

## **Evaluation of the factors affecting formation of abandoned lands in Ilam city to achieve urban sustainability**

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### **Extended abstract**

#### **Introduction**

Given that the land is the most important source in urban areas, it plays a key role in the success or failure of urban development projects. A significant factor in success of the plans for housing, infrastructures, equipment, and generally, favorable development of urban areas depends on timely and adequate access to the land and its competent management. Therefore, an optimal utilization of land to ensure economic efficiency, social justice, and environmental protection is urban sustainable development.

Nowadays, one of the problems that the city and citizens are encountered with is the abandoned and unused lands in various areas and districts of a city. These problematic urban areas and spaces can lead to instability in terms of environmental, social and economic conditions. Also, this makes serious challenges for the urban environments. Due to important and critical role of these lands in urban development and strategic plans progressing, it is necessary to control the lands. To manage and handle the abandoned lands, the first step is to identify the factors that are effective on their formation.

Ilam city as one of the growing middle cities of the country has some unused lands. This has faced this city with the problem of urban land abandonment and urban sprawl and significant horizontal development. Other factors such as war and consequent migration from other parts of the province, especially in the border cities of Mehran and Dehloranin, to this city have also affected this problem. Therefore, the main objective of this paper is to identify and evaluate the factors and elements creating the abandoned and unused lands in Ilam city. Hence, the main question raised in this research is that what factors and forces have led to the abandoned lands in the city of Ilam.

#### **Methodology**

This study is an applied research in terms of purpose and its methodology is analytic-descriptive. For collecting the data, the library and survey method were used. By specifying the

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related parameters and variables, the questions of questionnaire were prepared and distributed among the samples of this research. The population of this study includes experts in land and housing in the Ilam city. The study population was divided into three main parts including the public sector, the private sector and the professional groups. The total number of expert of land and housing (the sum of the related groups) in Ilam was 1649 people. Using Cochran sampling method with standard division of 5% and a confidence coefficient of 95%, a sample of 311 people out of the total population was estimated. To select the samples, we also used stratified sampling method. In this study, any of the three groups (public sector, private sector and professional groups) were considered as the studied classes. The sampling method for all of the classes was simple random sampling. Then, for data analysis, testing methods such as Pearson correlation coefficient, T test, as well as simple and multiple regressions were employed by SPSS software.

### Results and Discussion

In this research, effective factors and forces on the formation of abandoned lands were examined from 5 viewpoints including economic, socio-cultural, legal, political, and environmental aspects.

There are some variables related to the economic indicators in this study. One of the most important of the indicators is the land speculation with some factors such as abandoned lands for increasing the price, the role of estate agents and the brokers, the liquidity growth and the flow of wander money to the urban land market, the role of banks and financial and credit institutions, granting huge loans and its use in the purchase and sale of land. Other economic indicators are the reduction of effective demand for land and housing market due to too expensive land price, the land auctions from various institutions of government, lack of adequate resources and equipment such as funds in municipalities and executive agencies for applying the detailed and comprehensive plans.

The results of Pearson correlation test between two variables of economic factors and the amount of abandoned lands show that there is a significant relationship between the economic factors and forces as independent variables and the dependent variable of abandoned Lands (with a correlation coefficient of 0.441). This means that whenever the economic forces are increased in intensity, the intensity of abandoned lands will be enhanced with the same rate. Thus, based on the results obtained, the null hypothesis is rejected.

The investigated legal factors and forces in the abandoned lands are included in the joint ownership, inherited properties, the lack of official document, the urban strict rules, as well as a mismatch between the land price and the density and type of authorized users. The results of the test of relation between the legal forces and the intensity of abandoned lands within the city indicate that they have a significant relationship with correlation coefficient of 0.434. Therefore, the null hypothesis (The lack of correlation between these two variables) is rejected and it is approved that there is a relationship between the law forces and the intensity of urban abandoned lands.

Moreover, the obtained results show that the environmental, social and political factors and forces, each with different degrees have influenced the intensity of abandoned lands in the study area. This reveals a significant positive correlation between the mentioned factors and the intensity of abandoned lands.

According to the results of data analysis using single-sample T-test, Pearson correlation coefficient test and also multivariate regression analysis, the influence of the factors and forces (economic, legal, environmental, socio-cultural and political) on the abandoned lands in the Ilam city was determined.

### Conclusion

The procedure of physical development of Ilam in different periods shows that there has existed no pattern and program for the correct use of land, as well as no guidance for the city development. Hence, the expansion of the city has been horizontal in one or two floors or more

which is recently diffracted. The constructions in the most periods, especially in 1980s have been as patchiness, scattered and disordered parts. Despite determining the legal limit for the city until the 1920, in practice, this limitation has not been considered and a great deal of the city expansion has been located outside this limitation. All of these issues show the sporadic pattern of Ilam city and a sharp increase in the city expansion at any period which has caused an increase in the abandoned lands in this city.

This matter had been the result of different factors arising from the circumstances of each period. The factors including migrations due to the imposed war and migrations from villages to cities, policies of land and housing assignment, miscalculation of urban plans, land speculation and the prominent role of speculators in this matter and etc. have affected the formation of horizontal pattern of the city and the abandoned lands. The physical development of Ilam city has been very rapid, so that in 1956, the expansion of this city had been only 89 hectares. But after this decade, especially since 1976, the horizontal growth had been intensified. All the above factors indicate that the formation of urban abandoned lands as well as the horizontal and unplanned development of city has caused instability in Ilam city from the viewpoints of environmental, economic and social aspects. Consequently, the urban life has been threatened. Many officials and experts in Ilam city believe that if the government provides necessary infrastructures in the western half of the city of Ilam (areas 3 and 4) with low population density. The land price could be closed to the actual one and the real estate situation will be stabilized. This suggests that if the urban land is used and managed properly and there is no need to its physical development up to the next few decades and a sustainable urban form is accessible.

**Keywords:** abandoned lands, Ilam City, urban land, urban sustainability.

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## **Analysis the urban walkway role in promoting the vitality of urban spaces (Case study: 17 Shahrivar walkway of Tehran)**

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### **Extended Abstract**

#### **Introduction**

Walking spaces is one of the most important urban public spaces in urban regions. Jane Jacobs considers the walkways as a public and main space and the most critical member of city. In recent decades, as a result of rapid movement towards the development of our country, Body cities have suffered from severe changes. The effect of these changes can affect the body in our cities. Our people are in need for required spaces for their activities and there is no framework for this activity in cities. Gradually, Cavalry move dominated urban spaces and streets, urban planning and design far from the walking human scale and the needs. As a result, the values and social and cultural attractions of urban spaces are reduced. Thus, in the past two decades, on urban dynamics has been more attention to the walking discussion and this led to attraction of the policies attention of the deal with unsustainable urban space. Creation of a pure walking space (Urban Palazzo) in Imam Hossain (AS) is valuable as the context of practical and theoretical reflection and evaluation in a turning point in urban planning. This is a positive step in the realization of humanist urban planning. In this research, the role of 17 Shahrivar Walkway in urban spaces is investigated and analyzed. Urban spaces of the most creative urban places in human life and attention to the existing qualities in these spaces have been different in different historical periods according to the goals and wishes of the residents. What is common in all periods is the presence of the people and their social relations as the most important principle in the dynamics of urban spaces. Since pedestrian street in urban public space for the pedestrian movement could be taken to strengthen the citizens social and moral relations, often due to neglecting poor facilities allocation and inadequate walkways and lack of education and awareness of pedestrian movement rules, sometimes they are deprived of this right. Thus, the share of the transport system in recent decades is trimmed according to statistics for mechanical life and superiority car and countless other obstacles. Urban walkways positive response to the increasing needs of urban society is high pollution in non-secure environments from car traffic

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and children vibrant sites among cities. This is what gives life to a space, people and active presence and joyful in space.

### Methodology

This target of this applied study in terms of data collection is a descriptive- survey research. The population of this study is consisted of the individuals in traffic in 17 Shahrivar Walkway. Random sampling method is used for sampling; and since statistical population is unlimited according to the pre-test sampling, the sample size was 270 people. To analyze the situation of walkway and vitality for the literature and research, we developed structural Research Model according to the structures and latent variables. For analysis, we used SPSS and PLS software. To ensure the validity and reliability, we calculated Cronbach alpha and composite reliability for each index with convergent and divergent validity.

### Results and Discussion

Beginning the indices of the walkway and vitality were detected by using Fuzzy Delphi method the experts' views. Then, to verify the measurement model, we calculated cronbach's alpha, composite reliability and average Variance. The resulting values show cronbach's alpha is more than 0.7 and average Variance is more than 0.5. We also attempted to determine the relationship between structural divergent validity. The results of this analysis indicate that structures (latent variables) in the model have more interaction with their indices as with other structures, the divergent validity of the model is appropriate. Path analysis techniques was used for investigate research model. Path impact coefficient ( $\beta$ ) for mixed use 0.267, physical quality 0.322, landscape and Vision 0.297, social safety 0.266 and walkway in vitality is 0.306. Among these, the physical quality is the most important role in the vitality of the environment. In this model, P-value for each of the indicators of walkway on environment vitality is calculated and this number is less than 0.01 for all indicators which can be confirmed by their significant with 99% confidence level. But for walkway, this is more than 0.01 and rejected. Among the components of walkway accessibility and among the components of vitality interaction and sense of place, the values have most importance.

### Conclusion

Research analysis shows 17 Shahrivar Walkway as a public space could not lead to vitality in urban spaces. With this interpretation, we concluded that the mere creation of an environment without cars and for pedestrians cannot lead to vitality and attract population to use the space. Thus, the limited vehicle access to the area affects the vitality of the environment that they were in the study to be created vitality and suitable environment for the citizens.

**Keywords:** public spaces, Tehran city, vitality, walkway.

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## Assessment of qualitative and quantitative indices of housing by sustainable development approach (Case study: Saman City)

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### Extended Abstract

#### Introduction

The Saman City has experienced remarkable urban population growth due to its location in the vicinity of Zayandehrud River and also its tourism-agricultural function. The population growth was resulted from rural migration into the city and also natural population growth rate. The population growth caused many problems including shortage in quantity of urban houses, young population, difficulties in urban development plans, rurban structure, poor standardized urban structures and urban planning, economic weaknesses, and also many problems in quality of housing. The purpose of this research is to assess qualitative and quantitative indices of housing by sustainable development approach. Therefore, the sustainable development is independent variable and economic, social, and physical, environmental, housing facilities are considered as dependent variables.

#### Methodology

This is an applied research by descriptive-analytical method. The required data have been gathered by literature review, library investigation and going to offices. Some of data have also been collected by comprehensive plans and from Iran statistical organization. The data have been gathered by field works and questionnaire instrument. The sampling has been conducted in two stages. A sample of 320 households has been selected by Cochran formula using simple random sampling from a population of 4558 households in the Saman City. Subsequently, the questionnaires have been distributed among the households by cluster sampling method. The data have been weighted by Super Decisions through ANP method. Then, the data have been analyzed by three models of TOPSIS, Vicor, and copros to investigate situation of housing indices in the districts of Saman City.

#### Results and Discussion

##### Social index

To evaluate social index of housing, we have used four indices of social problems of housing, house safety against housebreaking, placidity in vicinity of the house, and existence of urban facilities near the houses. According to the results of the research, the areas older in urban residence have more suitable living situation. This is due to higher urban facilities.

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**Economic index**

For this index, we have used two indices, the ratio of renting cost to family income and the ratio of renting cost to total costs of the family. The results indicated that the districts 3 and 4 have more suitable situation compared with the districts 1 and 2.

**Housing size index**

To evaluate the housing size index, the study area have been divided into 6 levels including houses of 0-50 m<sup>2</sup>, houses of 50-100 m<sup>2</sup>, houses of 100-150 m<sup>2</sup>, houses of 150-200 m<sup>2</sup>, houses of 200-300 m<sup>2</sup>, and houses of more than 300 m<sup>2</sup>. The results have indicated that the district 3 with score 0.077 is at the first rank and the district 2 with score of 0.993 is at the lowest rank.

**Density index**

To evaluate this index, we have used three indices of family intensity in house, number of rooms in family, and density of houses in building. The results have indicated that the district 1 is most suitable and district 3 is the least suitable.

**Housing facilities index**

To evaluate the index of housing facilities, we have employed eight indices of electricity, phone, water, gas, cooling and heating system, bathroom, and toilet. The results have indicated that the district 2 with the score of 0.816 of TOPSIS Model has the first rank and the districts of 3, 4, and 1 are ranged from 2 to 4 in the ranking.

**Environmental index of housing**

To evaluate this index, we also have used 7 factors. The results have revealed that the districts of the Saman City are not in suitable condition in terms of environmental situation.

**Conclusion**

The results of the research in Saman City indicated that many of the indices revealed unsuitability in urban houses and there is no stability and equality as the main components of sustainable development. Therefore, it can be concluded that the housing in Saman City is not according to the standards of sustainable development. The results of this study are consistent with the results of Bazi et al. about the lack of stability in housing in Hajarabad City. The reason for this consistency is acceptable feedback. Therefore, this study like other investigations suggests instability in urban housing based on qualitative and quantitative indices.

**Keywords:** housing, housing indicators, Saman City, sustainable development.

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## Modeling the spatial relations in the factors effective on installation of current financial and credit institutes of Tehran using geographically weighted regression

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### Expanded Abstract

#### Introduction

Financial and credit institutes, especially banks, are assumed as the most important economic centers in the urban space. The significant role of these centers in offering services to the citizens in one hand, and the competition between these centers on the other hand reveal the necessity of investigations about the optimum place for their site selection (Rahnamaee et al., 2012: 48). In such studies, the amount and the way that the space would affect is of importance. Neglecting the effect of the space would lead to consequent errors in estimating, forecasting, and projecting (Soltani et al., 2000: 100). Multiplicity of effective variables in site selection in urban spaces has made the spatial decision makings complex, and modeling spatial relations necessary. Modeling these relations requires spatial methods due to the spatial nature of these factors.

In most studies about identifying the optimum place for installation sites of various activities and services, some methods are used that are based on experts' ideas. Multi-variable decision making techniques in geographical information system are widely used. While in these researches the spatial relations between the variables are not identified and modeled with respect to the current distribution pattern and the current situation are not used for further prediction.

One well-known spatial statistic method that deals with modeling the spatial relations between a set of variables is the Geographically Weighted Regression. This method models the relations between the variables that are connected to geographical factors and provides the possibility of predicting the value of unknown variables and a better perception of the factors affecting a variable. While in ordinary regression, each observation is assumed as independent and due to the self-correlation between the spatial data, in most observations the use of ordinary regression is not a suitable method for modeling the relations between the variables with spatial nature.

The main purpose of this article is to investigate the efficiency and to illustrate the superiority of the Geographically Weighted Regression in modeling the spatial relation of factors effective on installation of the financial and credit centers of Tehran.

#### Methodology

In this research, in order to model the spatial relations of effective factors on identifying the suitable place for installing the financial and credit centers, some variables were employed:

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educational and cultural centers, administrative centers, recreational centers, sanitary and therapeutic centers, economical and commercial centers, Traffic, Transportation and population. These were considered as the independent variables and the current situation of the financial and credit branches were considered as the dependant variables in the geographically weighted regression.

In this research, the Repeating Shape tool was employed to create Hexagons in ArcGIS in order to divide the study area. Each hexagon's data was aggregated in each unit. Then, the geographically weighted regression was conducted to model the spatial relations of effective factors on identifying the suitable place for installing the financial and credit centers with spatial statistic tools in ArcGIS. In this research, the Fixed Kernel, which is more appropriate for observations with semi-constant distributions (amounts, and number of neighbors), was employed beside the Akaike Information Criterion to determine the observation threshold.

### Results and Discussion

After conducting the geographically weighted regression on the model's parameters, the results were analyzed. The first output is the general information about the estimated model. The results indicated that the model has an acceptable accuracy in modeling spatial relations with the  $R^2= 0.8883$  and the adjusted  $R^2= 0.8841$ . Also, the estimated self-correlation between the remaining values of the geographically weighted regression using the Moran's I parameter shows an insignificant self-correlation. The mentioned index indicates a value of 0.026337 as no spatial clustering between the data sets and the geographical features. The map based on  $R^2$  values shows that the model has more reliability in predicting values in northern, central, and southeastern regions in comparison with western regions. Furthermore, the outputs show a value more than 0.5 for all regions.

The results for Tajrish, Enqelab, Ferdowsi, 15<sup>th</sup> Khordad, Valiasr, and Madadar square, and intersection of Enqelab and Valiasr, Ferdowsi and Jomhuri Eslami, Shahid Beheshti and Khaled Eslambuli and Valiasr, and Keshavarz and Jouibar avenues, and Doctor Fatemi avenue and Jihad square revealed the Afriqa Avenue as the highest values for financial and credit branches. Other regions are in other classes. As it could be seen, this model was somewhat able to predict the installation sites of these branches.

### Conclusion

The importance of the installation sites of financial and credit centers beside a set of affecting factors has made the modeling of the relations between these factors necessary. Due to the spatial self-correlation which usually exists in spatial data, the use of a regression model has been locally calibrated. It seems to be essential to identify the relations between the spatial variables. Geographically weighted regression, as one of the methods of spatial statistics, models the spatial relations between the sets of variables.

As the results show, the geographically weighted regression has modeled the spatial relations of effective factors on identifying the optimum place for installing the financial and credit centers with an appropriate accuracy ( $R^2= 0.8883$  and the adjusted  $R^2= 0.8841$ ) by the spatial variations in relations between the variables. In addition, the map derived from the local  $R^2$  values indicates that the model is of more efficiency in northern, central, and southeastern regions in comparison to western regions. Furthermore, the outputs show a value more than 0.5 for all regions.

These results could be a significant help for managers and planners of financial and credit centers to analyze the region in order to identify the potential sites to open new branches and services. Also, it helps the centers identify their current condition in comparison with their competitors for further planning.

**Keywords:** financial and credit centers, geographically weighted regression, Spatial Relations, Tehran city.



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## **Spatial analysis about distribution of population and urban services according to social justice using synthetic model (Case study: Bonab City)**

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### **Extended Abstract**

#### **Introduction**

Nowadays, urbanization is growing increasingly in the world. This situation has affected life quality because of unbalanced growth in some regions. Population growth has many negative consequences such as discordant physical distribution of cities, extension of informal settlements, poverty, decreasing life standards, lack of service centers, and finally inequity in accessibility for services. These circumstances have been exacerbated in developing countries. One of sustainable development dimensions, as the main slogan of third millennium, is satisfaction of urban dwellers. Indeed, urban managers can sustain cities by attention to population demands and using their participation. Balanced spatial organization in cities, kind of urban sustainability and its execution needs to create harmony between population and service distribution. Therefore, proper distribution of social, economic, cultural and hygienic services among regions is one of most important factors to prevent inequity and proper spatial distribution of population in the regions. This has been examined in Bonab city in East Azerbaijan province. It has tried to describe spatial distribution of population and services in that city, then has characterized relationship of population and service distribution; finally some solutions have been arranged.

#### **Methodology**

This research has descriptive- analytical method. Data has been gathered by library style using statistics of East Azerbaijan province (2011), comprehensive project, and updating the information by field survey. Case study is 5 regions of Bonab, according to proposal comprehensive project. Research indicators are didactic land use per capita, cultural and religious land use per capita, sporty land use per capita, administrative land use per capita, installations land use per capita, commercial land use per capita, green space land use per capita, and remedial land use per capita. Analysis of information has been done using Entropy (for getting spatial distribution of population), VIKOR, TOPSIS, SAR and synthetic models for ranking regions of Bonab. Finally, correlation coefficient between population and urban services has been examined using Spearman test in SPSS software.

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### Results and Discussion

Results of Entropy examination show that there is balanced distribution of population in Bonab city (with coefficient -1.5671). Mean of density is 64.8 people in hectare on Bonab. Region 4 by 111.3 people and region 1 by 49.2 person are the most and the least density regions of the city. Result of Entropy examination about getting indicators weight shows that didactic, administrative and cultural land use have obtained the highest weights. Results of TOPSIS model calculations show that regions 4, 1 and 5 have been situated in top grades. Also, development situation of the regions examined by VIKOR model show that the regions 4, 1 and 5 are recurred again. Then, this study has been done using SAR model, and results show that regions 4, 1 and 5 are repeated in third stage. Finally, we used synthetic method for least examination and results show that Bonab regions have been ranked by sequence as regions of 4, 1, 5, 2 and 3.

**Table 1. Ranking of Bonab Regions using TOPSIS, VIKOR, SAR and Synthetic Models**

Regions	SAR	Rank	VIKOR	Rank	TOPSIS	Rank	Mean 3 models	Final rank
Region 1	0.382106	2	0.659283	2	0.390152	2	0.370991	2
Region 2	0.286749	4	1	5	0.217059	5	0.167936	4
Region 3	0.220448	5	0.989806	4	0.225031	4	0.151890	5
Region 4	0.424565	1	0	1	0.718916	1	0.714494	1
Region 5	0.320738	3	0.894884	3	0.318579	3	0.248144	3

Afterwards, the regions of Bonab have been categorized in 3 clusters. Region 1 has been situated in cluster 1 as balanced region, and other regions have been situated in cluster 3 as unbalanced regions. Relationship examination between population and service distribution using spearman test shows that there isn't any scientific correlation between them. Namely, population growth hasn't played any role in distribution of urban services. Afterwards, the regions of Bonab have been categorized in 3 clusters. Region 1 has been situated in cluster 1 as balanced region and other regions have been situated in cluster 3 as unbalanced regions. Relationship examination between population and services dispersion using spearman test shows that there isn't any scientific correlation between them. Namely, population growth hasn't any role in distribution of urban services.

### Conclusion

In developing countries, urbanization process has been faced with uncontrolled city growth because of lack of service balance and population dispersion, in way that resulted unsustainability from this unbalanced growth has been appeared as lack of social and spatial unbalances with existing urban poverty, residency and informal employment, weakness of local government and environmental pollution. Therefore, sustainability in cities is fulfills when proper distribution of services and facilities in cities are due to the needs of population.

The purpose of this research has been identification of urban services and facilities distribution in five areas of Bonab city and evaluation of social justice in this city. In all the five areas of this city, amount of enjoyment from the elected services of development have seen different. Given service enjoyment, only four areas have been in full unbalanced state of services and regions of 1, 2, 3 and 5 have been recognized as the most imbalanced areas.

**Keywords:** Bonab, population distribution, SAR, spatial justice, TOPSIS, VIKOR.

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## Evaluation of sense of place with an emphasis on physical and environmental factors in urban coastal areas (Case study: Boushehr Town)

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### Extended Abstract

#### Introduction

Sense of place is one of the vital concepts in promoting the quality of human environment. This concept finally leads to creation of a high quality environment because of its important role in initiating interactions among the people and urban environment. The sense of place is one of the important meanings in improving the urban environment and human qualities. The feeling that an important factor in the formation of the foundation is communication of users and the environment, the quality will be ultimately leads to the creation of environments. The aim of this study is to evaluate the physical and environmental factors in creation of a sense of place in the coastal city of Bushehr and to explore the relationships between these elements. This research questions are:

- What physical and environmental factors may strengthen the sense of belonging to a place on a city beach (sample)?
- What is the relationship between these factors with their sense of place in an urban beach Bushehr?

Therefore, in this first study of sense of place, different dimensions and its components are discussed, the physical and environmental factors and how these factors influence a sense of place has been addressed. Based on the views of experts, indicators of effective components are presented. The study is to express the sample substrate (beach Bushehr) and addressed structural elements to create a sense of place on the coast of Bushehr. The space and the type of relationship between the senses of place is discussed.

#### Methodology

In this study, analysis and evaluation of physical and environmental elements affecting the sense of place (urban beach Bushehr) is by evidence-based documents such as maps and photos. Using registered user behavior patterns, interviews and questionnaires have been prepared. With no standardized questionnaire on the subject of the study, a questionnaire was designed. In this study, the standards are extracted through fine-reviewed assessment criteria based on a theoretical framework. The population of the study is Bushehr beach users and administrators, and urban experts. For such statistical population, the exact number usually can not be estimated

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and the so-called secret societies are random sampling using saturation point of interview. Accordingly, 108 questionnaires were available to users of the coastal city of Bushehr. After collecting data for their analysis, the data for the valuation metrics, statistical information and charts were examined, the relationships between the variables using Spearman correlation coefficients were analyzed in SPSS software.

### **Results and Discussion**

To evaluate the relationship between environmental factors and physical sense of place in urban area of Bushehr, public opinion survey has been used. Figures 3 to 9 represent the views of the public on environmental factors, location and access, spatial diversity, safety, human scale, visual beauty and permeability. Descriptive results of the study indicate that the environmental factors most frequently (48.15%) have chosen medium of choice. The location and access to the index, spatial diversity, aesthetics and safety are most frequent medium of choice 43.52%, 39.81%, 36.11% and 54.63%; but indices of human scale and high permeability are the most frequent options, respectively 50% and 49.07%.

#### **Environmental factors**

As the correlation matrix in Table 3 can be seen, the Spearman correlation between the two variables of environment and sense of place 0.093 and the means 0.028 also shows that in 99% of the error level there is a positive relationship between these two variables. To put it simply increases in the environmental factors is with the higher sense of place.

#### **Location and access**

As the correlation matrix in Table 4 can be seen, the Spearman correlation between two variables, location and access and sense of place 0.065 and the means 0.051 also indicates that 99 and smaller than 0.01 percent of error level there is a positive relationship between these two variables. To put it simply the location and access to greater sense of place in the city will be more.

#### **Spatial diversity**

As the correlation matrix in Table 5 is observed, the Spearman correlation between two variables, spatial diversity and sense of place 0.227 and the means 0.018 also shows that 99% and smaller than 0.01 error there is a positive relationship between these two variables. To put it simply increases in the diversity of space in the city will be even more sense of place.

#### **Safety**

As it is observed in the correlation matrix in Table 5, the Spearman correlation between two variables of safety and sense of place 0.084 and the means 0.048 also shows that 99% of 0.01 smaller than the error level there is a positive relationship between these two variables. To put it simply increases in the safety in the city will be even with more sense of place.

#### **Visual beauty**

As it is observed in the correlation matrix in Table 6, the Spearman correlation between the two variables of visual beauty and sense of place 0.109 and the means 0.897 also shows that 99% and an error level less than 0.01, there is no relationship between these two variables.

#### **Human scale**

As it can be seen in the correlation matrix in Table 7, the Spearman correlation between the two variables of human scale and sense of place 0.143 and the means 0.753 also shows that 99% and an error level less than 0.01, there is no relationship between these two variables.

#### **Permeability**

As it can be seen in the correlation matrix in Table 8, the Spearman correlation between the two variables of permeability and sense of place 0.328 and the mean 0.000 also shows that 99% of

0.01 smaller than the error level there is a positive relationship between these two variables. To put it simply increases in the amount of permeability in the city will be even with more sense of place.

### Conclusion

The general goal of the research is to probe into the relationship of the environmental factors, locations, availability, spatial variety, security, human criteria, visual beauty, and penetrability with the sense of place in Boushehr. In doing so, SPSS Software and Spearman Correlation Test have been applied to evaluate the relationship between each pair of variables. The results show that environmental factors, location, availability, spatial variety, security, and penetrability have significant impacts on boosting sense of place in Boushehr.

**Keywords:** physical and environmental factors, sense of place, urban areas of Boushehr.

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## Assessment of the appropriate components of urban public spaces for veterans and the disabled in the city of Khorramabad

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### Expanded Abstract

#### Introduction

For many scientists, space is an integral element of building material and structured social life. That means it can not be understood apart from society and social relations. Urban space is a fascinating topic containing the issues many scholars consider important to understand the relationship with social strategies, refining build, social, human, emotional quality of society, expression of the people life, political activity, healthy living city, and so on. The psychological, cultural, economic and physical environments are the strategic objectives of improving the quality of urban built environment and social strategies. But the concept and the process of creating urban space in various stages of history have the same meaning. In terms of the form and content of each stage of civilization it is always influenced by the spirit state of institutions, culture and dynamics of urbanization factors. Since most of the historical Iranian cities and traditional texture in this decade have had significant growth based on the principles of urban planning and urban design.

#### Methodology

This is an applied research based on objective and based on the method it is descriptive-analytical. The required data have been collected by both library and survey methods. In this study, we investigated the appropriate components of public spaces for veterans and disabled people to analyze the findings. We also used the inferential statistics to determine the impact of various factors on the appropriateness of urban public spaces. Finally, we have used the strategic planning (SWOT).

#### Results and Discussion

To gain effective factors on the appropriate causes of urban public spaces for veterans and the disabled people, especially in Khorramabad, we used the path analysis. In this way, the direct effects of the variables on the appropriate causes of urban public spaces for veterans and the disabled people are obtained through the combined regression.

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Based on the results, the variables of side walk status with rating 0.733 and bridges of communication with 0.654 have had the greatest impact on the appropriate urban public spaces for use of veterans and the disabled persons in the Khorramabad city. The facilities and equipment among the evaluation factors have had the lowest score (0.520) of the impact on Khorramabad urban spaces in terms of the appropriate public spaces for veterans and the disabled persons.

The results of the SWOT analysis reflects the fact that some of the appropriate principles in urban spaces including some offices, the appropriate regulations and standards and notification to the relevant organizations require the municipalities to make the urban spaces suitable for veterans and the disabled,. On the other hand, the continuous movement of officials at different levels, lack of parking in the city crowded spaces and etc. are known as the most important weakness.

The establishment of constructive interaction between the municipality and well-being of constructive, appropriate legislation for public and private organizations with proper weight (0.340) is in the first place. As the most important opportunity points in urban public spaces of the Khorramabad city, it was to determine the views of experts and relevant authorities.

Finally, the most important threats can refer to a severe shortage of facilities and information equipment to neglect the authorities and relevant organization in urban spaces.

### Conclusion

The results of the path analysis show that there is not multi-collinearity between independent variables. Based on the results, the sidewalk status and bridges of communication have been the lowest most influential facilities and equipment among the evaluated factors with the impact on urban spaces of Khorramabad in terms of the appropriate public spaces for veterans and the disabled persons.

The results of the SWOT analysis model indicate that some of the appropriate principles in urban spaces, such as some offices, the appropriate regulations and standards and notification to the relevant organizations, require the municipalities to make fit the urban spaces for veterans and the disabled people. The continuous movement of officials at different levels, lack of parking in the city crowded spaces and etc, are known as the most important weaknesses and challenges.

On the other hand, the establishment of constructive interaction between the municipality and well-being, appropriate legislation for official and organizations and public and private organizations with proper weight (0.340) are the most important opportunity point on urban public spaces in the Khorramabad city. We are to determine the perspective of experts and relevant authorities.

Finally, the components of such a severe shortage of facilities and notification equipment, neglect the authorities and relevant organizations to place disabled people in urban spaces. Lack of sufficient expertise in the design of places and urban spaces for disabled persons causes the problem of disabled traffic on the pedestrian stairs because they are not mechanized and electric of pedestrian stairs and are recognized as the most important threats.

**Keywords:** disabled, improvement, Khorramabad, public spaces.

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