

## CASE STUDY

### Examination of value added of conservation and restoration of urban historic textures in district 12 of Tehran

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**ABSTRACT:** The growth of urban populations in recent decades requires physical elements such as residential, commercial and cultural spaces and the development of infrastructure such as streets and highways, which will open a new horizon to the historic texture of cities and how to preserve and restore them. The development of new urban textures along with the lack of attention to the historic texture and the transformation of the form and structure of the old neighborhoods of the city, promotes the expansion of new physical elements and the oblivion of historic elements. In this research, first, various management dimensions and then issues related to the restoration and conservation of historic textures, problems with these types of textures, issues procedures and legal and historic measures are discussed, then by using the field survey in the direction of achieving quantitative and qualitative findings and in the format of statistical methods an using the questionnaire, the required data for the research are collected from managers and citizens and the results will be presented in the form of a chart. In this regard, four hypotheses are tested and are finally concluded and summed up. This research seeks to answer the question of whether restoring and conserving the historic texture of the District 12 of Tehran municipality could be achieved through the formulation of management strategies or not.

**KEYWORDS:** *Historic Texture; Integrated Management; Management Strategies; Municipality; Restoration; Urban Management; Worn-out Texture*

## INTRODUCTION

Historic textures belong to the urban system. A large system in which people live and also consist of components such as, people, buildings, cars, and as a whole, is a set of collections that are interconnected and it is referred to as urban texture. But there is a limited historic texture of this urban system that has previously been a historic city and has existed in different historic periods of time where the life has been in progress there and it has been a system with complete specifications of construction, performance, identity, human society and natural factors in it, and there is

still evidence of this historic city in the current city, which is called the historic texture (Karimian and Ahmadi, 2013; Mojabi, 2012). In every historic city, the historic texture is the initial core and the heart of the city (Hayden, 1997; Stubbs and Maks, 2011).

Throughout the centuries, there has been urban life in historic texture, and this process can be continued, provided that by systematic maintenance and restoration and by urban planning based on the correct understanding of the city's space organization, historic texture will be kept alive and dynamic. In developed countries with a cultural-historical heritage, conservation and restoration of the city's historic

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texture, within the framework of its spatial organization and the development of communal spaces, have always had a respectable place and have always been successful. From this perspective, historic texture is not considered as an old, obsolete and hindering entity (Pevsner, 2005), but an exceptional opportunity to control the volume of construction, and also it is a symbol of the cultural and civil history of the city (Evans, 2002; Castells, 2011; Semenenko, 2012).

Nowadays, the historic texture of a number of Iranian cities, faces a very serious and widespread crisis (Afshari, 2009). The lack of attention to the spatial organization of historic texture in the formulation of comprehensive and detailed plans, the lack of knowledge and awareness of the cultural and economic values of historic textures, selection of cell conservation and restoration methods, insisting on the protection of museums, the focus of vital and important economic and cultural activities of the city on the new and modern textures, changing the structure and space of the historic neighborhoods in line with the provision of urban services and immigration and settlement of immigrants in historic textures are all the threats and destructive factors that turn the historic constructions into large ruins or inferior neighborhoods in the center and the core of cities, with many social anomalies (Wu *et al.*, 2006; Balibrea, 2001).

The continuation of the degradation of the physical body of the texture along with the degradation of the environmental conditions has led to the movement of powerful residents groups from these neighborhoods to other parts of the city and the influx and settlement of low income and working groups in the mentioned neighborhoods, resulting in accelerating the process of stagnation and degradation (Rahnama, 1996; Rogers and Hall, 2005).

Tehran, until the Mongols, was one of the less valued villages of Rey which were deployed in small distance from Ray; after the destruction of Rey by the Mongols, this village, started to grow after the immigration of homeless people of Rey and its population and vastness increased (Shahidi Mazandarani, 2004). To the extent that during the Timurid period, it became a kind of town among the gardens, in 944 AH, on the orders of Shah Tahmasb, around the city which was six thousand feet, built a hundred and fourteen towers based on the number of Quranic Surah's, and caved a deep and wide trench around it and built four bridges and fourteen gates for it.

The pre-revolutionary Tehran city had ten districts, which later became twenty districts, and since 2002 it has twenty two districts.

In cities with a long historic background, that have a physical texture sequence, the center of the city usually coincides with its old downtown and forms the center of performance, not necessarily the geographical center, of the city system (Adham, 2006).

The District 12 of Tehran, is the core city of old Tehran, and is its birthplace.

This area is limited to Enghelab Street from the north and to Shoush Street from the south, from the east to 17th Shahrivar Street, and from the west to Vahdat Islamic Street. The area is the economic pole of the city and its population is about 365,000 people and the population of floating around 1400000 people. The number of households in the district is 91,000 households and the population growth rate is 2.5% per year. District 12 has the widest valuable textures and most of Tehran's historically unique and outstanding buildings and spaces (Fig. 1). Protecting and restoring, conserving and equipping this cultural heritage is a national task, and this is the highest relative advantage of this area. Meanwhile, the vast areas of the district, despite of the identity values (past remnants of Tehran), face extreme Erosion.

The renovation and restoration of these areas are urgently needed by relying on the concepts of urban restoration, and it should be noted that a considerable part of the valuable urban body (the edges of the streets), which constitute the history and symbolism of Tehran's urban landscape, has been destroyed and annoying extensions have been added to the remains of buildings and structures. The most important problem in the revival of the historic textures seems to be the lack of management, coherence and the lack of participation of managers and the private sector, as over the past years, despite the need to restore the protection of historic textures in this area and many approvals and follow-ups, still a small percentage of historic textures of the district has been restored.

Regarding the importance and necessity of addressing the sample of case study, it is necessary to refer to the characteristics of the historical center of Tehran, which manifests itself in the territory of the district 12. The studies show that approximately 27% of district 12 (inside the first bulwark) are over 400 years old. On the other hand, the district 12 with an area of 1600 hectares is more than 80 percent of the second

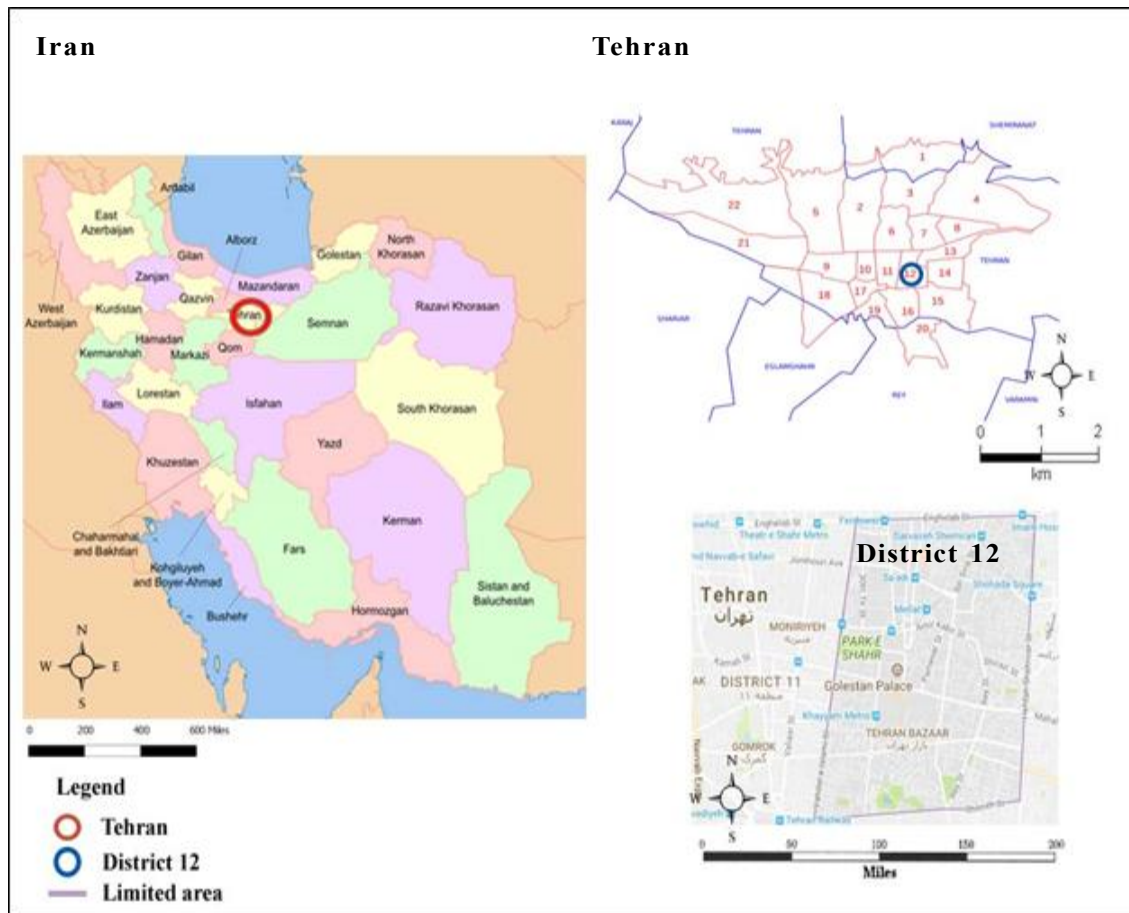


Fig. 1: Map of study area in Tehran

bulwark (2000 hectares). In other words, the lifetime of 73% of the texture in district 12 is more than 200 years old. Also, 43% of the area consist of indicator extents and zones and 15.5% of the length of the city's edges (street view) still has valuable bodies. Also, squares and privileged urban spaces should be looked at in the streets of old Tehran (Bavand Consultant Engineers, 2007). Also, more than 50% of residential units in the district 12 are over 30 years old (the highest proportion of old houses among the districts in Tehran) and only 8.5% of them have been built in the last ten years. The share of this district for the total construction of the period from 1996-2000 was only 3.3%. In other words, the texture of the district is getting worn-out gradually. The study shows that 17.3% of semi-durable buildings and 12.1% of short-lived buildings are located in the

district 12. Population and housing census data of 1996 indicate that among 39,245 residential buildings in the district 12, 66% of residential buildings are built with building materials and 34% were constructed with metal or concrete structures (Bavand Consultant Engineers, 2007). The historic and worn-out urban textures are part of the socio-cultural capital (Rius Ulldemolins, 2014; Amirahmadi et al., 2016), which have evolved over the years. In the district 12, the old body has not met with the new needs, including commuting cars, and it goes through the path of recession and degradation day by day. Urban centers have potential capacity for generating revenue due to geographical center, ease of access, market deployment, business activities and the existence of historical and cultural values (Steinberg, 2008). In spite of these features, residential

areas around the business center go through the path of recession and backwardness due to some reasons, such as the traditional texture of the road network, the worn-out of residential units, the weakness of infrastructure and environmental problems. The existence and continuation of such spatial forms have led to the formation of a kind of socioeconomic processes in the residential areas of historic and worn out textures, and high-income groups have left these neighborhoods and immigrant workers and mostly poor ones replaced them. On the other hand, some residential units are exposed to the aggression and pressure of market-oriented activities and have become manufacturing workshops or warehouses. The set of these factors has reduced the desirability of housing in these textures.

On the one hand, the conservation of the historic textures of cities is linked to the identity of the city and its citizens, and on the other hand, management and supervision of these textures are considered as the social-cultural necessity (Mohammadi and Bahadori, 2014). The abandonment of these textures will cause many harms and socio-cultural issues. Hence, identifying and developing effective management strategies and restoring and conserving historic textures are very important and essential for urban managers and citizens (Sarvarzade and Abedini, 2012). Economically, the historic texture as part of the city has allocated a significant area to itself. These textures, in addition to having historical and cultural values, have a high capacity for creating residential, commercial and cultural heritage use and the importance of these textures, particularly in the direction of sustainable development based on the maximum use of available capacities, should be considered. One of the economic strategies, due to some of the urban infrastructure of these areas in the context of the housing crisis, is the provision of adequate housing. On the other hand, the location of the historical context in the centers of the city leads to the saving of services to other marginal areas. (Amirahmadi *et al.*, 2016).

By objective presentation of the collection of historic monuments within cities to tourists, cultural tourism expands. However, such works and monuments sometimes will not be able to find their former use, but with the provision of cultural and traditional users, and with a view to their tourist attractiveness, the economic aspects of cultural buildings can be utilized and yet maintain the values (Ebrahimpour and Roshandel Arbatani, 2011; Momenlo, 2009).

Undoubtedly, the historic textures are the rich heritage and suitable places for the application of the tourism approach. By examining the global statements of Icomos, which are related to the protection of the historic and cultural heritage (1965-2015), it is possible to find the ground for the implementation of this approach in worn-out textures. The Kyoto Protocol (1967) emphasizes on the conservation of cultural heritage as a document of national honor and the dialogue of civilizations, and the lack of separation of the meaning and concept of the structures and works, the protocol considers the economic aspect and tourism industry for rapid recovery of capital and financial resources (Nordhaus and Boyer, 1999). Measures and interventions are being made to deal with the urban historic texture (worn-out) and to solve the related problems. Intervention can take place in different ways, which can be categorized into five general categories:

- a. Conservative-sanitary method
- b. Conservative-decorative method
- c. Urban renovation method
- d. Thematic-topical intervention method
- e. Urban restoration comprehensive method

The initial steps of activities related to restoration of old urban textures should be sought in Western Europe, especially in France and England, due to the initial beginning of the industrial revolution in the period 1830-1960, which has led to invention of thousands of machines for the exploitation of the deadly material force and the establishment of thousands of factories in the city areas. Therefore, the displacement of production centers from rural areas to urban areas, medical progress, and rapid natural population growth, the fight against contagious diseases, urban-rural migration and, consequently, the population density in cities, especially in the old part of the city, which is based on pre-industrial transportation technology of wheels had happened. As a result, many environmental problems were created for residence in urban areas. The organization of cities (in the original form of the Howard Gardens in 1850 and the old textures) was specially considered in two directions (Ward, 2005) of respect for the preservation of the past heritage and also the elimination of the bottlenecks caused by burnout problems of the area and also to the ridding access. In 1837, the French people founded an organization called the Special Committee of Henthav and Historic Monuments, which

worked on listing and maintaining elements and places that are in danger of destruction. Fifty years later in England, in 1877, William Morris founded an association to conserve ancient buildings, which is still the forerunner of many other organizations at the present time. The history of the collection of laws related to the conservation and restoration of valuable works, dates back to the nineteenth century, which has continued and evolved so far. This process was formed based on the theory of the reconstruction of ancient texture and the development of a city.

#### *Research Objectives*

The main objective of this research is to develop management strategies for the conservation and restoration of the case- study area (district 12 of Tehran), and the specific objectives of this research are:

- Determining the physical indices for the restoration of historic textures.
- Identification of economic indices for the restoration of historic textures.
- Determination of socio-cultural indices for the restoration of cultural textures.
- Determination of urban management indices for the restoration of historic textures.

#### *Research Questions*

The main questions of this research are as follows:

- What are the physical – spatial indicators for the restoration of historic textures?
- What are the effective economic indicators for the restoration of historic textures?
- What are the effective social indicators for the restoration of historic textures?
- What are the indicators of urban management for the restoration of historic textures?

#### *Research Hypotheses*

Hypothesis 1: “There is a difference between the role of management factors in conservation and restoration of historic textures of Tehran in two existing and desirable conditions”

Hypothesis 2: “There is a difference between the role of physical factors in conservation and restoration of historic textures of Tehran in two existing and desirable conditions”

Hypothesis 3: “There is a difference between the role of social and cultural factors conservation and restoration of historic textures of Tehran in two existing and desirable conditions”.

Hypothesis 4: “There is a difference between the role of economic factors conservation and restoration of historic textures of Tehran in two existing and desirable conditions”

#### **MATERIAL AND METHOD**

This research has a field-deep research and is based on quantitative and qualitative findings. By the field survey method, it attempts to collect the required data through quantitative and qualitative findings. The present research, in terms of purpose, is applied and is descriptive in terms of method. The statistical population includes relevant experts in the municipality of Tehran and historic property owners in district 12. Due to the limited number of experts involved in the conservation and restoration of historic textures, 110 of Tehran Municipality managers and employees working in different departments and also the owners of historic buildings, were questioned randomly. In order to achieve the management patterns in related subjects, library studies were performed and documented municipality experiences were also identified and examined. In addition, to obtain the demographic information of this area as well as information about historic textures, the official statistics from Iran’s Statistics Center and the Ministry of Roads and Urban Development were used.

This research is based on quantitative and qualitative research method. In the quantitative part, a researcher-made questionnaire is used which includes the design of indicators of the mentioned variables, and was concluded through statistical analyzes and tests, and in the qualitative section, semi-structured interview with segmentation of content analysis was used. The field operations questionnaire was analyzed and described after data collection using descriptive statistics including tables, charts, central indices and inferential statistics using factor analysis, Friedman analysis and variance analysis.

Among of the most important problems that can be mentioned are the lack of access to various organizational statistics and the lack of cooperation of the managers of the organizations involved in the urban context.

Data and information on this research have been collected by several methods:

1. Documentary method: In this method, theoretical and empirical literature on the role of four administrative, physical, social, cultural and economic

factors in the conservation and restoration of the historic textures of Tehran has been studied. In the following, a theoretical model and a questionnaire were developed.

2- Field method: In this method, the questionnaire was used to collect required data and information from the statistical population of the research.

The main measurement instrument in this research is questionnaire made by the researcher and attempts has been made to question the various dimensions of conservation and restoration of Tehran historic textures in two current and desirable conditions. The questionnaire consisted of four questions about the individual characteristics of the respondents and 25 main questions related to the goals and hypotheses of the research:

A) Individual characteristics (4 questions).

B) The role of management factors in conservation and restoration of Tehran historic textures (Questions 1, 2, 3, 4, 5, 6)

C) The role of physical factors in conservation and restoration of Tehran historic textures (Questions 7, 8, 9, 10, 11)

D) The role of social and cultural factors in conservation and restoration of Tehran historic textures (Questions 12, 13, 14, 15, 16, 17, 18, 19)

E) The role of social and economic factors in conservation and restoration of Tehran historic textures (Questions 20, 21, 22, 23, 24, 25)

In this research, content validity method (face validity) has been used to measure the validity of measuring instruments. After the initial compilation, the questionnaire was shared with the supervisors and counselors and a number of thematic experts, then the validity of the questionnaire was provided after applying their comments in the questionnaire and modifying the questionnaire.

Cronbach's alpha method was used to calculate the reliability of the questionnaire. First, the questionnaire was completed among 15 relevant experts. Then, through Cronbach's alpha, the internal consistency coefficient of the items related to the indicators of the questionnaire was calculated in two existing and desirable conditions. Based on the obtained results, the Cronbach's alpha coefficient of all the indices is higher than 0.70, which results in high reliability of the measuring instruments.

#### *Method of Data and Information Analysis*

after collecting data through a questionnaire and entering them into the "Statistical Package for Social Sciences (SPSS19)", the analysis of these data was done on the basis of descriptive and inferential methods:

1- Descriptive Method: Descriptive statistics are statistics that summarizes the responses of sample individuals. Accordingly, in order to describe the sample specifications, the statistical methods were used at different levels of summarization (frequency distribution, percent, ...) and table (one dimensional, etc.).

2. Inferential method: Using this statistical method is for generalization of the sample specification of the statistical population of the research. In other words, in this method, the hypothesis testing was used to infer population parameters from sample statistics.

To test the hypotheses of the research, first, to determine the normal status of the data, one-sample Kolmogorov-Smirnov test was used and the results showed that the distribution of data in all four dimensions considered in this research, namely administrative, physical, social, cultural, and economical, was abnormal and therefore, the Wilcoxon nonparametric test was used to test the research hypotheses based on these data (Gehan, 1965).

#### *Findings of the Research*

The research findings consisted of two parts: descriptive findings and inferential findings. In the descriptive findings, the frequency distribution of the variables of the research has been mentioned and in the inferential findings, the research hypotheses have been tested.

#### *Descriptive Findings*

Tables 1, 2 and 3 provide information on the demographic features of the respondents. Experts' opinions on the role of four administrative, physical, social, cultural, and economic key factors in conservation and restoration of historic textures of Tehran.

In this section, the experts' opinions about the role of four management factors: physical, social, cultural and economic factors in conservation and restoration of the historic textures of Tehran (in the form of several questions per factor) have been evaluated and examined based on the Likert scale

(Gliem and Gliem, 2003). Below is the result of each examination.

*Management Factors*

Management factors are the first set of factors that play an important role in the conservation and restoration of the historic part of Tehran. To measure this role, 6 related questions have been used:

1. How much is the role of urban management in restoring historic textures?

2. How much is the role of integrated urban management in restoring historic textures (simultaneous and integrated policy making of all relevant institutions and organizations such as water and sewage, electricity, telecommunications and all infrastructure facilities)?

3. How much is the role of delegation of authority to restore and improve the historic texture of Tehran to the municipality in conservation and restoration of the historic textures?

4. How much is the role of the cultural heritage and tourism organization in conserving and restoring the historic textures of Tehran?

5. How much is the role of strategic planning (long-term and macro) in restoring and conserving the historic texture of Tehran?

6. How much is the role of the policies and implementation decisions of Tehran Municipality in conservation and restoration of historic textures?

In general, the results of the index of the total number of management factors about the role of urban management in restoring historic textures are presented in Table 4.

Table 1: Relative distribution of respondents by gender

Gender	Frequency	Relative percentage
Male	83	75.5
Female	27	24.5
Total	110	100

Table 2: Relative distribution of respondents by age

Age	Frequency	Relative percentage	Cumulative percent
30 years or below 30	31	28.2	28.2
31 to 40 years	37	33.6	61.8
41 to 50 years	25	22.7	84.5
51 years or above 51	17	15.5	100
Total	110	100	-

Minimum: 22 years Maximum: 62 years Average: 38.3 years Standard deviation: 9.9 years

Table 3: Relative distribution of respondents based on education

Education	Frequency	Relative percentage	Cumulative percent
Associate	1	0.9	0.9
Bachelor	22	20	20.9
Master	68	63.6	84.5
PhD	19	15.5	100
Total	110	100	-

*Physical factors*

In this research, five questions have been used to measure and investigate the role of physical factors in conservation and restoration of the historic part of Tehran.

1. How much is the role of improving and renovating historic textures (restoring some parts of textures) in restoring and conserving the historic textures of Tehran?

2. How much is the role of urban furniture development (pavement, lighting, landscaping and green space development, etc.) in restoring and conserving and rehabilitating the historic textures of Tehran?

3. How much is the role of creating economic privacy (the territory in which various economic activities lead to a reduction in the economic value of the historic texture in restoring and conserving the historic textures?)

4. How much is the role of continuous depletion activities in reducing the number of abandoned place in restoring and conserving the historic textures?

5. How much is the role of planning on changing the use of monuments (converting them to hotels, restaurants, museums, traditional cafes, etc.) in restoring and conserving the historic textures of Tehran?

In general, Table 5 shows the results of the total index of physical factors.

Table 4: Relative distribution of respondents according to their view about the role of the total index of management factors in conservation and restoration of the historic textures of Tehran

Description	Current condition				Desirable condition			
	F*	%	M**	SD***	F	%	M	SD
Very low	17	15.5			2	1.8		
Low	43	39.1			1	0.9		
Average	26	23.6	2.56	1.09	7	6.4	4.51	0.81
High	19	17.3			29	26.4		
Very high	5	4.5			71	64.5		
Total	110	100			110	100		

\*Frequency, \*\*Mean, \*\*\*Standard Deviation

Table 5: Relative distribution of respondents according to their view of the role of the total index of physical factors in restoring and conserving the historic textures of Tehran

Description	Current condition				Desirable condition			
	F*	%	M**	SD***	F	%	M	SD
Very low	13	11.8			6	5.5		
Low	38	34.5			4	3.6		
Average	34	30.9	2.75	1.15	18	16.4	4.02	1.11
High	13	11.8			36	32.7		
Very high	12	10.9			46	41.8		
total	110	100			110	100		

\*Frequency, \*\*Mean, \*\*\*Standard Deviation



*Social and Cultural Factors*

The role of social and cultural factors in restoring and conserving the historic textures of Tehran has been evaluated based on 8 questions.

1. How much is the role of social security in historic neighborhoods in restoring and conserving the historic textures of Tehran (police stations in the neighborhood, 24-hour service centers, etc.).

2. How much is the role of adopting strategies to increase social capital in neighborhoods in restoring and conserving the historic textures (neighborhood gatherings, religious rituals, etc.)?

3. How much is the role of NGO’s activities in restoring and conserving the historic textures (charity associations, tourism, mosques, board of trustees, etc.)?

4. How much is the role of counseling activities in identifying historic textures to residents of the neighborhood in restoring and conserving the historic textures?

5. How much is the role of encouraging urban management in the participation of inhabitants in historic textures in converting their properties to residential-tourism places in restoring and conserving the historic textures?

6. How much is the role of identification to historic neighborhoods of Tehran by urban management in restoring and conserving the historic textures (maintaining the specific spaces of each neighborhood, considering the historical background and its role and function)?

7. How much is the role of notifying and advertising in familiarizing citizens and visiting them from historic textures and as a result, paying attention to their restoration?

8. How much is the role of the foundation and education and information about the incentives provided by relevant organizations to the private and public sectors in increasing their participation?

In general, the results of the total index of socio-cultural factors are in [Table 6](#).

Table 6: Relative distribution of respondents in terms of their views on the role of the total index of social and cultural factors in conserving and restoring the historic textures of Tehran

Description	Current condition				Desirable condition			
	F*	%	M**	SD***	F	%	M	SD
Very low	22	20			1	0.9		
Low	44	40			5	4.5		
Average	21	19.1	2.46	1.14	14	12.7	4.25	0.91
High	17	15.5			35	31.8		
Very high	6	5.5			55	50		
total	110	100			110	100		

\*Frequency

\*\*Mean

\*\*\*Standard Deviation

*Economic Factors*

In this research, six questions have been used to study the role of economic factors in conservation and restoration of historic part of Tehran.

1. How much is the role of public sector investment in supporting the conservation and restoration of the historic part of Tehran?
2. How much is the role of private sector investment in supporting the conservation and restoration of the historic part of Tehran?
- 3- How much is the role of providing incentive packages (tax exemptions, low-interest bank facilities, etc.) from the relevant organizations to the private sector to encourage them in activities related to the restoration and revitalization of monuments?
4. How much is the role of drafting motivational laws in order to preserve the inhabitants of historical neighborhoods and their non-immigration in conservation and restoration of the historic textures?
5. How much is the role of codifying restrictive laws to keep monuments from changing their use to other economic activities (warehousing, etc.) in conservation and restoration of the historic textures?
6. How much is the role of creating solutions to increase the value added of monuments and historic real estate for their owners in the conservation and restoration of the historic textures?

In general, the results of the total economic factor index are as described in [Table 7](#).

*Inferential / Analytical Findings*

In this section, we will test the hypotheses of the research. First, the Kolmogorov-Smirnov test was

performed to evaluate the normal distribution of data for all four management, physical, social and cultural factors, and the results showed that The value of Z is significant in all four factors at the error level less than 0.01 and 0.05. In other words, the distribution of data is not normal and therefore, parametric tests cannot be used to test the hypotheses. Therefore, the nonparametric equivalence of these tests was used., after it was determined that the distribution of data in for the four factors in current and desirable conditions, was not normal, the non-parametric Wilcoxon test was used to test the hypotheses. In the following, we describe the results of testing each of four research hypotheses of the research.

The first Hypothesis : (There is a difference between the role of management factors in conservation and restoration of historic textures of Tehran in two current and desirable conditions). To test this hypothesis, after considering the  $H_1$  and  $H_0$  hypotheses, Wilcoxon test was used to test it:

$H_1$  = There is a difference between the role of management factors in conservation and restoration of historic textures of Tehran in two current and desirable conditions.

$H_0$  = There is no difference between the role of management factors in conservation and restoration of historic textures of Tehran in two current and desirable conditions.

The results of the role of management factors in conservation and restoration of historic textures of Tehran showed that there was a significant difference between the number of negative and positive ranks with a confidence level of 0.99 and an error level of less

Table 7: Relative distribution of respondents according to their view of the role of the total index of economic factors in conservation and restoration of the historic textures of Tehran

Description	Current condition				Desirable condition			
	F*	%	M**	SD***	F	%	M	SD
Very low	33	30			2	1.8		
Low	48	43.6			5	4.5		
Average	13	11.8	2.16	1.12	15	13.6	4.24	0.98
High	10	9.1			31	28.2		
Very high	6	5.5			57	51.8		
Total	110	100			110	100		

than 0.01 ( $Z= 8.354$ ). In addition, comparing these rankings shows that in 97 cases, the number of positive ratings is higher than the number of negative ratings, while in only 6 cases, the number of negative ratings is higher than the positive ratings. In other words, we see that the role of management factors in conservation and restoration of historic textures of Tehran in the present condition has a long distance with the desirable situation, and there is a deep gap in this respect. Therefore, the hypothesis  $H_1$  of the research which is based on the difference of the role of management factors in conservation and restoration of historic textures of Tehran in the current and the desirable conditions, is accepted and the  $H_0$  is rejected, which is based on the lack of this difference.

The Second hypothesis: (There is a difference between the role of physical factors in conservation and restoration of historic textures of Tehran in two current and desirable conditions). To test the second hypothesis of the study on the role of physical factors in conservation and restoration of historic textures of Tehran, first two hypotheses  $H_1$  and  $H_0$  were set up and then tested using the Wilcoxon test:

$H_1$  = There is a difference between the role of physical factors in conservation and restoration of historic textures of Tehran in two current and desirable conditions.

$H_0$  = There is no difference between the role of the physical factors in conservation and restoration of historic textures of Tehran in two current and desirable conditions.

After performing the Wilcoxon test, it was revealed that there was a statistically significant difference between the number of positive and negative ranks regarding the role of physical factors in conservation and restoration of historic textures of Tehran ( $Z= 6.950$ ). Comparing these rankings shows that in 76 cases, the number of positive ratings is higher than the number of negative ratings, and in only 12 cases, the number of negative ratings is higher than the number of positive ratings. In other words, the role of the physical factors in conservation and restoration of historic textures of Tehran in the present situation has a very large gap with the desired situation. Therefore, based on this result, the hypothesis  $H_1$  of the research which is based on the difference in the role of the physical factors in conservation and restoration of historic textures of Tehran in two existing and desirable

conditions, is accepted and  $H_0$  based on the lack of this difference, is rejected.

The third hypothesis: (There is a difference between the role of social and cultural factors in conservation and restoration of historic textures of Tehran in two existing and desirable conditions). To test the third hypothesis of the research, after adjusting  $H_1$  and  $H_0$ , Wilcoxon test was used:

$H_1$  = There is a difference between the role of social and cultural factors in conservation and restoration of historic textures of Tehran in two existing and desirable conditions.

$H_0$  = There is no difference between the role of social and cultural factors in conservation and restoration of historic textures of Tehran in two existing and desirable conditions.

Regarding the role of social and cultural factors in conservation and restoration of historic textures of Tehran, with a confidence of 0.99 and a level of error less than 0.01, there is a statistically significant difference between the number of negative and positive ratings ( $Z=8.319$ ). By comparing the number of positive and negative ratings, it was noted that in 91 cases, the number of positive ratings is higher than the number of negative ratings, while in only six cases, the number of negative ratings is higher than the positive ratings. This conclusion suggests that the role of social and cultural factors in conservation and restoration of historic textures of Tehran in the current condition is very far from that in the desirable condition, and there is a deep gap in this respect. Therefore,  $H_1$  hypothesis which is based on the difference in the role of social and cultural factors in conservation and restoration of historic textures of Tehran in two existing and desirable conditions, is accepted and  $H_0$  which is based on the absence of this difference, is rejected.

The fourth hypothesis: (There is a difference between the role of economic factors in conservation and restoration of historic textures of Tehran in two current and desirable conditions). To test this hypothesis, after adjusting  $H_1$  and  $H_0$ , Wilcoxon test was used to test it:

$H_1$  = There is a difference between the role of economic factors in conservation and restoration of historic textures of Tehran in two current and desirable conditions.

$H_0$  = There is no difference between the role of economic factors in conservation and restoration of historic textures of Tehran in two current and desirable conditions.

The results of Wilcoxon test showed that the difference between the number of positive and negative ranks on the role of economic factors in conservation and restoration of historic textures in Tehran with a confidence level of 0.99 and error level less than 0.01, is statistically significant ( $Z=6.950$ ). In 93 cases, the number of positive ratings is higher than the number of negative ratings, and in only 6 cases, the number of negative ratings is higher than the number of positive ratings. Therefore, it can be seen that the role that economic factors can play in conserving and restoring the historic textures of Tehran in a desirable way in the present situation in Tehran, has a long distance with the desirable situation. Based on this result,  $H_1$  of the research which is based on the difference in the role of the economic factors in conservation and restoration of historic textures of Tehran in the two existing and desirable conditions, is accepted and  $H_0$  is rejected, which is based on the absence of this difference.

## **CONCLUSION**

Studies have shown that Tehran's historic texture management, in order to perform duties, has a wide range of objectives, policies and actions in various dimensions, and the historic centers of district 12 are so valuable that can be a basic and important element that the neighborhood and, consequently, the city change accordingly, and it can have a dynamic and lasting life and become a very beautiful and suitable neighborhood for the city. The neglect of the in-charge people to the economic value of historic centers and their valuable role in economic growth and the lack of attention to tourist capacity and tourism have caused the regeneration concerns of the historic centers of the district, to become ambiguous.

Among the most important reasons for the presence of citizens (human resources) in the intervention of historic textures, we are name the followings:

- Everyone is given the opportunity to have their voice heard. Also, people in the neighborhood are allowed to be accepted as beneficiaries or the in-charge persons.
- Local people are encouraged to take personal responsibility for identifying issues, finding solutions and employing them, and the concerns of the people become well-understood.
- The knowledge and skills increase for effective collaborative work and the priorities for future activities will be recognized.

Considering the opportunities and abilities of the district and the proper use of the prospects for future development of district 12, will be essential, the most important of which are as follows.

- Realization, policymaking and executive plans in the management aspect
- Strategies and policies in the cultural-social aspect
- Strategies and policies in the physical-conservational aspect
- Strategies and policies in the economic aspect

Considering the capacities of the regions with historic textures, all strategies should be in the form of comprehensive and appropriate development and control. The implementation of a comprehensive and dynamic legal system for the conservation, restoration and wise use of the public material and spiritual heritage, with respect for the rights of citizens and the beneficiary community is one of the most important preconditions for the revival of historic textures in the district, which is possible within the framework of policies and plans. Improvement, renovation, organization and revitalization of the historic textures of the district, in order to exploit the material and spiritual values of urban texture are of the most fundamental strategies for the present and future generations, which is possible in the framework of enjoying urban landscape with historic identity and are of the most important ways of enriching the places and events and the values of historical-cultural memory of these centers.

Economic dimensions of the historic textures of district 12, which are efficient, sustainable and updated and are based on providing superior services and are in interaction with the economic flow of the city, are of the most important ways recommended by this research, because, having dignity of life and a stable life, a lively and distinguished place as the main tourist attraction and spending leisure time and the city and the place of realization of the values of the historical-cultural heritage, are the historic texture of the district. From this point of view, historic textures are not considered to be old and obsolete and hindering, but an exceptional opportunity to control the volume of construction and also the symbol of the cultural and civil history of the city.

Conservation, restoration and improvement of outstanding and historic buildings and areas of the district is a national duty. The results of the survey of 110 distributed questionnaires among the experts of

the city district and the owners of the historical real estate in the district 12 are as follows:

1. The role of NGO's activities in restoring and conserving historic textures (charity associations, tourism, mosques, boards of trustees, etc.) has been low in the district.

2. Within the framework of the collaboration of various organizations (integrated management), the role of Tehran City Municipality policies and executive decisions in protecting and restoring historic textures have been underestimated.

3. At present, the role of integrated urban management in restoring historic textures (the simultaneous and integrated policymaking of all relevant institutions and organizations, such as water and sewage, electricity, telecommunications and all infrastructure facilities) is unremarkable.

4. Commitment and effort of the municipality and the renovation organization to the improvement and restoration of the texture of the neighborhood, the role of various continuous activities such as depletion in order to reduce the number of ruined and abandoned places in the direction of conserving and restoring the historic textures, have been very good to a great extent.

5. Also, despite the importance of the social security of the historic neighborhoods in restoring and conserving the historic textures of Tehran (police stations, 24-hour service centers, etc.) by local people, the social security of the historic neighborhoods has a small role in the restoration and conservation of historic textures of the district 12 and is not evaluated satisfactory.

6. Reducing social security, in many cases the low social security factor at historic textures is the main reason for the migration of the population from these textures. As a result, one of the reasons for the degradation and worn-out process is the weakness of social security, which could be due to conflicts of incompatible uses and migration and displacement of the population.

7. The role of identification to the historic neighborhoods of Tehran by urban management has been weak in conserving and restoring historic textures (conserving the special spaces of each neighborhood according to historic background and its role and function).

8. The role of creating solutions to increase the value added of historic real estate for their owners was not remarkable in conserving and restoring historic textures.

9. Despite the importance of capital in restoring historic textures, the results show that the role of public sector investment in supporting the conservation and restoration of the historic part of the district, has been inadequate.

10. Despite the importance of capital in the restoration of historic textures, the results show that the role of private sector investment in supporting the conservation and restoration of the historic part of the district has been inadequate.

11. Despite the importance of the role of physical factors in restoration of historic textures, the physical factors presently play a minor role in the conservation and revitalization of the historic textures of Tehran (district twelve).

12. The role of urban furniture development (pavements, lighting, landscape, development of green space, etc.) has been weak in conserving and restoring and revitalizing the historic textures of the district, and creating a link through the related route paths of area extension, proper flooring, suitable urban furniture, defining bodies, body and function, and so on, have not completely established a systematic relationship.

a) To define and establish appropriate training, research, and management skills and supervision strategies in the conservation and restoration of the historic textures of the district.

b) To follow the implementation of global urban management standards in the Municipality of Tehran

c) To observe the rights and interests of owners and investors in the regulation and reformation of laws

d) To create the cultural capacity and public awareness, build confidence and identify the neighborhoods in interaction with the historic texture of the district

e) The Economic-cultural empowerment of residents of Tehran's historic district,

f) Restoring the role of Tehran's historic texture in the lives of citizens by strengthening urban tourism.

g) To improve the quality of study and implementation activities in the field of conservation and restoration,

h) To exploit and support creativity wisely in restoring the historic texture of the district

i) Reviving the historic identity of Tehran as the contemporary capital and contemporary site of cultural developments in Iran,

j) To encourage investment and stimulate economic participation of stakeholders and beneficiary institutions,

k) To activate and shape the cultural heritage economy,

l) To accredit and enhance quantitative and qualitative settlement function of the texture.

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#### CONFLICT OF INTERESTS

The authors declare that there is no conflict of interests regarding the publication of this manuscript.

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