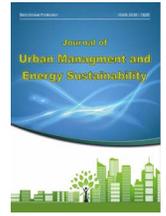


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Topological evaluation of the physical identity in explaining the structure of sustainable urban management

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ABSTRACT

Identity in a city reflects the social structure of people who have been given meaning throughout history. The physical identity of a city depends on the components that reflect the physical characteristics that make up a civilized society. The purpose of this study is to explain and typologically evaluate physical identity, which is emphasized according to the impact of urban management. The present research is a survey and analytical-descriptive method and in terms of purpose, it is considered as a development-applied evaluation. The sample evaluated in this study is the central fabric of Kashan, with emphasis on the bazaar complex and the fabric around Sang Square. 95 questionnaires have been identified with the number of items, which, according to Edwards method, this statistical population has been considered with 95% confidence interval and 5% error coefficient. To explain the final indicators based on the three main components of physical identity, with urban management, the Delphi method was used, which finally, after explaining the proposed research framework, using Shannon entropy weighting and the model in the ranking, it was found that the urban face component has the greatest impact with having a CL value of 0.64 in the issue of physical identity with the urban management approach. In the future research, this evaluation can be examined on the scale of urban areas and also other methods can be used for ranking, which in general can achieve a specific framework in the field of urban body identity in the urban management system.

Running Title: Topological evaluation of the physical identity



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1. Introduction

Identity expresses the characteristics of each person or phenomenon (Bemanyan et al., 2010) and is the result of mental feelings of his daily existence and extensive social communication that needs a place to be formed (Pourjafar et al., 2011) and this creates similarity in an individual, ethnicity or nation and in contrast causes the difference between individuals and groups (Akbari, 2008). The question of identity, especially in recent decades is undoubtedly one of the most important questions in the field of humanities (Rahimzadeh, 1993). Some scholars have defined identity with emphasis on individuality (Sheikhavandi, 2001). But when it comes to the identity of a city in our line of thought and mental image of the term, a number of features show that it represents the city we are looking for (Hull et al., 1994). The city in its historical meaning is the point at which the maximum concentration of power and culture of a community is crystallized. The city is the form and symbol of cohesive social relations and the centers and activities are social, economic and political status (Majedi and Zarabadi, 2010). In the structure of the traditional-Iranian city, neighborhoods were formed based on ethnic, local and religious sectarian and sometimes social status and the cohesion of neighborhoods in some cases was based on their religious identity (Habib, 2007). Moreover, urban identity has been able to play an essential role in the integration of the Iranian city (Bagheri, 2019). Identity in traditional cities is mainly due to changes in the urban body (Oktay, 2019) and most of the buildings in the urban wall itself is a stimulus for social change (Kecioren, 2004). Physical identity played an important role in the city in the past, but due to changes in modernity and fundamental changes in the urban form, this concept has been confused (Rafizadeh, 2019). Physical identity means the traits and characteristics that distinguish the body of the city from the non-existent and reveal its resemblance to the self. These traits must be such that the body of the city, while maintaining the continuity of time, is also evolving and ultimately lead to the emergence of a whole (Mirmoghtadaei, 2004). Physical identity is conceptually synonymous with the term's "personality" and "sense of place" (Habibi, 2007)

but in another definition, spatial identity is part of personal identity that is related to the physical environment (Lewitka, 2018). The structural characteristics of a city are more pronounced in its urban face that the physical identity of an urban fabric is mainly dependent on the five elements that are ultimately hidden in the urban body (Lynch, 1995) (Karaman, 2019) which is practically within the framework of physical identity (Zhong et al., 2014). This is especially important in cities that have various historical periods in the period of Islamic transformation (Alizadeh et al., 2011); so that, in the vicinity of the main mosques, the bazaar element is traditionally part of an urban body and, in a way, it determines the physical identity of that texture (Taheri, 2001). This type of urban element is visible in most Middle Eastern cities that have an organic urban form (Baris et al., 2009). These elements were used in the city (Padua, 2017). The city of Kashan, according to the historical past, has a valuable texture that is more reflected in the city center. In the urban center as well as in the historical bazaar complex, there is a high level of behaviors that result from a sense of belonging to the place and can also be generalized in the field of tourism. The physical identity of Kashan Bazaar complex depends on the criteria that have been explained over a period of time and also expresses its urban character. The purpose of this study is to explain and typologically evaluate the physical identity that needs to be investigated according to the impact of urban management. The main question that arises is whether the quality of urban management affects the physical identity of the urban fabric? And can the impact of these indicators be ranked on the basis of more and less? Accordingly, it can be assumed that there is a significant relationship between physical identity and urban management.

2. Methodology

The present research is a survey and analytical-descriptive method and in terms of purpose, it is considered as a development-applied evaluation. The method of data collection is a library (documents, statistics, etc.) and survey (field). In this study, according to the type of problem and purpose, the urban fabric scale has been proposed as a range of neighborhoods. Percentage and error

rate of 5% is considered. First, the Delphi method has been used to explain the final indicators based on the three main components of physical identity, in line with urban management, and finally the research framework is proposed. After that, in order to accurately measure physical identity, after analyzing the results in SPSS application, T-test was used to evaluate the significance. After this step, in order to rank the research indicators in order to find out the effect of each one, using the Shannon entropy method in weighting and also the TOPSIS adaptive model by considering the negative and positive criteria and also the compensatory structure of the evaluation model. In the multi-criteria method, all areas are analyzed by focusing on the idealism and anti-ideal distance. Then, after performing and applying the relevant methods, the ranking in the correlation of the desired indicators in the explanation stage will be compiled in a structure and as a result, the necessary connection to the current state will be performed. Naturally, after determining the analysis process to explain the situation, the type of strategy can be given to achieve the proposed framework of urban management.

2.1. Explain the components and criteria of effective physical identity in the structure of urban management by Delphi method

The components and indicators of physical identity in various scientific sources and projects are sometimes concentrated and sometimes integrated, which can be explained by the three components of urban face and urban body (Behzad Far, 2013) using from the existing theoretical literature and data analysis using content analysis method, specific factors that are involved in physical identity can be selected, which are finally explained as a proposed framework of physical identity indicators in line with the concept of urban management. It is necessary to explain that based on the Delphi method, the final indicators are selected entirely from the urban management approach.

2.2. Delphi method

The most important thing in the Delphi method is to select experts and specialists in the field. In this way, the selected individuals are

given information about the Delphi method and they are invited to participate in this research. Anonymity is one of the important components of this research approach. Questions from experts and selected experts are followed by successive questionnaires (Aliazadeh, 2014). In this research, first, the initial model is designed and compiled based on theoretical foundations and using existing models about concepts, especially physical identity with urban management. After the initial design, this model was tested and developed through the Delphi method. Using open-ended questions in the Delphi questionnaire and analyzing them in the next steps, judging the consensus among experts and reaching the theoretical saturation of the qualitative methods used in analyzing the data obtained in the present study. Collection of field data in the present study began with the collection of questionnaires in the first stage of the research and the extracted data were analyzed through descriptive statistics and qualitative analysis. To use the Delphi method, people who had one or more of the following characteristics were invited: university faculty members and experts in the field of urban management and social and psychological issues; managers and experts working in the Housing and Renovation Organization as well as the Municipal Organization; author or translator of books on the subject of research; PhD students in urban planning and independent researchers.

2.3. Study range

Due to its historical structure, Kashan city has deep layers of urban identity. Obviously, the historical fabric of this city, due to its location in the city center, is one of the most important areas for the concentration of commercial, administrative, political, economic services. Although the historical fabric covers only a part of the total area of Kashan, layers of urban identity, especially its physical identity in the central bazaar can affect the structure of urban management. This area, with an area of 478 hectares and a population of 54,125,000 people (in 2016), consists mainly of native and local households in Kashan, which mainly have a basic economy based on the central bazaar.

This texture has historical value and palmists of different periods are considered as a part of the identity of the city and its architectural style and structure are practically from the architectural patterns of nature, which is completely different from the new texture. The area of Sang Square, in the historical complex of Kashan Bazaar and the neighborhoods leading to it, is taken from the ossification of the Timurid period, and in other historical periods, mainly new physical layers have been added to it. In the body of this square, there is a school, a hospital, a big mosque and other buildings such as Emad al-Din's tomb at the end of Mir Emad and Afzali streets in the Pahlavi period, which are connected to the government gate. (Figure 1)

In the dimension of physical identity, this collection can explain a coherent structure that includes the urban image component, including node, edge, road, sign and neighborhood, city face component with walls and space representation, and city body with sky line representation and proportions in thematic structure. Edge, pattern, human proportions and signs in the research dimension. In the same way, we can consider the central base area as well as the stone field node as an example, considering realistic sampling. (Figure 2)

3. Research Findings

In this study of the social and physical systems of urban planning as well as two sub-systems of social and perceptual urban design, 14 factors which were extracted from the theoretical and experimental foundations of the physical identity from the perspective of panel experts by default in the first stage were developed. In this regard, to investigate the first stage, all the factors affecting physical identity are mentioned.

In the first round of the Delphi method, panel members identified 10 of the 14 factors extracted from successful research as having a meaning impact on the development of a physical identity framework with an urban management approach. Detailed results related to the implementation of the first stage of distribution of the questionnaire are shown in the Table 1. The elements of urban elementary, urban sign, social node and mental image have been removed from the Delphi trend due to having an average importance of less than 2.5. (Table 1)

After conducting the first stage of assessing and evaluating the views of panel experts on the factors raised and derived from the theoretical foundations, as well as receiving the suggestions of panel members, in this round and in order to be cautious, all the factors derived from the

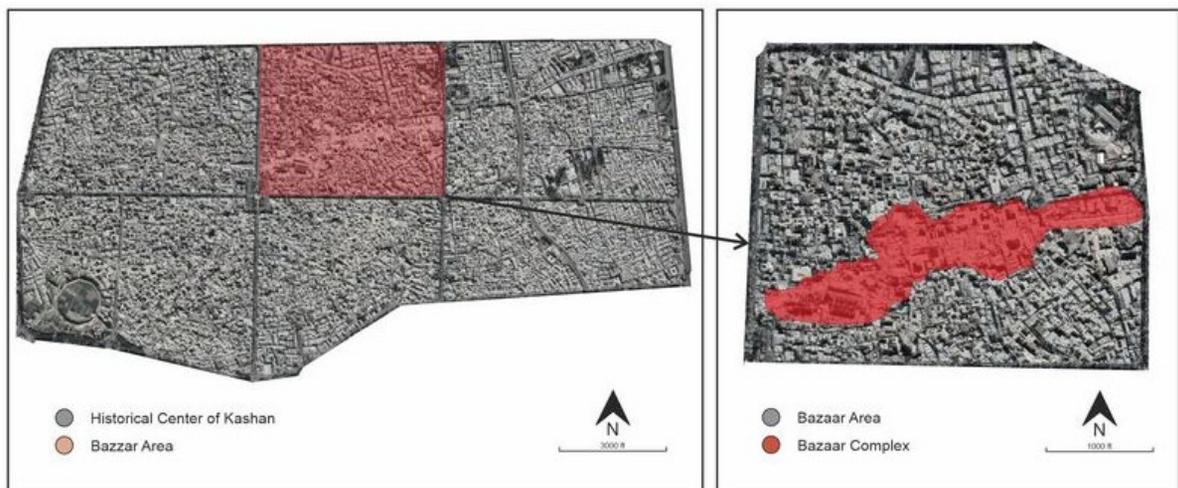


Fig. 1: Kashan Bazaar area, historical bazaar complex, Sang Square

theoretical foundations to along with the average opinion of the members in the first round and the previous opinion of the same member, it was provided to all panel experts. The panel members identified 10 factors out of the 10 factors presented in the second round, having a high and very high impact (with an average greater than 2.5) on the topological structure of the physical identity with the urban management approach. Detailed results related to the implementation of the second stage of the questionnaire distribution are shown in the table below. The Kendall coefficient

for the members' answers about the order of the nine factors that had a great and very great effect in this round was 0.765 (Table 2).

In the third round of compiling the city framework, compiling the topological structure of the physical identity with the approach of urban management, along with the average opinion of members in the second round and the previous opinion of the same member was provided to all panel experts. Detailed results related to the implementation of the third stage of the questionnaire distribution are shown in the

Table 1: Step 1 Fuzzy method in formulating the topological structure of the physical identity with the urban management approach

No	Factors	NUM. of answers	Average	Standard deviation	Minimum	Maximum
1	Urban element	29	2/1	0/35	2	5
2	Urban sign	28	2/31	0/37	3	4
3	Accessibility hierarchy	33	5/21	0/37	2	5
4	Accessibility proportions	25	4/72	0/45	1	5
5	Urban physical characteristics	31	5/10	0/37	2	5
6	Social node	33	2/41	0/40	1	4
7	Traffic node	32	4/86	0/35	1	4
8	Mental image	30	2/21	0/37	1	4
9	Façade architecture style	33	4/30	0/45	2	5
10	Façade materials	33	4/98	0/52	1	5
11	Construction buildings	33	4/84	0/76	1	5
12	Sky line	33	3/51	0/52	1	4
13	Height of building	33	4/80	0/57	1	5
14	Passage width	33	2/55	0/60	2	5

Table 2: Step 2 of the fuzzy method in formulating the topological structure of the physical identity with an urban management approach

No	Factors	NUM. of answers	Average	Standard deviation	Minimum	Maximum
1	Accessibility hierarchy	15	3/54	0/91	3	5
2	Accessibility proportions	15	3/08	1/03	3	5
3	Urban physical characteristics	15	3/41	0/91	4	5
4	Traffic node	15	3/22	0/95	3	5
5	Façade architecture style	15	3/22	1/11	3	5
6	Façade materials	15	3/34	1/03	3	5
7	Construction buildings	15	3/40	0/96	3	5
8	Sky line	15	3/52	0/97	4	5
9	Height of building	15	2/78	0/95	2	5
10	Passage width	15	2/69	1/11	2	5

table below. The Kendall coordination coefficient for members' responses to the order of factors was 0.790. (Table 3)

3.1. Reasons to stop polling

The results of the three rounds of the Delphi method in the research show that for the following reasons, the consensus has been reached among the panel members and the rounds can be repeated:

- 1- In the second round, more than 50% of the members chose 10 influential factors in formulating the topological structure of the physical identity with the urban management approach, which had an average greater than 2.5, among their factors.
2. The standard deviation of members' answers about the importance of factors in the third

round has decreased meaningless compared to previous rounds.

- 3- Kendall coordination coefficient for members' answers about the order of factors in the third round is 0.790. Given that the number of panel members was more than ten, this amount of Kendall coefficient is quite meaning.
- 4- Kendall coordination coefficient for arranging the nine factors influencing the formulation of the topological structure of the physical identity with the urban management approach in the third round compared to the second round increased only 0.025. Two consecutive rounds do not show meaning growth.
5. The points given to the factors by experts and elites indicate that the skyline indices, buildings and facade materials are the highest

Table 3: Step 3 of the fuzzy method in formulating the topological structure of the physical identity with the urban management approach

No	Factors	NUM. of answers	Average	Standard deviation	Minimum	Maximum
1	Accessibility hierarchy	15	4/24	0/67	1	5
2	Accessibility proportions	15	4/08	0/91	1	5
3	Urban physical characteristics	15	4/51	0/82	1	5
4	Traffic node	15	4/22	0/45	1	5
5	Façade architecture style	15	4/22	0/45	1	5
6	Façade materials	15	4/34	0/38	1	5
7	Construction buildings	15	4/40	0/92	1	5
8	Sky line	15	4/52	0/99	1	5
9	Height of building	15	3/78	0/72	1	5
10	Passage width	15	3/69	0/92	1	5

Table 4: Components and indicators as the topological structure of physical identity with urban management approach

Identity dimension	Component	Indicator	Measurement	Evaluation tools
Physical identity	City image	Sign	Urban element & sign	Map
		Road	Accessibility way	Map
		Edge	Urban physical characteristics	Map
		Node	Social & traffic node	Map
	Urban face	Neighborhood	Neighborhood structure	Interview & questionnaire
		wall	Facade	Map
	Urban's body	Space	Urban space	Interview & questionnaire
		Sky line	Sky line of urban wall	Map
		Proportions	Urban edge proportions	Map

score and, therefore, have the greatest impact on the realization of urban management approach in the process of developing a topological framework of physical identity. According to this issue, the following research structure can be developed in the three components of physical identity (Table 4)

After performing the questionnaire based on the item structure, by entering the information obtained in the SPSS application environment, the items of each categorized component are calculated, their average is calculated and after performing this step, using T-Test to check the physical identity. In the scope of the sample and its generalization to the whole study population. Furthermore, the extent and average impact of urban management is limited and at the end, the relationship and connection of urban management with physical identity is clarified and specified.

3.2. Characteristics of the respondents

In a survey of 95 residents, employees and city managers of Kashan District 1 Municipality, 66.3% of the respondents were men and 33.7% were women. All respondents had a university degree and corresponded to the issue of physical identity. They are also informed background and the frequency of other unrelated people in the number of people studied was zero. (Table 5-6).

Age composition of the respondents: 23.2% aged 15-25 years, 42.1% aged 26-35 years, 26.3% aged 36-50 years and 8.4% aged 51 years and higher poses. (Table 6)

3.3. Physical identity items

Urban face: The first physical component goes back to the concept of urban face and considering that it consists of three negative questions, so the importance of very few options to achieve the main goal of physical identity is more than

Table 5: Genders table

Sex	Abundance	Percentage	Valid percentage	The cumulative percentage
Male	63	66/3	66/3	66/3
Female	32	33/7	33/7	100
Total	95	100	100	-

Table 6: Age composition of respondents

Sex	Abundance	Percentage	Valid percentage	The cumulative percentage
15-25 Age	22	23/2	23/2	23/2
26-35	40	42/1	42/1	65/3
36-51	25	26/3	26/3	91/6
51 & up	8	8/4	8/4	100
Total	95	100	100	-

Table 7: City image items

City image	Many agree	agree	Approximately	disagree	Much disagree
Urban management has been influential in identifying the historical area	11.6	10.5	12.6	30.5	34.7
The historical value of the local texture of the area is not important to me	2.1	20	13.7	29.5	34.7
The main and secondary roads of the base area and its residential fabric have a history and identity background	28.4	32.6	12.6	15.8	10.5

others. 65.2% of the respondents are working or living in the historical fabric of Kashan city and also in the area of the Sang Maidan node. 65.2% of the respondents feel dissatisfied with the management of the city in order to identify or maintain it, and 64.2% of the respondents, in response to the fact that the residential texture of the area is not important to them, chose the opposite and very opposite option. 26% of the

respondents chose to oppose the context in response to migrating or relocating from the context of the historical fabric. (Table 7)

Urban face: The urban face component with wall and space indicators is the second component and one of the most important components related to physical identity. 54.7% of the respondents stated that the buildings in the neighborhood are memorable for

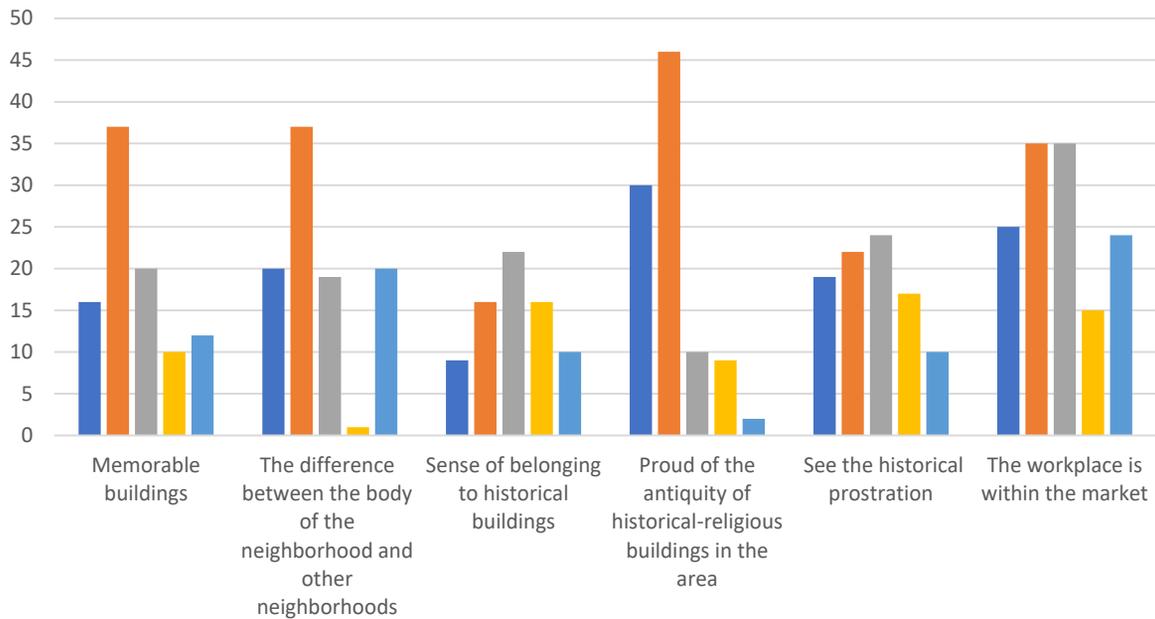


Fig. 2: Response rate to the urban face component

Table 8: Urban wall items

Urban wall-Urban face	Many agree	Agree	Approximately	Disagree	Much disagree
The base area is a good place to live	1.4	9.8	30.5	48.2	10.1
Life in the bazaars and historical fabric is miserable	5.4	31.4	10.7	12.6	7.5
I wish I did not live in this neighbourhood	1.2	9.8	29.7	47.8	1.5

Table 9: Space items

Urban space-Urban face	Many agree	Dgree	Approximately	Disagree	Much disagree
The base area is a good place to live	1.4	9.8	30.5	48.2	10.1
Life in the bazaars and historical fabric is miserable	5.4	31.4	10.7	12.6	7.5
I wish I did not live in this neighbourhood	1.2	9.8	29.7	47.8	11.5

them. 21.1% of the respondents see a special difference between the texture and body of the neighborhood and the bazaar area, with other neighborhoods, 28.4% of the respondents spend their leisure time in the street, stone square area and open spaces around the bazaar, 80% of the respondents spend their time and 45.3% of the existence of historical-religious buildings such as Meir Emad Mosque are considered as a matter of pride and as a member of the area. 99% of the respondents enjoy seeing the main buildings of urban walls such as the entrance of the bazaar and mosques with an integrated architectural style, 69.9% prefer their workplace to be within the bazaar. (Figure 2)

Urban wall: Urban wall in the historical fabric of Kashan Bazaar area is practically indebted to the passage of history in different periods, so that most historical palmists in the urban fabric have a long history from the Timurid period to Qajar, this wall includes special historical buildings. It is religious as well as functional like a bazaar, which is mainly built with a distinct and integrated architectural style. The architecture of the facade in these walls is mainly made of brickwork and uniform designs with regular arches, which clearly shows the sense of belonging to the residents in the beauty of this type of walls. 12.6% of respondents living in the neighborhood and bossier area, 57.9% of the respondents do not regret living in this neighborhood and basically enjoy the vitality in the vicinity of the base. (Table 8).

Space: Urban space, due to being a host for

residents, employees and exploiters, is the main face of the urban body, urban spaces including streets (sidewalks, vegetation, pause in front of shops, etc.), The square (vegetation in the square, etc.) Forms the walls as the body of the square and also the spatial hierarchy as the spatial organization in the fabric of the bazaar area, forms the whole space. Citizens' attitudes toward the urban space are based more on the form of the wall as well as the location of the behavioral camps that take place there. In the functional field, the uses in the wall, which are sometimes in one class and sometimes in different guilds, also affect the traffic space due to the commercial arrangement. 40% are against the change of public open spaces adjacent to the urban wall, 15.8% of the respondents are indifferent to the structure of spatial changes in the fabric of the bazaar area. Moreover, 43.3% consider widening the passages and changing the structure of urban spaces as priorities. Urban management knows. (Table 9)

Urban's body: The urban body component with sky line representations and proportions are the third component that refers to its physical examples in relation to physical identity. The structure of the architectural style pattern in the skyline and its proportions has been studied. The urban wall skyline is mainly related to the type of density and the number of urban texture floors, but in the bazaar area, due to the presence of historical bodies, the number of floors is mostly the same and increasing the wall height and skyline at accent points such as bazaars

Table 10: Skyline Items and proportions

Sky line & proportions-Urban body	Many agree	Agree	Approximately	Disagree	Much disagree
The base area is a good place to live	1.4	9.8	30.5	48.2	10.1
Life in the bazaars and historical fabric is miserable	5.4	31.4	10.7	12.6	7.5
I wish I did not live in this neighbourhood	1.2	9.8	29.7	47.8	11.5

Table 11: Response rate, number and percentage

Physical identity	Numbers	Percentage	Relative percentage	The cumulative percentage
Low	35	36.8	36.8	36.8
Medium	60	63.2	63.2	100
Total	95	100	100	-

entrances or large buildings such as mosques can be seen. In the matter of proportions, the existence of homogeneity while enlarging the parts of each wall shows the harmony with the urban view.

Skyline and Proportions: 74.8% of the respondents stated that the height of the city street walls is understandable to them and is at a suitable angle of view from the center. 68.5% of the respondents are also opposed to changing the height and construction of new and high buildings and have a complete sense of duty about it. In addition, 23.2% have an unfavorable feeling about the opening rate and the height of the entrance of historic buildings and bazaars, which can change depending on the type of entrance use, floor structure and environmental graphics. (Table 10)

The above-mentioned components can be summarized as physical identity, of which the indicators of each of the three components can be elements of physical identity. In order to check the identity, the Likert spectrum has been used in five categories from very high to very low, respectively 5 to 1, which above 3 can indicate the optimal and ideal conditions, as well as the number 3 indicates acceptable and average status. And the number 2 and less, indicate the weakness in the level of identity of people in the historical area of Kashan Bazaar. (Table 11)

As can be seen in Table 11, the highest percentage of 63.2% of the physical identity of the historic fabric is in a relatively moderate state and

36.8% is in a weak state of physical identity. But the amount of physical identity in large and very large amounts is not seen at all.

Hypothesis test in the community: the above statistics have been met in relation to the sample population and to generalize it to the whole context, the T-test should be used. For each dimension of identity, the average of 60% = μ (ie in the Likert scale, option 3 = μ) is tested by the mentioned method. The H0 hypothesis and the opposite hypothesis for the 60% mean are expressed as follows.

According to this table, in a meaning column, if the values are less than 1% and 5%, it can be concluded that the null hypothesis is rejected at the 99% and 95% confidence level. It can be concluded that the average physical identity in the society, with a confidence level of 99%, is lower than 60% or the average (3). In the continuation of the evaluation on the subject of physical identity and also the extent of the impact of urban management on how it is formed to evaluate the indicators and the impact of each, there is a need for ranking. In this ranking method, based on the weight of each index, which has been structurally selected by Delphi method, it is possible to get which of them has the most and the least impact. Besides, considering the meaning correlation between both concepts of physical identity and urban management, practically extracted strategies as a suggestion from the managerial approach to physical identity.

Table 12: Mean of physical identity in the sample population in T-test and significance

Subject	Numbers	Average	Standard deviation
Physical identity	95	2.5910	0.63002

H₀: $\mu = 60$

H₁: $\mu \neq 60$

Table 13: Mean of physical identity in the sample population in T-test and significance

Subject	t	(-n) Numbers	Meaning	Mean difference	Confidence %95	
					Lower	Higher
Physical identity	-11.073	94	000	-0.409	-0.4824	-0.3357

3.4. Weighing and ranking by Shannon and TOPSIS entropy methods

Table 14: Decision matrix according to the changed indicators for weighting

Component	Sign	Road	Edge	Node	Neighbourhood	Wall	Space	Sky line	Proportions
1	5,00	3,00	4,00	2,00	4,00	5,00	5,00	2,00	3,00
2	4,00	4,00	2,00	4,00	5,00	4,00	2,00	1,00	1,00
3	4,00	1,00	3,00	2,00	1,00	3,00	3,00	3,00	4,00
SUM pig	13,00	8,00	9,00	8,00	10,00	12,00	10,00	6,00	8,00

Table 15: Decision matrix of study indices without linear scale

Component	Sign	Road	Edge	Node	Neighbourhood	Wall	Space	Sky line	Proportions
1	0,3846	0,3750	0,4444	0,2500	0,4000	0,4167	0,5000	0,3333	0,3750
2	0,3077	0,5000	0,2222	0,5000	0,5000	0,3333	0,2000	0,1667	0,1250
3	0,3077	0,1250	0,3333	0,2500	0,1000	0,2500	0,3000	0,5000	0,5000

Table 16: Weighting results by the Shannon entropy method and ranking of study indicators

		m	3	K= 0,9102						
		Proportions	Sky line	Space	Wall	Neighbourhood	Node	Edge	Road	Sign
The entropy of each index	Ej	0,9947	0,8869	0,9656	0,9464	0,8587	0,9808	0,9372	0,1500	0,8869
	DJ	0,0053	0,1131	0,0344	0,0536	0,1413	0,0192	0,0628	0,8500	0,1131
Degree of deviation	Wj	0,0038	0,0812	0,0247	0,0385	0,1015	0,0138	0,0451	0,6103	0,0812
	RANK	9	3	7	6	2	8	5	1	3
Normalized weight	DM us	0,15	0,06	0,04	0,06	0,1	0,25	0,2	0,05	0,09
	$\lambda_j W_j$	0,0006	0,0049	0,0010	0,0023	0,0101	0,0034	0,0090	0,0305	0,0073
	W'j	0,0082	0,0705	0,0143	0,0334	0,1467	0,0497	0,1303	0,4412	0,1057
	RANK	9	5	8	7	2	6	3	1	4

Table 17: Positive and negative elements of TOPSIS ranking

	Cl	Di-	di+
1	0,640045079	1	0,644868538
2	0,489042284	2	0,608333333
3	0,438566334	3	0,523528213

Table 18: Ranking of final indicators of physical identity with urban management approach

Rank	Component	Cl	Rank
1st	face	0,640045079	1
2nd	image	0,489042284	2
3rd	body	0,438566334	3

4. Conclusion

Considering the evaluation of physical identity based on the impact on urban management, which is due to the type of managerial attitude in the concept of identity, it can be stated in the discussion of the physical identity that 76% of the statistical population have moderate cooperation and correlation with each other. (Figure 3)

A corresponding hypothesis is the relationship between physical identity and urban management. Spearman test is used to test this hypothesis. The table below shows the relationship and correlation between physical identity and urban management. The number 0.010 is a meaning and value, which means that the relationship between the two variables is confirmed and causes the null hypothesis to be rejected. The number 0.262 confirms the correlation coefficient between the two dimensions of physical identity and

physical identity. This relationship with the level of confidence is 59% and practically shows the proportional structure of the managerial attitude in the identity of the worker. (Table 19)

Therefore, it can be said that: with a 99% probability of urban management and physical identity in the central fabric of the base have a positive and meaningful correlation with each other. The relationship between these two dimensions means that optimizing the effect of urban management will increase and further integrate the physical identity of the residents and employees. In fact, these two dimensions are related and are in a longitudinal line. Any positive change made by an urban manager through the intervention approach in the field of physical identity indicators can lead to a strengthening of a sense of belonging and dependence on place over time, which ultimately leads to the

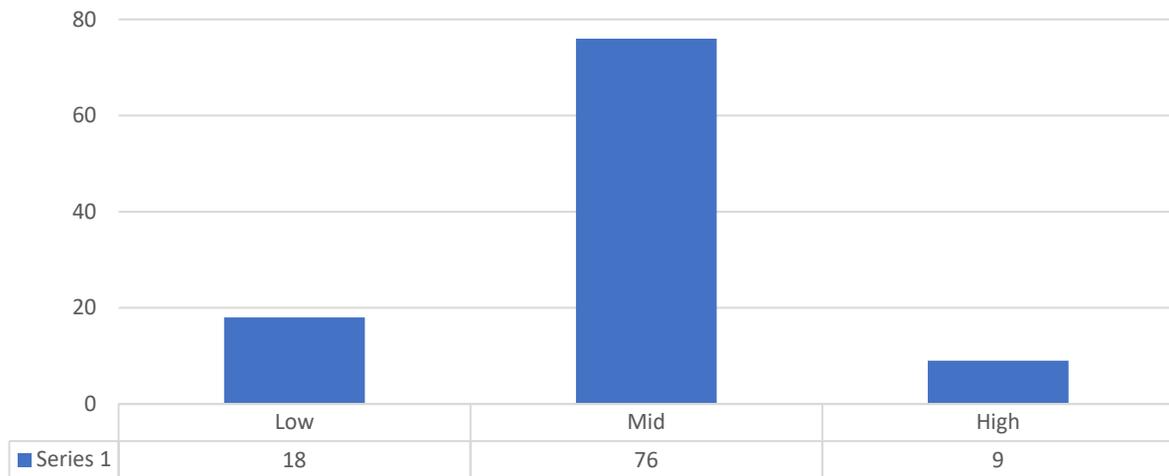


Fig. 3: Graph of physical identity percentage

Table 19: The meaning between physical identity and urban management

Description		Physical identity	Urban management
Physicists identify	Validity	1.000	0.262(*)
	quantity	-	0.010
		95	95
Urban management	Validity	00.262262(*)	1.000
	quantity	0.010	-
		95	95

structure of physical identity. From another point of view, after evaluating the indicators by weighting method and using the ranking system, it has been determined that the urban wall index has the most impact on the urban management approach to physical identity and also the space is hidden due to the quality of urban space. In place, it practically houses the most important identity events. The urban landmark index is more important due to the creation of elements and historical monuments that are often found in special buildings, and also the neighborhood has a great impact on physical identity due to the hierarchical structure of space and the context of social behaviors. In the next position, space proportions can be effective due to the existence of two factors, form and structure. For other indicators, the node and the road and the skyline have the most impact, respectively, and the urban edge has the least impact on physical identity due to the presence of the element and physical complication. Therefore, the following suggestions can be made in the urban management approach to the concept of physical identity:

- Urban walls should be restored, protected and also restored as a historical value. In addition, these historic walls in the type of architectural criteria should have restrictions on change and prohibition of intervention.
- Urban space in case of intervention in the location should have special rules, so that, any change in its form, to be done under the supervision of the municipality.
- Urban signs should be protected, restored and restored with an approach, and also in visual corridors, any intervention in closing the path leading to it should be avoided, and as a dominant factor in space, the height of other buildings should be avoided.
- The proportions of the wall as well as the urban space should be strictly monitored and in case of intervention, the previous structure should be preserved and the new approach should be evaluated.
- Social knots should be strengthened and through it, the sidewalk and bicycle should be wider, due to this concept, green space and urban furniture have increased and the speed of the rider should be controlled by creating

rules and changes in the street.

- Roads leading to urban spaces must have standard proportions and any widening is subject to change in height to the width of the axis according to the rules.
- The height of adjacent and marginal buildings should be controlled in a certain range, so that, the height of special buildings, such as historic mosques, has the highest ascent in the skyline of the wall.
- The type of building materials used in new buildings should be completely closed to the color of the space and urban facades should have a general integrity.

In future research, this evaluation can be examined at the scale of urban areas and also other methods can be used for ranking, which in general can achieve a specific framework in the field of urban body identity in the urban management system.

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