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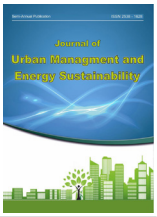

CASE STUDY RESEARCH PAPER

Evaluation of the significance of macro-factors of urban livability in the neighborhoods of Torghabeh city

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ABSTRACT

In recent years, Iran has started to decline in the quality of livability with the increasing trend of urbanization and population accumulation in small areas, and the research of the last decade shows the low indicators of urban livability in the country, which clearly affects the quality of life of its residents and its health. endangers The general purpose of the present research is to investigate the significance of macro factors affecting livability in the neighborhoods of Torghabeh city. The current research method is analytical-descriptive and is considered practical in purpose. The method of data collection is documentary as well as field. The target statistical population includes the citizens of Targaba city, which is adjacent to Mashhad metropolis. The findings indicate that in all neighborhoods except the old neighborhood, economic, social, service and infrastructure, managerial and environmental factors have significant differences and based on the average rank of each dimension, it is possible to determine the most important dimension in each neighborhood. identified The results show that the macro factor in the environmental aspect of the livability of the neighborhoods of Torghabeh has a significant difference compared to other factors. Finally, the environmental factor with an average score of 4.07, the social factor with a score of 3.2, the management factor with a score of 2.7, the service and infrastructure factor with a score of 2.57 and the economic factor with a score of 47.1 respectively got 5. In order to compare macro factors in the environmental dimension of livability according to professors, Friedman's test was used. According to the obtained significant level of more than 0.05, it shows that there is no significant difference between the macro factors of the environmental dimension in the opinion of the professors. In the future studies, the internal relationships of each group of factors can be examined with each other.

Running Title: Macro factors of urban livability in the neighborhoods of Torghabeh city

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INTRODUCTION

In the 20th century, the approach of planning and designing the city was for the use of citizens, but with the beginning of the era of modernity and the industrialization of human societies, the increase of the urban population and the invasion of the machine age, the livability capabilities of the city began to decline (Elsawy et al, 2019:165). The increase in population density in the cities led to the creation of conditions for harming the urban society and reducing urban livability (McCrea & Walters, 2012:17). Therefore, urban planners, looking for a way to prioritize the role of people in cities, proposed the term livable city (Elsawy et al, 2019:165). From this point of view, livable cities have become one of the new urban agendas of the United Nations in recent years. In the past years, at the global level, several studies have been conducted to investigate the quality of life in the urban environment, satisfaction with the neighborhood, the vitality of the city and the livability perceived by residents in cities (Kourtit et al, 2022:227). But every city has its own unique livability indicators in the direction of urban livability (Yassin, 2019: 224). Urban neighborhoods differ in livability indicators due to differences in their cultures, attitudes, values, and local structure (Mouratidis & Yiannakou, 2022:1). However, some studies of European cities show that high density does not have a negative effect on neighborhood satisfaction, which can be considered a key to the livability of a neighborhood (Andersen et al. 2020:8). Although the definition of livability varies from one society to another, quality of life in any place is at the center of the concept and there are many measurable indicators, usually density, transportation, security and sustainability, which are constant components. form. (Eizenberg et al. 2020:14; FCL and CIESIN, 2020). In Iran, in recent years, with the trend of increasing urbanization and population accumulation in small areas, livability indicators have started their downward trend, and in numerous researches, problems such as worn-out fabric have overcome each other. Migration of local population, inefficiency of urban infrastructure, high population density, reduction of economic prosperity, reduction of environmental potential of cities, reduction of sense of belonging to place and participation, etc. have been brought up. The city of Torghabeh is not an exception to this rule and due to its proximity to the metropolis of Mashhad (the spiritual capital of Iran) and its mountainous climate and good weather and the special tourist conditions of the city of Torghabeh, it has led to the attraction of the affluent class of Mashhad to create garden villas in distant neighborhoods. It has been turned away from the city center. Also, due to the departure of the old and resident population of the central neighborhoods of Torghabehh towards less dense neighborhoods and far from the city center, it has led to problems regarding the provision of urban infrastructure services to the residents of these neighborhoods. On the other hand, the current research believes that a livable city can be achieved from livable neighborhoods, therefore, the current livability status of the neighborhoods of Targaba city in terms of livability indicators and macro factors influencing the current livability status of the neighborhoods of Targaba city in order to prevent overcrowding The commercial functions, the change of use and the destruction of the ecology of the city of Torghabeh and in order to preserve the natural resources of the touristic city of Torghabeh for the future generations of Iran, the land is one of the necessities of the present research. This research is carried out with the aim of investigating macro-factors affecting the livability of the urban neighborhoods of Torghabeh city in the urban area.

Urban livability

One of the concepts related to the sense of place is the concept of livable societies, which in recent decades and with the emergence of public awareness that many of our societies today do not meet this criterion; It has been discussed a lot (Jamapour and Ahmadi, 2014: 78). The concept of livability has basically been considered since the end of the 20th century, and until now a single and clear definition of the concept of

livability has not been provided (Gim, 2021.:38). Kennedy and Bai consider this issue to be due to lack of consensus and the existence of some ambiguities. Helen (2006) considers this difference of opinion to be normal; Because the scientific fields of the researchers are different from each other and each of them has given a special definition of it according to their expertise. Another reason is the nature of this concept itself, because livability is a multifaceted concept that includes physical, social and cultural environments (Khorasani, 2016: 52; Mousavi et al. 2016: 38). Although livability has a long background and history in city thoughts and urban planning, it was not called by this name until the end of the 20th century (Saitluanga, 2014:74). The term livability was considered for the first time by the American National Art Administration in 1970, in order to achieve urban planning ideas, and later other research centers and organizations used this term (Larice, 2005:42). Even today, with the spread of the problems of human societies and their daily aggravation, and the decline in the quality and indicators of the lives of the residents of different places, the use of this word has become very strong; In a way that most designers, planners and urban decision makers pay attention to and emphasize it.

Livable city is an abstract term, its concept is very similar to the old proverb, beauty is in the eye of the beholder. Therefore, people have different opinions about livable city (Akbari et al. 1397:148). Livable city is equivalent to the term livable city (Banderabad, 2013:49) and in recent decades, parallel to the theories of sustainable development and sustainable urban development, the idea of improving the quality of life, which itself causes cities to be livable, has opened its place in urban planning literature. (Sasanpour et al., 2014: 26).

This city is considered as a connection between the past and the future, which on the one hand respects the historical signs of our roots, and on the other hand, respects what has been born so far in the future, that is, from historical signs (enclosures, buildings, structures). It is also a city that fights against any waste of natural resources and what we should keep intact for future generations. Therefore, a livable city is also a sustainable city (Song, 2011:184). In a livable city, there is a proper connection between streets and buildings. Peter Hamsan beautifully expresses the relationship between streets and buildings. (Hataminejad et al., 2021) There are trees between them, they are trimmed throughout the year, and it also tells the events and incidents of the people who are between them (Kourtit et al. 2020.:149). In this regard, Lewis Mumford, one of the great urban planners, writes about the livable city: returning cities to their role requires not only a geographic and economic organization, but also a social act and a symbol of beauty and collective unity, and a basic approach to urban development. And this shows that urban policies have failed in the past and the planning towards a livable and just city (Lee et al. 2017:707). In the book Principles of Revitalizing Cities, urban livability is defined as the possibility of watching people and protecting and hearing their voices, the possibility of informal gathering of people in public areas, the opportunity for children and youth to socialize in public areas, to be recognized and valued. All citizens are for each other and respect the knowledge and awareness of all city residents (Cities Plus, 2003:348). This concept is used to evaluate the performance of cities in terms of the living standards provided to residents (Mahmoudi et al., 2015) and also is used to distinguish from the best level of life to the worst level of aging in the city. (Adam et al., 2022)

Materials and Methods

The current research is of analytical-descriptive type and is considered practical in purpose, and at the same time, there is a developmental character of the research with regard to the research in the field of analysis and development of relationships. And the method of data collection is the study of library and field documents. The target statistical community includes the citizens of Targaba city and experts who will be investigated and questioned. According to the latest general population and housing census

in 2015, the statistical population of Torghabeh city is 20988 people, which according to Cochran's formula, the sample size is estimated at 377 people, therefore, 395 household questionnaires are distributed among the residents of the neighborhood according to the percentage of the population of each neighborhood of Torghabeh city. and questioning will be done, and then the questionnaire compiled for carrying out the Delphi method of 16 experts will be distributed among managers, experts and professors in the field of geography and urban planning. Then, based on the examination of the basic concepts, macro factors are extracted and evaluated in the sample. In order to analyze the collected information, with the help of SPSS software, we will code the data and then analyze it, and EXCEL software will be used for graphic display and preparation of charts, ArcGis software will be used for preparing maps and in the test Hypotheses will be used from T-Test, Fridman, Anova and other statistical tests, if needed, according to the opinion of the statistical consultant.

Case of Study

Targaba city is located in Targaba and Shandiz counties, Binaloud and Razavi Khorasan province at latitude 19.36 north and longitude 23.59 east and with an area of about 1530 hectares (Development and Urban Plan of Targaba city, 1394:137). In the country's divisions, Targaba was considered as a village until 1331, and in this year, based on the approval of the Ministry of Interior, it became a city and its municipality was established. Based on the latest political changes in 2005, this city, together with the city of Shandiz, was extracted from the city of Mashhad as Targaba Shandiz and divided into two districts (Tarqaba and Shandiz) and four villages (Tarqaba, Jagharq Shandiz, Abardeh). With the creation of Mashhad and its transformation into a modern metropolis, and despite all the economic and social changes, the city of Targaba has more or less preserved its historical role as a resort for the people of Mashhad and its pilgrims and travelers. In general, a relatively large part of the lands of Torghabeh city has a plain type and a slope of less than 8%. These lands are the areas on which the city and its residential areas are spread.

Targaba neighborhoods

The old neighborhoods from the distant past have consisted of three types of neighborhoods, which are generally different from the current neighborhoods and include; Red Castle neighborhood, Lower Castle neighborhood and Hoz Castle neighborhood. These neighborhoods were in three separate places, the upper castle, the red castle, was based on the highest area of Torghabeh, which overlooks the current village of Targahdar, whose remains were still standing until a few years ago. But the other two places that were located in the current lower neighbor-

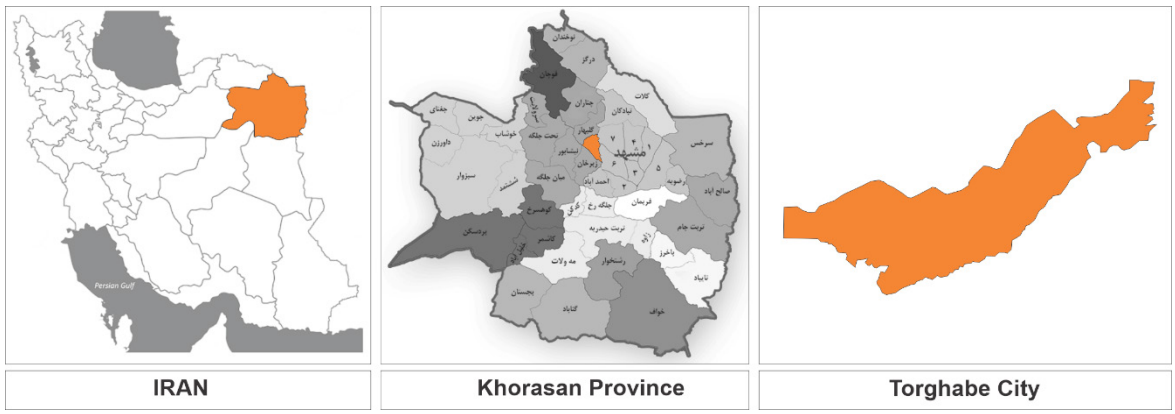

Figure 1: Geographical location of Targaba city - Source: author

hood are the lower castle at the current entrance of the city on Anuri street and the Hoz castle in Eidgah, where no significant remains of the two mentioned castles have been left (Bazobandi and Arfai, 2005: 43). The basis of the morphology of the city is based on three large neighborhoods, including the upper neighborhood (Balaadeh), the middle neighborhood (Pachnar), the lower neighborhood (Bayen Deh), but next to the above neighborhoods, other neighborhoods have gradually emerged, which include: Ghale No Tot Zar neighborhood, Mohajerneshin neighborhood, Tot Zar neighborhood, Eidgah neighborhood (Tolo town), Sarband neighborhood (Alsti) and Koche Asia neighborhood, to which several settlements have been added due to the growth and immigration of Targhabeh and several Another town is under construction. In the map of the urban area of Torghabeh, as well as the area of traditional neighborhoods of the city of Torghabeh, which are defined based on the old neighborhoods and the new contexts that have been proposed in the form of the neighborhood. These neighborhoods include Amir Abad neighborhood, Hesar neighborhood, Sarband Elesti neighborhood, Shahrek Karimi neighborhood, Targadar neighborhood, Tolo 1 neighborhood, Tolo 2 neighborhood, Anbaran neighborhood, Eidgah neighborhood, Farhangian neighborhood, Ghale Nou neighborhood, Old neighborhood, Mashhad Nakh neighborhood, Negin is Vilashahr neighborhood, Pachnar neighborhood, Kuche Sima neighborhood and Golestan neighborhood, the approximate location and range of each neighborhood is indicated on the map. The basis of the evaluation in the current research is the same divisions, and based on this, the urban livability in the neighborhoods of Torghabeh city has been investigated.

Findings

According to the obtained results, there were 225 men (equivalent to 57.0%) and 170 women (equivalent to 43.0%) in the sample. The highest frequency includes people in the age group of 36 to 64 years with a frequency of 152 people (equivalent to 38.5 percent) and the lowest percentage is related to people with an age of less than 18 years, with a frequency of 33 people (equivalent to 8.4 percent). According to the sample size, samples were taken from different neighborhoods and are presented in the following table:

Table 1: Frequency distribution of residence

Address	Quantity	%
Amirabaad	10	2.5
Hesar	52	13.2
Sarband Alasti	10	2.5
Shahid Karimi	10	2.5
Torgadr	33	8.4
Tolu1	15	3.8
Tolu2	15	3.8
Anbaran	30	7.6
Eydgah	11	2.8
Farhangian	22	5.6
Ghaleno	11	2.8
Ghadim	10	2.5
Mashhadnakh	10	2.5
Negin	10	2.5
Vilashahr	37	9.4
Pachenar	11	2.8
Kuchesima	34	8.6
Golestan	64	16.2
Total	395	100.0

This research includes moral judgment, auditor's evaluation, personal and social values, analytical or rationalist thinking style, religion. To investigate these variables, descriptive findings are presented in tables to provide a background for more familiarity with each of their variables. Based on the questions related to each variable and by averaging the scores of the questions, related variables were defined and then described in the following table based on descriptive statistics:

By examining the above table, some concepts of descriptive statistics of variables including mean, standard deviation, skewness and kurto-

sis have been displayed. In which, the average as the balance point and the center of gravity of a statistical distribution is one of the appropriate central indicators to show the centrality of the data. Another group of community describing parameters are dispersion parameters. Dispersion parameters are a measure to determine the degree of dispersion of data from each other or their degree of dispersion compared to the average. Among the most important dispersion parameters is the standard deviation. The higher the standard deviation of a statistical distribution, it indicates that these data have more dispersion. Skewness indicates the asymmetry of the abundance curve. If the coefficient of skewness is zero, the society is completely symmetrical, and if the coefficient is positive, there is a skew to the right, and if it is negative, there is a skew to the left. In general, if the skewness is not in the interval (2, -2) and the kurtosis is not in the interval (10, -10), the data is far from the normal distribution (Klein, 2011). The value of observed skewness for the studied variables is in the range (2, -2). It means that in terms of the skewness of the research variables, it is normal and its distribution is symmetrical. The stretching value of the variables is also in the range (10, -10). This shows that all the distribution of variables has normal elasticity.

Investigating the status of livability dimensions

Considering that each of the dimensions includes more than one item and has a quantitative scale and previously, its normality was accepted in Table 2, the t-test can be used to compare the mean of this dimension with the number 3. . The results of this test are listed in the following table:

In the t-test, if the p-value divided by 2 is less than 0.05, it can be concluded that the status of the desired component is at what level

Table 2: Descriptive statistics of research variables

Research Variable	Quantity	Average	Deviation Criteria	crookedness	tension	Lowest	Most
economic	395	3.18	0.48	0.1	-0.87	2.17	4.33
Services & Infrastructure	395	2.67	0.26	0.59	-0.34	2	3.44
Social	395	2.92	0.3	0.29	0.04	2.08	3.92
Management	395	2.39	0.44	-0.11	0.75	1	4
Environmental	395	2.9	0.32	0.58	0.03	2.3	3.9
Livability Dimensions	395	2.81	0.22	0.38	-0.28	2.33	3.42

Table 3: The results of comparing the average components of the economic dimension with the number 3 by t-test

Dimention	Average	Deviation Criteria	statistics t	Degree of Freedom	P value	Results
economic	3.18	0.48	7.375	394	0.000	More than average
Services & Infrastructure	2.67	0.26	-24.751	394	0.000	Less than average
Social	2.92	0.30	-4.958	394	0.000	Less than average
Management	2.39	0.44	-27.437	394	0.000	Less than average
Environmental	2.90	0.32	-5.967	394	0.000	Less than average
Livability Dimensions	2.81	0.22	-16.885	394	0.000	Less than average

according to the positive or negative t-statistic. If the p-value divided by 2 is less than 0.05 and the t-test statistic is negative, the investigated component has an average below average (3). If the p-value divided by 2 is less than 0.05 and the t-test statistic is positive, the investigated component has a mean greater than the mean (3). If the p-value divided by 2 is greater than 0.05, the average of the investigated component is not significantly different from the average (3). Based on the obtained results, it can be seen that the status of the economic dimension is higher than average and other dimensions are lower than average.

Spatial investigation of dimensions

In order to check the average of each of the dimensions, according to the studied neighborhoods, the following table presents the average of this dimension according to the neighborhoods:

By examining the following table and graph, it can be seen that Hesar and Sarband Alsti neighborhoods are in the best economic condition, and Amir Abad neighborhood, Shahrak Karimi neighborhood, Eidgah neighborhood, Farhangian neighborhood, Mashhad Nakh neighborhood, Negin neighborhood, Kuche Sima neighborhood, Golestan neighborhood are in the best condition. The situation is below average.

Econimic Dimention

Examining the average values obtained from the evaluation of the economic dimension of urban livability in Targaba city shows that three Hesar neighborhoods, Sarband neighborhood and Tolo 1 neighborhood are in a better condition than other neighborhoods. In terms of the economic dimension, the worst situation among 18 neighborhoods is the alley neighborhoods. Sima Farhangian neighborhood, Eidgah neighborhood and Amirabad neighborhood are reserved. The

Table 4: The average dimensions studied by the neighborhoods studied

Neigborhood	Economic	Services & Infrastructure	Social	Management	Environmental	Livability Dimensions
Amirabaad	2.50	2.42	2.85	2.30	2.75	2.57
Hesar	3.83	2.48	2.68	2.41	2.70	2.82
Sarband Alasti	3.75	2.84	3.35	2.55	3.31	3.16
Shahrak Karimi	2.78	2.58	2.83	2.35	2.69	2.65
Torgadr	3.44	2.54	2.94	2.45	2.64	2.80
Tolu1	3.58	3.15	3.30	2.47	3.05	3.11
Tolu2	3.43	3.00	3.30	2.47	3.11	3.06
Anbaran	3.21	2.65	3.08	2.25	2.80	2.80
Eydgah	2.62	2.39	2.79	2.32	2.56	2.54
Farhangian	2.68	2.38	2.76	2.45	2.90	2.63
Ghaleno	3.02	2.93	3.34	2.59	3.25	3.03
Gadim	3.12	3.08	3.16	2.85	3.07	3.06
Mashhadnakh	2.82	2.62	2.72	2.20	2.93	2.66
Negin	2.87	2.70	2.85	2.30	2.89	2.72
Vilashahr	3.41	2.98	3.04	2.69	3.42	3.11
Pachenar	3.03	3.05	3.36	2.50	2.96	2.98
Kuchesima	2.74	2.68	2.93	2.25	2.84	2.69
Golestan	2.95	2.55	2.69	2.17	2.87	2.65
All Neigburhoods	3.18	2.67	2.92	2.39	2.90	2.81

remaining 11 neighborhoods have divided the three middle ranges among themselves, among which Tolo 2, Targhadar and Vilashahr neighborhoods are in a relatively good condition, Anbaran neighborhoods, Old neighborhood and Pachenar neighborhood are in average condition. 5 Ghale Nou neighborhood, Golestan neighborhood, Nagin neighborhood, Mashhad, Nakh neighborhood and Shahrak Karimi neighborhood have a not very favorable situation in terms of the economic aspect of urban livability. The difference between the best and worst situation in the neighborhoods is not very great from the economic point of view, the differences are not so big. Gives. But it should be mentioned that the neighborhoods that are in each other's neighborhood have a contradictory economic situation compared to each other, which can be effective and important in choosing an approach to improve the situation.

Service and infrastructure dimension

The average graph of service and infrastructure dimensions shows a small gap between the status of the neighborhoods of Torghabeh city in terms of services and infrastructure. Tolo 1 neighborhood, Old neighborhood, Pachenar neighborhood and Tolo 2 neighborhood are in the best condition compared to the 18 evaluated neighborhoods in Targaba city from the perspective of services, the worst condition in terms of services and infrastructure belongs to Hesar neighborhoods, Amirabadf neighborhood, Eidgah neighborhood and Farhangian neighborhood. Anuranf neighborhood, Mashhad Nakhaf neighborhood, Shahrek Karimi neighborhood, Golestan neighborhood and Targadar neighborhood are located in an urban status at a short distance. The rest of the neighborhoods with a short distance are classified in an average, relatively favorable condition. Compared to the

Table 5: Normal breakdown of the mean values of the economic dimension for Targbe neighborhoods

Rating	Neighborhood Name	Average	Level	Classification
1	Hesar	3.83	3.83-3.564	Good
2	Sarband Alasti	3.75		
3	Tolu1	3.58		
4	Tolu2	3.43	3.564-3.298	Fairly good
5	Torgadr	3.44		
6	Vilashahr	3.41		
7	Anbaran	3.21	3.298-3.032	Medium
8	Ghadim	3.12		
9	Pachenar	3.03		
10	Galeno	3.02	3.032-2.766	Rather bad
11	Golestan	2.95		
12	Negin	2.87		
13	Mashhadnakh	2.82		
14	Shahrak Karimi	2.78		
15	Kuche sima	2.74	2.766-2.5	Bad
16	Farhangian	2.68		
17	Eydgah	2.62		
18	Amirabaad	2.5		

economic aspect of several neighborhoods that had a favorable economic situation. The evaluation of services and infrastructure have shown a not so favorable situation and even completely unfavorable situations. This shows that not only there is no direct relationship between the economic status and the status of services and infrastructure of a neighborhood, but in some neighborhoods, this relationship can be put forward in a completely opposite way without any significant implications.

Social dimension

In the evaluation of the neighborhoods of Torghabeh city, in this part, the social dimension of urban livability has been investigated and measured. The results of the evaluation of the social dimension show that more than half of the neighborhoods are in a lower than average condition and only a few neighborhoods are in a favorable condition. Pachanar neighborhood, Sarband Elesti neighborhood, Qala Nou neighborhood, Tolo 1 and 2 neighborhoods are the neighborhoods whose status has been shown favorably in the evaluation of the social dimension. Apart from these neighborhoods, Old and Anbaran neighborhoods, which have a relatively favorable situation, 11 other neighborhoods all have a lower status than the average evaluation of the social dimension of the urban livability of Tarqabeh city. Among these, Hesar neighborhood, Golestan neighborhood, Mashhad Nakh neighborhood, Farhangian neighborhood, and Eidgah neighborhood have the most favorable conditions, while Targadar neighborhood, Koche Sima neighborhood, Amirabad neighborhood, Negin neighborhood, and Shahrak Karimi neighborhood are in a relatively unfavorable situation with a little distance. The desirability of the neighborhoods in terms of the social dimension in the first layer indicates the more favorable so-

Table 6: Normal breakdown of mean values of services and infrastructure dimension for Targbe neighborhoods

Rating	Neighborhood Name	Average	Level	Classification
1	Tolu1	3.15	3.15-2.996	Good
2	Gadim	3.08		
3	Pachenar	3.05		
4	Tolu1	3		
5	Vilashahr	2.98	2.996-2.842	Fairly good
6	Ghaleno	2.93		
7	Sarband Alasti	2.84		
8	Negin	2.7	2.842-2.688	Medium
9	Kuche sima	2.68		
10	Anbaran	2.65	2.688-2.534	Rather bad
11	Mashhadnakh	2.62		
12	Shahrak Karimi	2.58		
13	Golestan	2.55		
14	Torgadr	2.54		
15	Hesar	2.48	2.534-2.38	Bad
16	Amiraabad	2.42		
17	Eydgah	2.39		
18	Farhangian	2.38		

cial dimension in the central and old neighborhoods, and the opposite of this is the low social quality of urban livability in the newer and more detached neighborhoods from the central core. Therefore, the age of the neighborhoods and the social capital in the older neighborhoods can be considered as the main reason for the high averages obtained in the evaluation of the social dimension of urban livability in the neighborhoods of Torghabeh city.

Management dimension

The management dimension in measuring urban livability is considered to be one of the most influential and important dimensions, because top-to-bottom management policies in all parts of urban governance that are current in our country show the impact and important role of the management dimension in the emergence of a quality such as livability. It is a city. In terms of the averages obtained from measuring the management dimension of urban livability, the condition of the neighborhoods of Torghabeh city shows an unfavorable indicator in more than half of the neighborhoods and the existence of an average level in 30% of the evaluated neighborhoods. The old neighborhood is the only neighborhood that has a favorable situation in terms of management. Vilashahr neighborhood, Ghale Nou neighborhood, Sarband Elesti neighborhood, Pachnar neighborhood and Tolo 1 and 2 neighborhoods have a relatively favorable or average condition, and other neighborhoods include relatively bad and bad categories in the natural failure of the average management dimension of urban livability. 11 Targhadar neighborhoods, Farhangian neighborhood, Hesar neighborhood, Shahrak Karimi neighborhood, Eidgah neighborhood, Negin neighborhood, Amirabad neighborhood, Kuche Sima neighborhood, Anbaran neighbor-

Table 7: Normal breakdown of average social dimension values for Targhabeh neighborhoods

Rating	Neighborhood Name	Average	Level	Classification
1	Pachenar	3.36	3.36-3.224	Good
2	Sarband Alasti	3.35		
3	GHaleno	3.34		
4	Tolu1	3.3		
5	Tolu2	3.3		
6	Gadim	3.16	3.224-3.088	Fairly good
7	Anbaran	3.08		
8	Vilashahr	3.04	3.088-2.952	Medium
9	Torgadr	2.94	2.952-2.816	Rather bad
10	Kuche sima	2.93		
11	Amirabaad	2.85		
12	Negin	2.85		
13	Shahrake Karimi	2.83		
14	Eydgah	2.79	2.816-2.68	Bad
15	Farhangian	2.76		
16	Mashhadnakh	2.72		
17	Golestan	2.69		
18	Hesar	2.68		

hood, Golestan neighborhood, and Mashhad Nakh neighborhood have a relatively unfavorable situation. The graphic representation of the current situation of the management dimension in the urban livability of the neighborhoods of Torghabeh shows the chaotic and unfavorable management situation affecting the urban livability in the city of Torghabeh.

Environmental dimension

In this research, the environmental dimension of urban livability has been measured with items related to the green spaces of parks and playgrounds in the neighborhoods and the quality and status of their access and care. The results obtained from this environmental assessment are in urban livability. The average and relatively favorable condition of Tolo 2 neighborhoods, Old neighborhood, Tolo 1 neighborhood, Pachnar neighborhood, Mashhad Nakh neighborhood, and Farhangian neighborhood separates almost half of the neighborhoods of Tarqabeh city from the unfavorable situation. Other neighborhoods have a relatively unfavorable situation in this evaluation. The interesting point in the results of the environmental dimension is the closeness of the results of some neighborhoods in the average obtained from the measurement of this dimension with the results obtained in the social dimension. Of course, this issue is not definitive and statistical, and can be compared and interpreted by simply comparing the maps produced. The only exception neighborhood in this category and this comparison between the social and environmental dimension is Vilashahr neighborhood, which had an unfavorable situation in terms of the results of the social dimension, but showed a favorable situation in the environmental dimension. Therefore, this itself can be an example of violating the meaningful relationship between

Table 8: Normal distribution of the mean values of the management dimension for the neighborhoods of Targbeh

Rating	Neighborhood Name	Average	Level	Classification
1	Ghadim	2.85		Good
2	Vilashahr	2.69		Fairly good
3	Ghaleno	2.59		
4	Sarban Alasti	2.55		Medium
5	Pachenar	2.5		
6	Tolu1	2.47		
7	Tolu2	2.47		
8	Torgadr	2.45		Rather bad
9	Farhangian	2.45		
10	Hesar	2.41		
11	Shahrake Karimi	2.35		
12	Eydgah	2.32		Bad
13	Negin	2.3		
14	Amiraabad	2.3		
15	Kuchesima	2.25		
16	Anbaran	2.25		
17	Goestan	2.17		
18	Mashhadnakh	2.2		

Table 9: Natural breakdown of average environmental dimension values for Targbeh neighborhoods

Rating	Neighborhood Name	Average	Level	Classification
1	Vilashahr	3.42	3.42-3.248	Good
2	Sarband Alasti	3.31		
3	Ghaleno	3.25		
4	Tolu2	3.11	3.248-3.076	Fairly good
5	Ghadim	3.07		
6	Tolu1	3.05	3.076-2.904	Medium
7	Pachenar	2.96		
8	Mashhadnakh	2.93		
9	Farhanigian	2.9		
10	Negin	2.89	2.904-2.732	Rather bad
11	Golestan	2.87		
12	Kuchesima	2.84		
13	Anbaran	2.8		
14	Amirabaad	2.75		
15	Hesar	2.7	2.732-2.56	Bad
16	Shahrak Karimi	2.69		
17	Torgadr	2.64		
18	Eydgah	2.56		

Table 10: Natural breakdown of the average values of all dimensions of livability for the neighborhoods of Targbeh

Rating	Neighborhood Name	Average	Level	Classification
1	Sarband Alasti	3.16	3.16-3.036	Good
2	Tolu1	3.11		
3	Vilashahr	3.11		
4	Ghadim	3.06		
5	Tolu2	3.06		
6	Ghaleno	3.03		
7	Pachenar	2.98	3.036-2.912	Fairly good
8	Hesar	2.82	2.912-2.788	Medium
9	Anbaran	2.8		
10	Torgadr	2.8		
11	Negin	2.72	2.788-2.664	Rather bad
12	Kuchesima	2.69		
13	Mashhadnakh	2.66		
14	Golestan	2.65		
15	Shahrak Karimi	2.65		
16	Farhagngian	2.63	2.664-2.54	Bad
17	Amirabaad	2.57		
18	Eydgah	2.54		

Overlapping dimensions

After examining each of the dimensions that make up the concept of urban livability and measuring this situation in the city of Tarqabeh, in this part, by overlapping the results obtained for each dimension, we will have a general view of the current situation of the neighborhoods of the city of Tarqabeh from the approach of urban livability. The overall results show the desirability of the condition of 6 out of 18 neighborhoods under investigation in the overall result of the average dimensions evaluated to measure the existing state of urban livability in Targaba city. Sarband Alsti neighborhoods, Tolo 1 neighborhood, Vilashahr neighborhood, Old neighborhood, Tolo 2 neighborhood, and Qala No neighborhood in general have a relatively favorable condition in terms of urban livability, and Hesar Anbaran and Targhadar neighborhoods have an average level of the averages obtained among the neighborhoods. are evaluation. Farhangian neighborhood, Amirabad neighborhood and Eidgah neighborhood have the most favorable condition among the evaluated neighborhoods, and Negin neighborhood, Kuche Sima neighborhood, Mashhad Nakh neighborhood, Golestan neighborhood and Shahrak Karimi neighborhood have a relatively unfavorable situation with a degree of reduction and at the bottom The average limit is placed. It can be seen in the graphic representation of the status of the neighborhoods on the map that 5 central neighborhoods and one neighborhood with a distance from the center are the easternmost neighborhoods of Targaba city. In general, and in terms of the results of the examined dimensions, it has a favorable condition and the unfavorable level of urban livability in the general condition in the neighborhoods of Targbeh does not show an ugly or ugly appearance. The existing situation can somehow lead to the improvement and improvement of the conditions of bringing the neighborhoods to a favorable state of urban livability in Targaba city and by generalizing the mechanism presented in other cities. Therefore, the separation of the results obtained from the evaluation of each dimension and even each item can play a role in providing a solution in the path of achieving the desired situation.

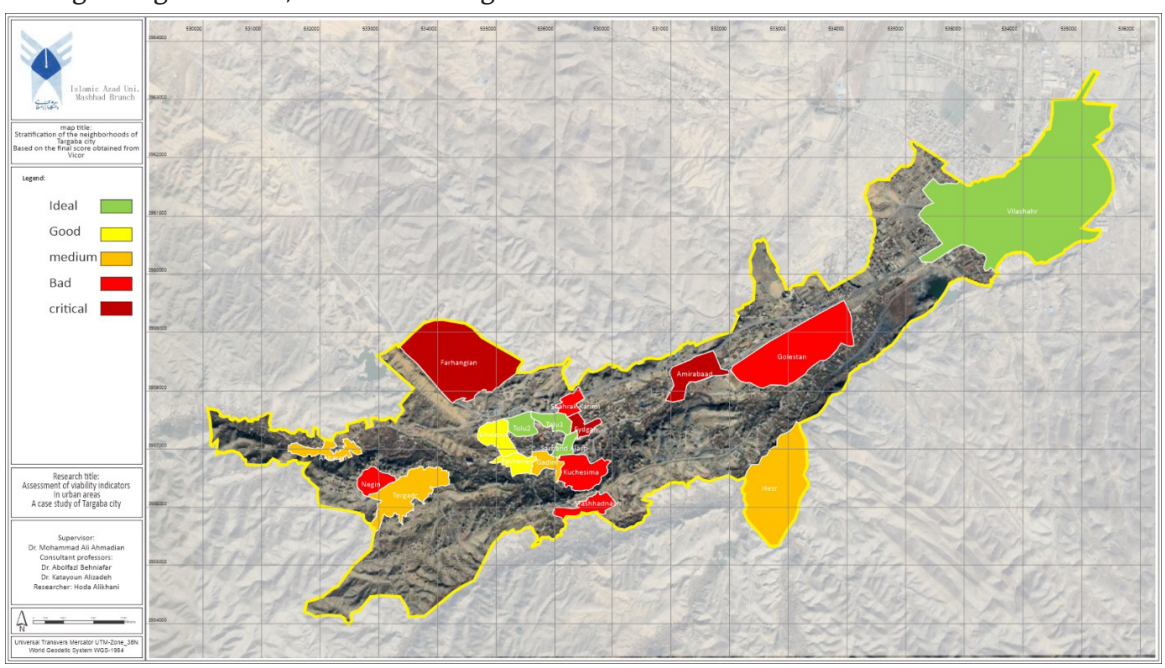

Figure 3: The situation of the neighborhoods of Toqaba city based on the dimensions of urban livability - Source: cartography unit of Toqaba municipality and the researcher

Comparison of dimensions in each neighborhood

In order to compare the dimensions in each neighborhood, Friedman's test was used, the results of which are presented in the following table:

The results show that in all neighborhoods except the old neighborhood, the dimensions have significant differences, based on the average rank obtained for each dimension, it is possible to identify the most important dimension in each neighborhood, and the results are obtained as a rank in the table below It has been stated, for example, that the most important dimension in Amirabad neighborhood is the social dimension and the least important dimension is the managerial dimension.

Conclusion

The macro factors in the livability of the neighborhoods of Torghabeh city are significantly different from each other. In order to compare the macro factors of viability according to professors, the Friedman test was used, the results of which are presented in the table below, according to the significant level obtained, it can be seen that the significant level is less than 0.05, which shows that the macro factors of The professors' opinions differ significantly, so the third hypothesis is confirmed at the 95% confidence level.

Table 13: Comparison results of macro factors using Friedman test related to the third hypothesis

Macro factors	Average Rating	Rating
economic	2.47	5
Services & Infrastructure	2.57	4
Social	3.2	2
Management	2.7	3
Environmental	4.07	1
Statistics of 2	10.989	
Degree of Freedom	4	
Significant level	0.027	

Table 11: The results of comparing dimensions in each neighborhood using the Friedman test

Neighborhood	Average Rating					Friedman Test Results		
	economic	Services & Infrastructure	Social	Management	Environmental	Statistics of 2	Degree of Freedom	Significant level
Amirabad	2.70	2.00	4.30	1.80	4.20	22.87	4	0.000
Hesar	5.00	1.82	3.27	1.87	3.05	141.85	4	0.000
Sarband Alasti	4.80	1.95	3.50	1.30	3.45	31.53	4	0.000
Shahrak Karimi	3.60	2.10	4.50	1.45	3.35	24.39	4	0.000
Torgadr	4.97	1.86	3.95	1.70	2.52	107.26	4	0.000
Tolu1	4.73	2.97	3.67	1.13	2.50	43.25	4	0.000
Tolu2	4.50	2.10	4.00	1.33	3.07	41.33	4	0.000
Anbaran	4.38	2.32	4.27	1.20	2.83	87.91	4	0.000
Eydgah	3.45	2.00	4.64	1.68	3.23	25.08	4	0.000
Farhangian	3.18	1.43	3.77	2.18	4.43	52.31	4	0.000
Ghaleno	2.82	2.41	4.23	1.45	4.09	24.28	4	0.000
Ghadim	3.00	3.25	3.50	2.40	2.85	2.91	4	0.573
Mashhadnakh	3.75	2.30	3.00	1.35	4.60	25.47	4	0.000
Negin	3.60	2.80	3.45	1.45	3.70	14.49	4	0.006
Villashahr	4.03	2.41	2.64	1.73	4.20	68.85	4	0.000
Pachinar	2.82	3.27	4.45	1.64	2.82	18.44	4	0.001
Cinema Alley	3.01	2.53	4.04	1.97	3.44	35.47	4	0.000
Golestan	4.13	2.22	3.03	1.76	3.87	107.73	4	0.000

Table 12: Ranking results of dimensions in each neighborhood based on the average rating of Friedman's test

	economic	Services & Infrastructure	Social	Management	Environmental
Amirabad	3	4	1	5	2
Hesar	1	5	2	4	3
Sarband Alasti	1	4	2	5	3
Shahrak Karimi	2	4	1	5	3
Torgadr	1	4	2	5	3
Tolu1	1	3	2	5	4
Tolu2	1	4	2	5	3
Anbaran	1	4	2	5	3
Eydgah	2	4	1	5	3
Farhangian	3	5	2	4	1
Ghaleno	3	4	1	5	2
Mashhadnakh	2	4	3	5	1
Negin	2	4	3	5	1
Villashahr	2	4	3	5	1
Pachinar	3	2	1	5	3
Cinema Alley	3	4	1	5	2
Golestan	1	4	3	5	2

The macro factors in the economic dimension of the livability of the neighborhoods of Torghabeh city have significant differences from each other. In order to compare macro factors in the economic dimension of livability from the point of view of professors, Friedman's test was used, the results of which are presented in the table below, according to the significant level obtained, it can be seen that the significant level is greater than 0.05, which indicates According to the professors, macro factors of the economic dimension do not differ significantly, so the first sub-hypothesis is rejected at the 95% confidence level.

Table 14: The results of the comparison of macro factors of the economic dimension using the Friedman test related to the first sub-hypothesis

Economic Factor Items	Average Rating
Industrialism	1.97
Decline in national production	2.97
Reduction of human capital	2.67
Increasing consumerism	2.40
Statistics of 2	6.877
Degree of Freedom	3
Significant level	0.076

The macro factors in the service and infrastructural dimensions of the livability of the neighborhoods of Torghabeh city have significant differences from each other. In order to compare macro factors in the service and infrastructural aspect of livability according to professors, Friedman's test was used, the results of which are presented in the table below, according to the significant level obtained, it can be seen that the significant level is less than 0.05, which indicates It shows that the macro factors of the service and infrastructure dimensions have significant differences from the professors' point of view, so the second sub-hypothesis is confirmed at the 95% confidence level.

The macro factors in the social aspect of the livability of the neighborhoods of Torghabeh have significant differences from each other. In order to compare macro factors in the social dimension of livability according to professors, Friedman's test was used, the results of which are presented in the table below, according to the significant level obtained, it can be seen that the significant level is less than 0.05, which indicates According to the professors, the macro

factors of the social dimension are significantly different from each other, so the third sub-hypothesis is confirmed at the 95% confidence level.

The macro factors in the management aspect of the livability of the neighborhoods of Torghabeh have significant differences from each other. In order to compare macro factors in the management dimension of livability from the point of view of professors, Friedman's test was used, the results of which are presented in the table below, according to the significant level

Table 15: The results of the comparison of service and infrastructure macro factors using the Friedman test related to the second sub-hypothesis

Service and Infrastructure Operating Items	Average Rating	Rating
The Trans-Regional Role of Services	3.57	1
Transportation System	2.03	5
The uneven growth of the city	3.30	2
Unfair distribution of services	2.80	4
Proximity to the metropolis of Mashhad	3.30	2
Statistics of 2	12.469	
Degree of Freedom	4	
Significant level	0.014	

Table 16: The results of comparing macro factors of the social dimension using the Friedman test related to the third sub-hypothesis

Social Factor Items	Average Rating	Rating
Decline in births	1.63	4
Increased immigration	2.90	1
Reduction of social capital	2.63	3
Proximity to the spiritual capital of Iran	2.83	2
Statistics of 2	13.500	
Degree of Freedom	3	
Significant level	0.004	

Table 17: The results of the comparison of macro factors of the management dimension using the Friedman test related to the fourth sub-hypothesis

Item Management Factor	Average Rating	Rating
Lack of integrated urban management	4.37	3
Short life of the position of city managers	4.70	2
Car-based transportation policy and widening of roads	4.07	5
Urban Land Laws	2.83	6
Urban Governance	5.10	1
Urban Development Plans	4.20	4
Horizontal and scattered growth of the city	2.73	7
Statistics of 2	19.848	
Degree of Freedom	6	
Significant level	0.003	

obtained, it can be seen that the significant level is less than 0.05, which indicates According to the professors, the macro-factors of the management dimension have significant differences, so the fourth sub-hypothesis is confirmed at the 95% confidence level.

The macro factors in the environmental dimension of the livability of the neighborhoods of Torghabeh city are significantly different from each other. In order to compare macro factors in the environmental dimension of livability from the point of view of professors, Friedman's test was used, the results of which are presented in the table below, according to the significant level obtained, it can be seen that the significant level is greater than 0.05, which indicates According to the professors, there are no significant differences between macro factors of the environmental dimension.

Table 18: The results of the comparison of macro factors of the environmental dimension using the Friedman test related to the fifth sub-hypothesis

Environmental Factor Items	Average Rating
Geographic Location	2.67
The trans-regional role of ecotourism	2.10
Climate change	2.93
The system of ruggedness	2.30
Statistics of 2	5.394
Degree of Freedom	3
Significant level	0.145

Finally, it can be acknowledged that based on the findings and results of the research, the livability of urban neighborhoods is a relative concept in the issue of sustainability. A livable city is a successful city; A city where the increase of livability and of course the improvement of the quality of life in Targbeh city is the human and fundamental axis of sustainable urban devSignificant levelelopment. This is possible in the context of improving the urban environment, suitable housing and stable employment, personal and social security, balanced and optimal distribution of urban services and facilities, repair and reconstruction of urban infrastructure and access to urban uses. Also, providing multiple and diverse options in the existing infrastructure of public transportation, walking, bicycle, and public transportation that increase physical activity, protect the environment, and reduce traffic. Improving the security of transportation and increasing the number of points with access to public transportation, each of them can have a significant contribution in making Targaba city livable. The result of the influence of these factors will be a good urban vision for the city. It goes without saying that the landscape of each settlement is considered one of the most important aspects of its livability and has an undeniable effect on the spirit and belonging of the people, creating a sense of participation and solidarity and increasing the connection and place belonging to the settlement. Therefore, people and place are on both sides of the realm of livability, and the originality of livability debates is basically in correctly connecting the place and people and considering their attitude in this regard. In addition, the following features that were explicitly or implicitly presented in the framework of the indicators and variables discussed in this thesis and in order to prove the hypotheses of the research in the context of the doctrine, additional items can be added to it and characteristics were envisioned for it. Therefore, according to the results of this research, in order to achieve the principles of a livable city in the dimensions of the neighborhoods in the city of Tarqabeh, Mashhad, two major strategies can be presented, as well as suggestions for improvement in this field, according to the dimensions and components presented.

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