportion of length, width and height, the combination of various forms that complement the city's appearance, the continuity of the city's elements in order to create continuity in the view and movement of pedestrians - creating continuity through Identifying connecting elements - belief in historical continuity (Zakavat, 2017).	aesthetic coherence	
Structuralists believe that space as a unifying element - emphasizing the design of a large-scale spatial network as a connecting element of the city body - emphasizing the step-by-step expansion of creating a coherent structure through the process of centrality of symmetry and connection between elements is possible (Zakavat, 2017).	Structural coherence	
This approach considers compatibility with the physical, historical, socio-cultural context as the factor of coherence in the form.	contextual coherence	

Physical orientation on: 1. The possibility of mutual relations between the masses and the disjointed space and different areas of the cities is emphasized. 2. It is in finding inclusive patterns that provide the possibilities of these mutual relations. 3. It does this through a blizzard (Zakavt, 2017).			
The principle of spatial hierarchy - The principle of continuity in the composition of space - Unity in composition - Human scale - Oneness - Spatial diversity - Spatial contrast	How to combine space	Physical structure	Mohammad Reza Pourjafar, 2013
Combination of functions-scale of activities	Providing services	Activity structure	
Mental image-sense of place (Alikaei and Zamani, 2014).	Making space meaningful	Identity structure	
In the tree structure, no unit is connected to another unit except through connection to the whole, but in the semi-network structure, the units are connected to each other, according to his belief, since modern city planners have considered the city as a tree. The organization of cities is organized into branches with separate functions and localities and regions (Hatami and Ziaee Naji, 2017).			Christopher Alexander, 1965
A coherent and transparent physical complex that consists of 5 elements: node, edge, sign, road and neighborhood is capable of creating a clear mental image / Lynch emphasized the perceptual coherence of the city landscape and its tangible forms (Esmaili et al., 2013)).			Kevin Lynch, 1972
The result of his work is extracting the principles in which the system of connected but diverse urban space is taken into account by maintaining the human scale in the height of the buildings, balanced facades and creating a meaningful and defined shape that provides the possibility of meeting and social communication (Zakavat, 2017).			Rob Carrier, 1979
The first principle of continuous network connection, the second principle of enclosing sides and continuity. The third principle: coherent bridging. The fourth principle of axis and perspective - the fifth principle: integration of inside and outside (Zakavt, 2017).			Roger Transic, 1986
He considers the creation of a center to be the most important principle for creating unity and believes that a whole should have a center in itself and create a network of centers around it (Esmaeili et al., 2013).			Christopher Alexander, 1987
The whole has a gradual growth and this type of growth is homogenous with the end of the whole. The whole is not predictable. The whole is connected and not fragmented, and its parts are related in a complex and surprising way. The whole has an effect on us and is able to make a person move (Zhakawt, 2017).			
Gradual growth is a necessary condition of totality The growth of wider totalities of the imagination is necessary to create totality in the existing structure. Every building should have a continuous and beautiful public space in its neighborhood. The structure of each building should create smaller wholes in the fabric (Hatami and Ziaei Naji, 2017).			
Uniform facades are commemoration of some elements of the city as a whole, luxury of building materials, balance of components instead of absolute size, use of measures such as cornice and continuous wall surfaces, same height and facade to create continuity of building to show power in a spatial area. (Esmaili et al., 2014).			Neil Carlson, 1989
Coherence is reasonable harmony or unity that skillfully connects all parts within a body in such a way that nothing can be added or removed from it without reducing its beauty (Alikaei and Zamani, 2014).			Reka Albert, 1991
Social cohesion has been the most central issue of sociology in the past and present, and it is considered a type of social capital and implies a collective agreement among the people of a society (Berkman & Kawachi, 2000).			Berkman, Lisa. F. Kawachi, Ichiro, 2000
The continuity and stability of the social, political and cultural life of a society depends on the coherence and solidarity between the constituent elements of the social structure. Coherence means the feeling of mutual responsibility between several people or groups, who have awareness and will (Yip et al., 2016).			Yip, Calvin. Sarma, Sisira. Wilk, Piotr, 2016
Physical cohesion is the process of organizing various interdependent elements in the form of			Ben Hamouche,

the city, in which mutual relationships or necessary and simultaneous participation between the parts subjectively and objectively with the aim of creating a purposeful, integrated, neat, legible, meaningful whole. and it converges with the trends of nature (Hamouche, 2009)	Mustapha, 2009
Improper distance of two adjacent bodies (according to their scale and function), body geometry (in the design of walls and paths), accessibility of two adjacent walls, diversity and arrangement of uses and the relationship between mass and space are among the most important factors that weaken cohesion. are physically in cities (Murillo et al., 2016)	Murillo, Rosenda. Echeverria, Sandra. Vasquez, Elizabeth. 2016
Achieving greater physical cohesion in current cities does not mean removing large-scale elements; Rather, macro-scale elements should be linked to their same-scale elements in the city, such as large urban areas or metropolitan functions (Qin et al., 2021).	Qin, Weidi. Wang, Yi. Cho, Seungjong. 2021

3. Research Methodology

Considering that the current research methodology is a mixed methodology (qualitative and quantitative), it means that first the qualitative method is used to calculate the dimensions and components of the research by coding the concepts extracted from the interview, and then the quantitative method is used to measure the statistics. Inferential and enclosure components are used in the physical structure of residential buildings of contemporary Iran, the research paradigm is also the governing paradigm of combined methods, i.e. pragmatism.

The present research method is developmental-applied in terms of type and has a nested combination method in terms of method type. To answer the research questions, nest-to-nest research method of qualitative and quantitative type is used. First, a systematic literature review is conducted to review previous texts and studies in this field. Then, based on the definitions, questions centered on the main question of the research are developed, which include 5 items as follows;

1. Express your definitions of the words of confinement in residential complexes?
2. What are the components of confinement in Ekbatan and Ati Saz residential complex?
3. What are the components of modernism in the architecture of selected residential buildings of the Pahlavi period?
4. Move in the architectural space of one of the selected buildings by mentioning the name with the system of thinking aloud and speak the components you see?

Scholars are selected based on the snowball system and semi-structured interviews continue until theoretical saturation. For correctness, the questions are checked and scored by experts using the Delphi method. The way to enter the research of thinkers is as described in the table below. Interviews are conducted with 26 people, and theoretical saturation occurs from the 21st person onwards. The results are entered into the ATLASTI software and grand theory techniques are used which include coding for ease of use from a pre-designed coding table. Quantitative stage is done in causal-comparative way. Then, one question is considered for each component and it is compiled in the form of a questionnaire with a Likert scale and provided to the residents. The validity of the questionnaire using the CVI formula is 0.72 and the reliability is 0.72 using Cronbach's alpha. The statistical population includes all the residents in all age groups, and the distribution of the questionnaire was done with a random approach, equally from each of the residential complexes. The sample size of residents of the upper limit of the Morgan table includes 384 people. SIGMAPLOT software is used to analyze inferential statistics. Table 1 shows the characteristics of the interviewees.

Table 2 Characteristics of the interviewed people

Conditions for entering the research	Number	Expert board
1. The aristocracy of confinement in residential complexes	7	Professors of architecture
	8	Professors of landscape architecture
	9	Urban design professors
2. Faculty or with a doctorate degree	4	Urban planning professors
3. The aristocracy of the residential component	30	Total
4. Aristocrats of future studies Delphi		

4. Open Coding

Open coding is an analytical process through which the concepts identified and the characteristics of those dimensions are discovered in the data (Greene and Caracelli, 2003: 49). At this stage of the foundational data theory, the primary categories of information about the phenomenon under study are divided by information segmentation. gives shape (Shehbazi and others, 2019: 68). The researcher bases the categories on the collected data (Creswell and Plano Clark, 2006: 397).

5. Analysis of Findings

In the summary of all the codes extracted from the interviews conducted in connection with the examination of the degree of confinement in the neighborhood cohesion of the residents of Ekbatan and Ati Saz, it is presented in the Figure 1.

5.1. Open Coding

At this stage, the researcher tries to recognize the hidden concepts by reviewing the collected data set. Finally, the information obtained from the interviews with professors and experts, 46 concepts were extracted through open coding in connection with the examination of the degree of confinement in the neighborhood cohesion of the residents of Ekbatan and Ati Saz. This structure of experience was based on the type of meanings resulting from positive experience and complex connections of different dimensions, which form the main nature of the degree of confinement in the cohesion of the neighborhood of Ekbatan and Ati-Saz residents. The main parts of the resulting space became the basis of the discussion about the influencing dimensions in the degree of confinement in the cohesion of the neighborhood of Ekbatan and Ati-Saz residents and the questions raised in this regard. Then the classes formed in open coding were compared with each other and the relationship with their sub-classes was checked. Similar classes were merged together and grouped in one central class.

5.2. Extraction of Descriptive-Interpretive Codes in Open Coding

At this stage, first, the text of the interview was studied in detail and word for word in search of themes related to the research questions, and at every point of the interview where a theme was found, that part of the interview was selected and a descriptive theme was attributed to it. And after the descriptive coding of the interview text, their meanings were interpreted. In Table shows the descriptive and interpretive coding of some interview texts.

Table 3 A selection of conceptual codes extracted from the text of the interviews (Source: taken from the analysis of Atlasti software version 23.1.1.0)

Extracted conceptual code	Propositions taken from the text of the interview and interpretation
The possibility of crime	For residents of gated communities, security is the first concern. The residents think that they and their neighbors have protected their place of residence inside a strong barricade and thus protected themselves from crime.
The variety and type of businesses belonging to the local scale	For residents of gated communities, security is the first concern. Residents think that they and their neighbors have kept their place of residence within a strong wall and thus protected themselves from crime. Gated communities improve the local economy by creating employment (temporary job opportunities related to activities Construction, service jobs such as gardening, repairs and security are new demands for certain services there.
The amount of communication with neighbors	Residents of enclosed neighborhoods have a sense of belonging to the neighborhood more than residents of other neighborhoods, especially in neighborhoods with sports facilities because people share activities together.
Permeability rate	Enclosed communities privatize public spaces through the use of walls and fences that block public access and undermine the concepts of democracy and citizenship.
Number of public transport stations	Travel patterns throughout the urban network can change. Traffic through walls and sidewalks and access to transportation stations may be longer.
Existence of specific regulations for tax determination	In order to integrate the enclosed neighborhoods, specific regulations are used to determine taxes and there is a written mechanism to manage these neighborhoods.
Service satisfaction	In these neighborhoods, especially in large projects, amenities are of high quality, and residents enjoy access to attractive parks, open spaces, innovative facilities, meeting spaces, and public art.
The existence of a formal mechanism for managing closed communities	In the closed neighborhoods, there are elected boards for consolidation. These boards act as neighborhood decision-makers, contracts govern resident behavior, and fund monthly local utility bills.
The degree of people's desire to improve the neighborhood	Civic participation is high within the enclaves to create a cohesive society, and there are fewer responsibilities and problems for the local government. In closed communities, people have a greater desire to improve their living conditions.
The quality and variety of local camps	In enclosures, there are more active behavioral sites that strengthen social bonds.

The spider diagram shows the codes extracted from the interview text.

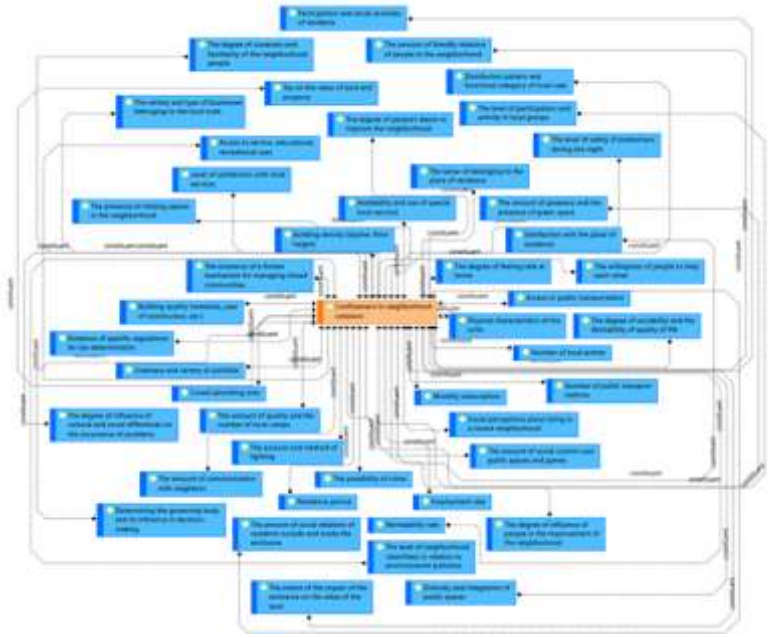


Fig 1 Repetition of each of the codes extracted from the interview text in open coding (source: taken from Atlasti software analysis version 23.1.1.0)

5.3. Descriptive statistics

At this stage, the statistical population for this research is the residents of the future residential complexes of Ati Saz-Ekbatan, which is used to find the sample size from Morgan's table, and due to the lack of an accurate upper limit of the population, which is 384 people, it is selected as the sample size. Questionnaires are randomly distributed. The results show that 39% of the participants are women and 61% are men. The most age group of participants in this research is 54% between 18-22 and 25% between 22-26 and 21% between 26 and 30. The highest frequency is related to the physical characteristics of units with a value of 1914 and the lowest is related to the duration of residence with a value of 984. The support of the moving average of the data distribution shows the correctness of the method of measuring the instrument, also the answers are correlated with each other and can be predicted in Figure 2.

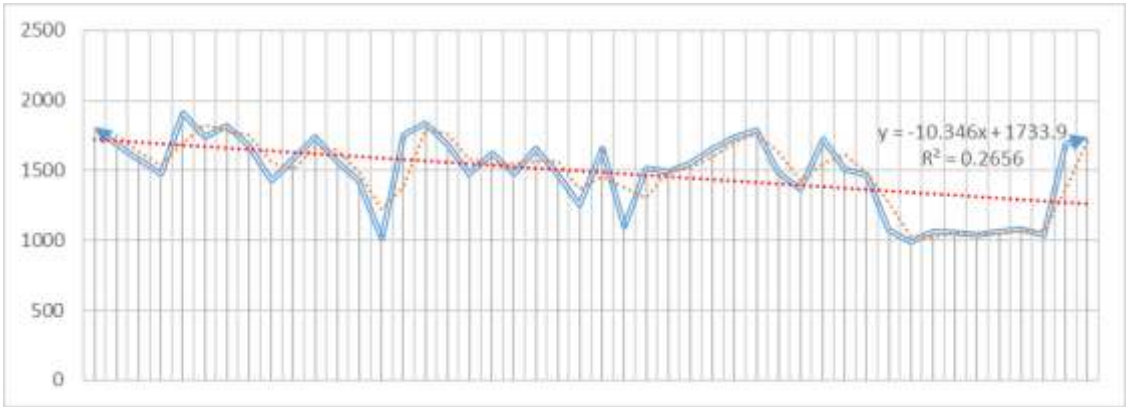


Fig 2 Frequency diagram of enclosure components in residential complexes

5.4. Inferential statistics

Correlation

Two-Sample Kolmogorov-Smirnov Test is used to check the parametric and non-parametric type of data.

Table 4 Kolmogorov-Smirnov test to check the normality of inclusion variables

Variable	Average	Standard Deviation	Z Kolmogorov Smirnov	p
Enclosure components in selected residential complexes	25/41	5.28	0.893	0.585

As can be seen in the above table, the Kolmogorov-Smirnov test is not significant for the score of the physical components of the behavioral setting (p=0.585), and therefore the enclosure variables do not have a normal distribution and non-parametric analyzes can be used for them.

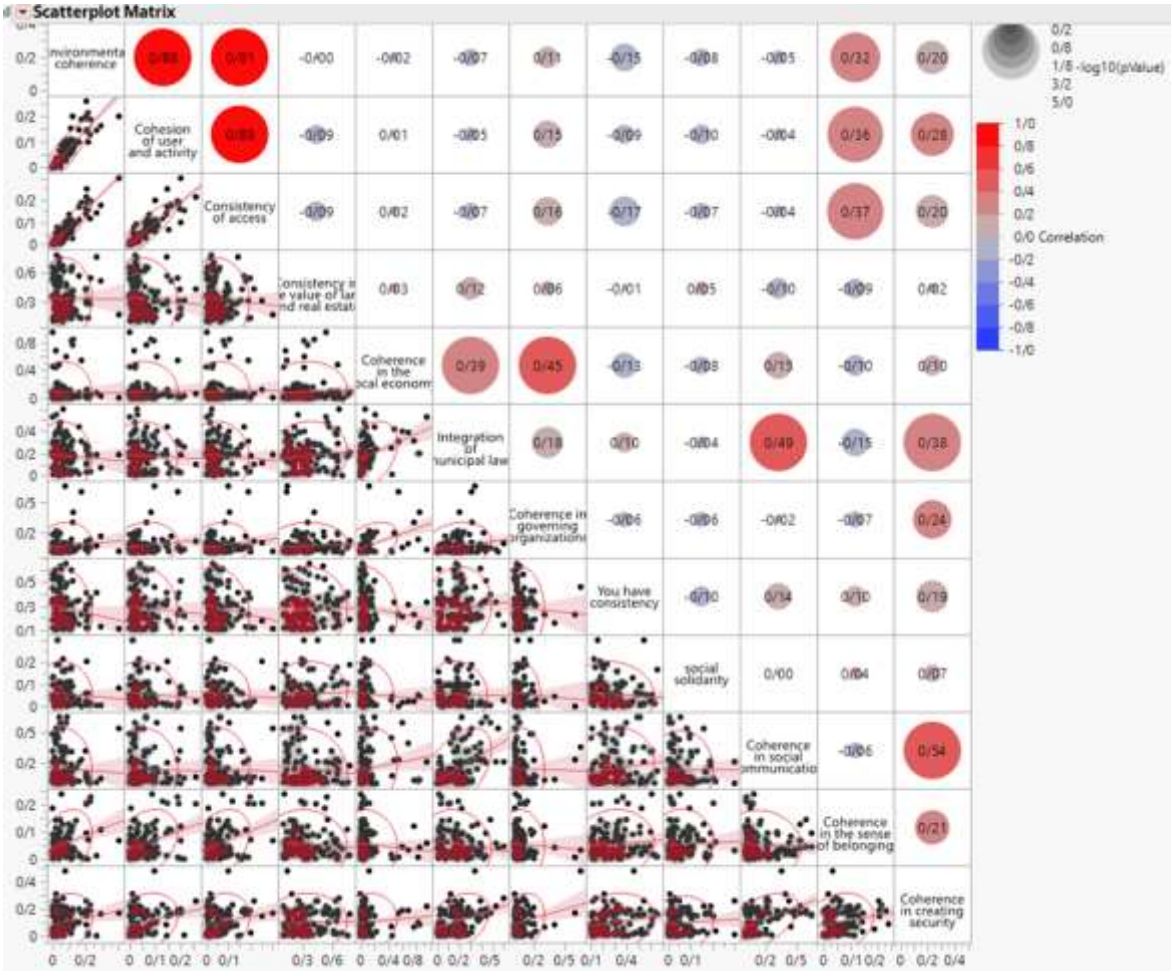


Fig 3 Correlation between the dimensions of enclosure relative to each other

Based on the correlation matrix between the dimensions, it was found that access coherence, user and activity coherence, environmental coherence have the highest correlation relationship with others, but case-by-case coherence in social communication has the highest average correlation coefficient with other components.

PN Modeling

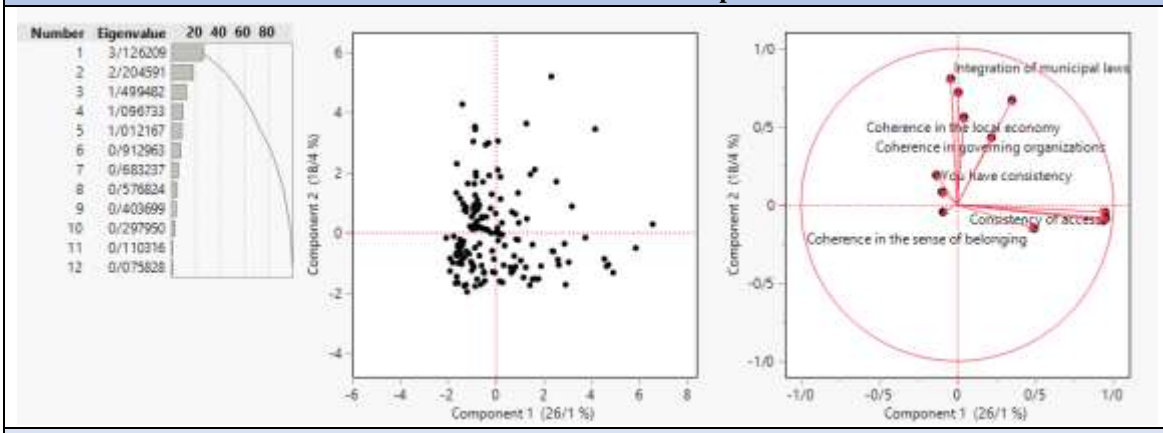
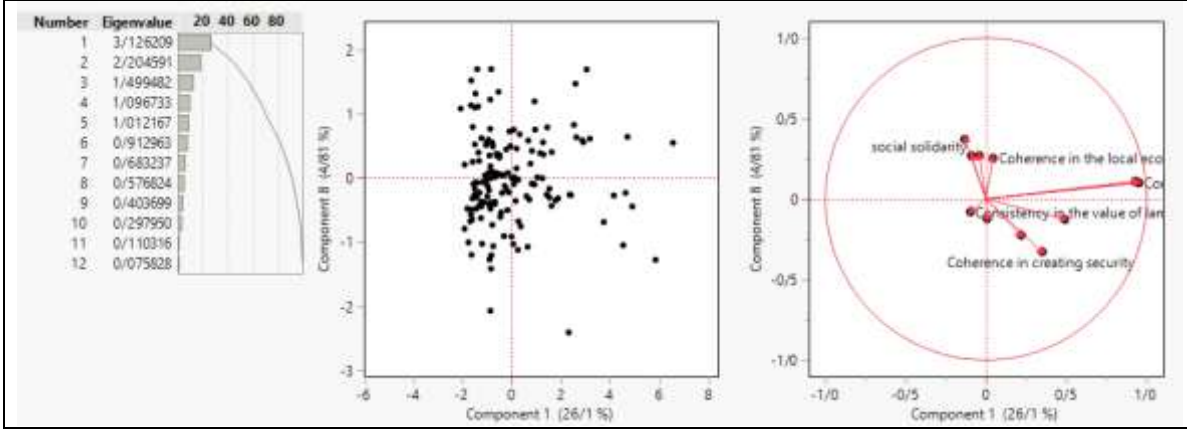
In the next step, PN modeling is used to check the effect of the components in each questionnaire. It was clarified that in Ekbatan residential complex, the coefficients of determination and factor contribution are more effective on a case-by-case basis, and the distance between the maximum and minimum components (highly effective and low effective) is large. On the other hand, the use of the components as described below and with each other will increase the impact in creating enclosure.

1. Consistency of use and activity, coherence in social relations, coherence in the value of land and real estate
2. Coherence in sense of belonging, cohesion in local economy, cohesion in municipal laws
3. Coherence in ownership, cohesion in governing organizations, social cohesion

In the future collection, the effect of the components to create the enclosure was less than that of Ekbatan, and the distance between the maximum and the minimum (highly effective and low effective) is reduced, and the use of some components as described below and with each other has the effect of creating more enclosure. will do;

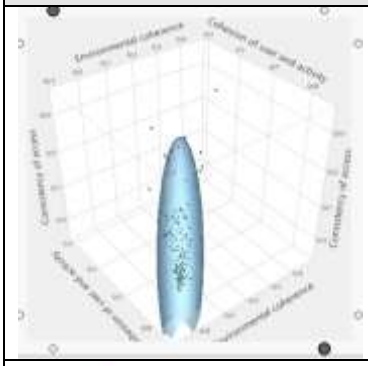
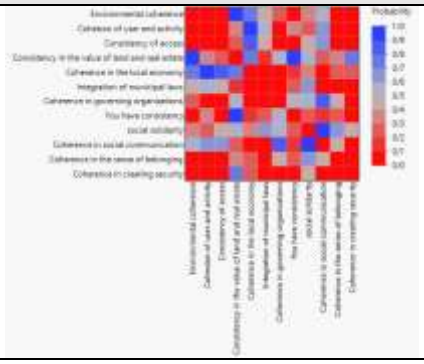
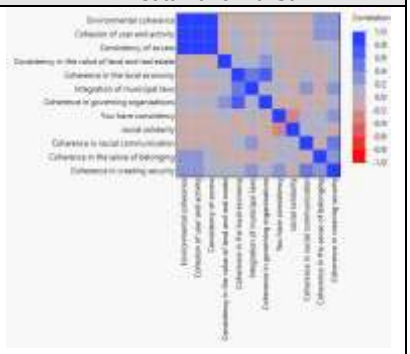
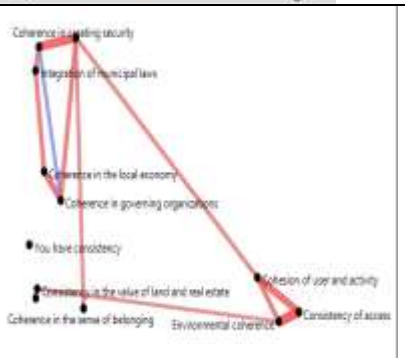
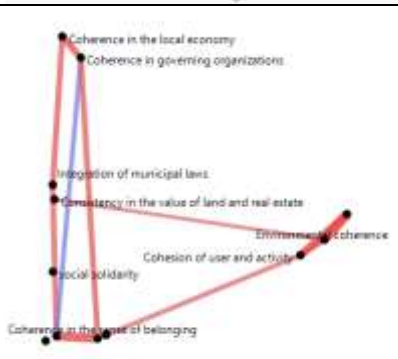
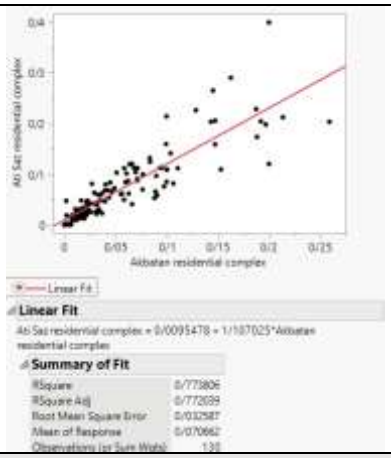
1. Consistency of access, coherence in the sense of belonging, coherence in managing organizations
2. Social cohesion, cohesion in the local economy

Table 5 PN modeling of confinement components in Ekbatan and Ati Saz collection

Ekbatan residential complex

Ati Saz residential complex


Based on the findings obtained in PN modeling for the factor share and the factor growth chart, it was found that most of the obtained relationships have significant coefficients less than 0.05 and tend to 0, which is evident in the graphic chart and the most significant relationships have points. It is red. Also, the coherence of access, coherence of user and coherence of environment has the highest dimension and a larger factor contribution that has significant relationships, but coherence in creating security does not have a significant relationship despite the impact factor. Coherence in municipal laws has a larger factor share than the first three cases, but it has a less significant amount. In general, based on the scope of the effect of the components of confinement and also its focus, it shows the continuity of the relationship between the components. Based on the relational correlation, it is determined that each dimension has a relationship with the other two dimensions and can be predicted, and the third dimension, which will be added to the blue color, has far less predictability than them. It is important to pay attention to the dimension of cohesion in both sets, which has no predictability based on other dimensions and has acted separately and should be considered in the first stage for planning and design. In general, the dimensions of confinement in the collection of Ati Saz and Ekbatan have a correlation of 0.772 in the way of application.

Table 6 Coefficient and scope of the application of enclosure components in Ekbatan and Ati Saz residential complexes

Scope of the effect of dimensions	Significance of relationships	Factorial effect of effective dimensions in Ekbatan and Ati Saz
		
		
Future communication correlation	Correlation of communication	Graphic correlation

6. Conclusion

In the current research, to investigate the degree of confinement in the neighborhood cohesion of the residents of Ekbatan and Ati-Saz, to identify these factors from the point of view of experts and

spatial users, and to extract the dimensions, components of each of the community effects and indicators of each of the components for measurement. The research method used was a combination of qualitative and quantitative type. In the qualitative part, with the help of the grounded theory method, variables were extracted from semi-structured interviews with the coding technique using Atlasti software version 23.1.1.0.

According to the investigations carried out in this research, in both neighborhoods, the factor of social cohesion is considered the most effective factor in the cohesion of the residents of both neighborhoods. The reason for this is that the enclosure and separation of Ekbatan and Ati Saz neighborhoods from the surrounding neighborhoods, both physically and socially, has caused problems such as social-cultural discontinuity in this area, which has consequences such as the fragmentation of the social fabric. The isolation and insularity of these two neighborhoods has caused the administration of this area to face problems and social participation in urban governance is decreasing. One of the most important problems caused by the lack of communication and connection between Ekbatan and Ati-Saz neighborhoods with the surrounding neighborhoods is social disunity and segregation in this area, which, if appropriate decisions are not taken and the need for social cohesion of the area is not taken into account, can cause many problems in the future. be cultural-social. The lack of communication and physical connection has also caused a gap in the physical tissue and its lack of harmony with the surrounding environment. In addition to the mentioned issues, these neighborhoods also struggle with the problem of access and inefficient public transportation, and this has caused major changes in the process of citizens living in these neighborhoods. From a physical point of view, fragmentation and isolation of Ekbatan and Ati-Saz neighborhoods can cause disharmony in the urban structure of Tehran, which may affect the economy of the region and affect the price of land and real estate. From the social point of view, the disruption of the social fabric and the existence of strange gates and walls will cause the loss of the socio-cultural identity of the neighborhood and the cohesion in the sense of belonging will decrease and decline, which is harmful to the quality of the environment and safety and security and the effects It will bring a side. Because in these neighborhoods, the residents have little or very little contact with their neighbors, and this is a sign of the residents' limited social interactions with their other neighbors. The very old residents of the two neighborhoods are relatively high, and the migration and relocation between the residents of the neighborhoods is relatively low. As a result, there is a sense of belonging in these neighborhoods and people are satisfied with their place of residence. According to the surveys, the public spaces of these neighborhoods are relatively safe and suitable for children to play, and they feel safe because of the presence of guards in these two neighborhoods and the lobbies of each block. The fifth most important factor from the residents' point of view is the governing organizations. Ati-Saz, and Ekbatan, are too big for a group of 5, 7 or 9 people to manage them, each phase of settlements has a separate board of directors and things are managed interactively. In Ekbatan and Ati-Saz towns of commercial units, Block 23 Board and Phase 1, 2, and 3 each have a separate board of directors that make decisions related to their area. One of the positive opportunities created in the settlements is the opportunity for participation and management from the bottom up in these residential complexes because, as mentioned in the previous section, all the powers of administration and maintenance of the settlement are the responsibility of the owners. But in these two towns, one of the basic problems is the lack of participation of people in the administration of the town and the indifference of the residents to the issues, and this is one of the important weaknesses in both towns.

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