



Comparative study of Tabriz metropolitan areas based on urban furniture components

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Abstract

Background and Aim :City furniture is actually a manifestation of the aesthetics and identity of a society. Therefore, functional design, appropriate location, and proper and principled use of furniture in the city context are very important. Although city furniture is one of the most important categories of a city, it is not possible to equip and improve the current situation of this important thing at a time and simultaneously in all regions of a city; therefore, a comparative comparison in this regard can be effective and help urban managers perform better and make decisions in accordance with the priority of intervention at the level of each region. On this basis, the present study has been developed with the aim of a comparative study of the regions of Tabriz metropolis based on the components of city furniture.

Methodology: This research is applied in nature and descriptive, analytical and survey in terms of method. The statistical population of the research includes 30 experts and specialists in the urban field. In order to evaluate and prioritize the target areas, 5 components (environmental quality, beauty and proportion of urban furniture, correct placement of urban furniture, balanced urban structure, quality of urban furniture components) were used. In this regard, 10 areas of Tabriz city were prioritized using the MABAC model.

Findings and Conclusion: The results of implementing the model showed that Region 2 was in the first place with a final score of 0.513 and was in a favorable position, while Regions 5 and 9 were in the second and third places with scores of 0.388 and 0.362, respectively. In contrast, Region 1 was in the last place with the lowest score of -0.382. According to the findings of the present study, planning and management in accordance with the ranking made in the present study can, in turn, pave the way for urban managers to make future plans in the study area.

Key words Urban furniture, MABAC, Tabriz metropolis.

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Extended Abstract

Introduction:

With the increasing urbanization and growth of urban population and the problems arising from it, providing facilities for the welfare of citizens has become a necessity. In recent years, this urbanization process has forced planners to pay more attention to economic, cultural and especially social system issues and to strive to create and design a suitable and pleasant environment for city residents. Urban furniture, as one of the effective and constructive elements of the city's public space, plays a significant role in shaping the mentality of citizens. The quality and quantity, beauty, comfort, durability and location of this furniture play a significant role in achieving a beautiful and sustainable city. In fact, organizing urban spaces and elements as well as public uses of a city, including urban components and furniture, is considered as one of the effective approaches that aims to improve the quality of the urban environment and meet the diverse needs of citizens. Today, cities have become a kind of museums that display beauties. Elements of urban equipment are of great importance and are not only used for specific purposes; rather, they can be used as a factor for refreshing the landscape of urban spaces. Currently, the lack of landscape, public spaces, and urban furniture in accordance with aesthetic principles in all Iranian cities has led to a problem called lack of spatial belonging, reduced vitality, and the emergence of numerous problems for users of the urban environment. Therefore, paying attention to appropriate public spaces that are essential for healthy urban life is vital. . Given the rapid increase in urbanization and the lack of effective planning and design systems in many developing countries, public spaces face various challenges, including inappropriate furniture for citizens to use. These problems have arisen due to a lack of attention to the demands and needs of the people. In the present era, the problems of metropolises are not limited to only increasing population, traffic, high prices, economic problems, and environmental disorders, but also include a variety of behavioral abnormalities, social problems, and psychological and mental pressures caused by unpleasant visual landscapes. These factors contribute to the increasing challenges of modern urban life and the narrowing of spaces. Space for today's society is a challenge. Undoubtedly, the peace that comes from proper urban design and optimal use of urban furniture will have a great impact on the lives of today's citizens. Given what has been stated, the present study has been developed to answer the question of how to prioritize the areas of the Tabriz metropolis based on the components of urban furniture.

Methodology:

The present study is applied in nature and descriptive, analytical and survey in method. The statistical population of this study includes 25 experts and specialists in the field of geography and urban planning who were selected by snowball method. The demographic characteristics of the experts are as shown in Table (1). Among the 25 experts, 8 have a bachelor's degree, 11 have a master's degree and 9 have a doctorate. Also, in terms of experience, 5 people have between 3 and 10 years, 8 people have between 10 and 15 years and 7 people have between 15 and 30 years of work experience. In order to measure the areas of Tabriz metropolis based on the components of urban furniture, 5 indicators (environmental quality, beauty and proportion of urban furniture, correct placement of urban furniture, balanced urban structure, quality of urban furniture components) were used, which themselves consist of various items. The questionnaire was based on a 5-option Likert scale, in which the responses were assigned ranks from 1 to 5, the number 3 was the theoretical median of the responses, and the average obtained was compared with the number 3. In this regard, the points that the experts had assigned to each of the indicators were entered into Excel software and a number was considered as the average for each of the studied areas, which indicates the status of each of the areas in relation to the indicator under study. Since the weight of the indicators must first be calculated in order to rank the options (areas), there are various models for weighting in this regard. In this study, the Shannon entropy model was used. Then, using the MABAC model, the areas of Tabriz city were prioritized based on the desired indicators. In the continuation of the work process, the areas of Tabriz city were prioritized based on the desired indicators using the MABAC model.

Results and Discussion:

By ranking, the status of the desired options can be understood, meaning that by comparative comparison, it can be understood which ones are in a good condition and which ones are in an unfavorable condition so that necessary measures can be taken in this case. In the present study, the MABAC multi-criteria decision-making model has been used to achieve the research question and objective. Based on the final results of the Mabak model, region 2 is in a favorable position in terms of urban furniture components with a final score of 0.513 and the first rank, and regions 5 and 9 are in the second and third ranks, respectively, with scores of 0.388 and 0.362. In contrast, region 1 is in the last rank with the lowest score of -0.382. Thus, it is clear that region 1 of Tabriz metropolis has the lowest rank and the farthest distance from the desirable urban furniture components among the studied options. Among them, the component of correct placement of urban furniture with the lowest average has had the most negative impact on urban furniture in Tabriz metropolis. Every city consists of specific urban furniture and layout. Paying attention to urban furniture and beautifying the urban environment in accordance with the needs of citizens in urban areas is one of the most important challenges facing urban planners and managers. Urban furniture, with its characteristics such as color, form, and practical nature, improves the quality of life of citizens. Using inappropriate urban furniture causes people's needs to remain unanswered and the urban system to encounter problems. The type of urban furniture reflects the identity and culture of a city. With the appropriate design of this equipment and installation in the necessary place, the welfare needs of citizens are met and their identity is also introduced. Therefore, urban furniture and equipment play a very decisive role in improving the quality of life of citizens. Because in addition to meeting the needs of citizens, it is also psychologically effective. Therefore, it is necessary to pay special attention to the capacities of the region, the texture, and the identity of the city and its residents in the design of urban furniture such as urban elements, tables and chairs, urban fountains, lighting equipment, etc. In this regard, the evaluation of urban furniture components is considered an effective step towards achieving sustainable urban development. Since it is not possible to manage and improve the situation of all regions at the same time and simultaneously. For this purpose, recognizing the strength and weakness of each region in terms of the indicators under study through a comparative comparison based on different decision-making models among all urban regions can contribute significantly to the performance and better decision-making of urban officials in accordance with the priority of intervention at the level of these regions and in different planning periods.

Conclusion:

Accordingly, the present study was conducted with the aim of a comparative study of the regions of Tabriz metropolis based on urban furniture components for future planning. Following the urban furniture components used in the present study, the current status of the studied regions was prioritized using the MABAC multi-indicator model. According to the results of the aforementioned model, it is observed that Region 2 is in a favorable position in terms of urban furniture components with a final score of 0.513 and the first rank, and Regions 5 and 9 are in the second and third ranks, respectively, with scores of 0.388 and 0.362. In contrast, Region 1 is in the last rank with the lowest score of -0.382. Considering the findings extracted from the questionnaire, among the components examined, the balanced urban structure component had the highest value among the other components with an average of 3.02 out of 5. The correct placement of urban furniture component had the lowest value with an average of 2.90. Considering the results obtained in the present study, it is suggested: In addition to prioritizing the intervention of urban officials and managers in accordance with the rank and priority of each region, it is better to consider three features in the design and installation of urban furniture. 1- They should be practical. 2- They should have identity. 3- They should also be visually beautiful. Having these three characteristics requires that attention be paid not only to the functional and practical aspects of urban furniture elements, but also that their form and color be in harmony with the environment and climatic factors of the region and that they be installed and used in an appropriate location.

Declarations

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