

ANALYZING EFFECTIVE INDICATORS OF POLITICAL MANAGEMENT OF SPACE IN TEHRAN METROPOLIS

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Abstract : Spatial policies can be thought of as the interrelationships between functions identities, and physical perspectives. Many experts argue that public-private participation is the key to the success of good governance in the political management of space. The present work aims at examining the effective indicators in the political management of the metropolitan area of Tehran using the fuzzy dimethyl technique, which is descriptive in terms of practical purpose and data collection, being based on the causal method. The sample size was composed of 70 university professors and senior managers of political space management, leading to the identification of 23 factors as well. It was found that regional and spatial relations had the greatest impact on the political management of space ; the existing laws that cause the inefficiency of the political management of space had in contrast the least impact.

Key words: political management of space, urban management, governance, Fuzzy DEMATEL method, Tehran Metropolis

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INTRODUCTION

The global applications of urban cities are based on some criteria the most important of which are digitization and technological development in the city, and the extent to which tourism contributes to the functions of the urban city; other factors are represented by the elements of natural, economic and social sustainability in the management of smart cities (Kahlil, 2022). Spatial policies can be considered as outcomes of the reciprocal relations between functions, representations, identities, and physical perspectives (Ruoso and Plant, 2018). Good governance is the perfect basis for achieving a sustainable development strategy. Decentralization, in addition to accountability, predictability, and transparency, is in turn an effective mechanism that relies on good governance (Thanh and Chien, 2022).

Researchers have so far conducted extensive comparative studies on governance and political management of space in metropolises, in order to analyze some important variables such as privacy and security, utility and application, content, services, citizen participation, and so on. Nevertheless, some main variables such as political management of space and efficiency and effectiveness of interrelationship between governmental institutions and organizations have been overlooked (Biswasa et al., 2018; Dehghanan et al., 2021). The relationship between government, rulers and ruled, and the manner of political management of space is indeed of great importance. Iran is a country that has had a structured political system for about a century and has experienced and tested various institutional models for the political management of space in its metropolises. The daily life of people in metropolitan areas is largely influenced by the political management of space and decisions of the urban management system. The city is considered as a source of development and the place of urban management has a very important and decisive role in the process of urban development and improvement of urban settlements. Thanks to the ever-growing influence of cities around the world, local governments are then considered as other major players in the public policy domain (Noring et al., 2021). The ongoing urbanization is replete with both positive and negative externalities (Agyemang et al., 2017). Since e-government initiatives in developing countries are still in the early stages of development and face significant challenges, a slew of roadblocks is then preventing the widespread usage of technological services on a larger scale (Mustafa et al., 2022; Moezzi et al., 2012). Over the past decade, the rapid development of new information and communication technologies (Gheitarani et al., 2022b; Hashemzadeh et al., 2011; Hakkak et al., 2021; Jahanshahi et al., 2020; Vafaei-Zadeh et al., 2021) and social media, and other developments in urban domains have revolutionized both the traditional governance and its transition to a smart one (Jiang et al., 2021).

The mayor of the metropolis, as an executive director, must have various activities and connections with the administrative structure outside his/her own realm, and the same leads the urban management and mayors of metropolises, especially the one in Tehran, to be political. A review of figures who have been elected as the mayors of Tehran shows that the political view has had a significant impact on the selection of urban and political management of space in Tehran. In other words, the weight of political choices is much greater in Tehran metropolis. The concentration of government organizations and institutions in Tehran along with the urban management complex has led to some sort of incompatibility in the political management of the metropolitan space. Urban spaces are among the most important and prominent geographical spaces significantly expanded

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due to increase in the number of cities and urbanization. These changes as well as increase in urban spaces indeed require efforts to organize them in order to increase urban resilience and make life in urban spaces more feasible for residents.

THEORETICAL BACKGROUND

Several thinkers and philosophers in the history sought to systematize and provide a model for the political management of human society, such as Plato, Aristotle (Moore et al., 2022). The urban areas are major centers for economic, social, and political growth in any country, and they have proven to be the most attractive places for the generation of wealth, job opportunities, creativity, and innovation (Allal et al., 2022). Today, cities are deemed important areas for sustainable development, economic growth, technological innovation, and social cohesion (Hanifah et al., 2021; Gheitarani et al., 2022a; Taherinia et al., 2021; Gharleghi et al., 2018; Etemadi et al., 2022; Hakkak et al., 2022; Khaksar et al., 2011; Jahanshahi et al., 2019; Gogheri et al., 2013; Dehkordy et al., 2013). Since urban actors are increasingly involved in changing their potential abilities and roles, there is a new wave of experiments in cities, which has turned them into governance laboratories or urban experiments in governing and ruling domains (Raven et al., 2019). As a result of these developments, new structures for space management, whether at local or at national level, were gradually formed. Accordingly, with the aim of politically managing the space, a diverse spectrum of governments was formed, ranging from federal states with broad local powers to simple centralized states. Every political structure that manifests itself in the form of a country needs mechanism to achieve its goals, in addition to being compatible with the spatial structure, must also have sufficient dynamism compatible to temporal changes; hence, the government is a collection of executives, political, and military entities (Skocpol, 1979) for which special application is conceivable. The purpose of political organization of space is the political administration and management of space in order to achieve national goals with a comprehensive, forward-looking, and strategic perspective. In this regard, along with other various goals and functions (social, environmental, economic, political, and administrative) with which the political organization of space provides the grounds for public participation in national, regional and local decisions are also among the main goals of political organization in urban space (Ahmadipour et al., 2019). In the past, researchers of urban affairs could study politics using a "space-free" approach, which is no longer possible nowadays. Concentrating on urban areas and spatial patterns produced by external factors consistently differentiates between the new approach and the previous one, and leads to a focus on the space factor. However, such a mechanism is not specific to the urban scale. This approach can be used to interpret international and national relations. The urbanization has its own advantages and drawbacks regarding metropolises; on the one hand, metropolises have proven to be key assets in international competition and have growing importance for national wealth. Metropolises' success challenges the existing balances and thus cohesion at local, regional, and national scale: they are simply running ahead of the other regions and thereby create new tensions (Damurski and Andersen, 2022).

Governance in Metropolitan City

As the local governance is being diversified based on the status of local government, nature of society, state, and local environment, it is worth and relevant to know the status of local governance subjectively, incorporating policies and practices based on national, regional, and local planning (Subedi and Subedi, 2021). Metropolitan areas are among the most important and influential phenomena emerged in the twentieth and twenty-first centuries, leading to a new and diverse pattern of urbanization, housing, city extension, and spatial structure and organization in a new era. The growth of such areas is closely related to the globalization process, worldly structure of cities, the role of metropolises in their hierarchical network so that the complex trends, processes, and forces of globalization have brought in competition among these regions by accelerating the developmental process of metropolitan areas as an engine of the global economy, and also in favor of the capitalist system (Nelles, 2012). As such, the emergence of diverse actors in urban politics and the effects of globalization have become important factors in devising a governing theory in cities. Since the 1970s, higher government expenditure has been cited as one of the reasons of inflation rising in the Keynesian economic model; reduction in public spending to stabilize the government's share from GDP was also considered as an acceptable option, a policy that paved the way for the emergence of the concept of spatial governance. In this model, decentralization and transfer of policy-making tasks and responsibilities to social actors and institutions, and the need for power sharing are all taken into account (Hassall, 2012). A permanent gap between traditional administrative boundaries and metropolitan areas has led to various theoretical approaches and suggestions for the ideal model of urban governance. Each of these approaches lends support the alternative forms of governance in metropolises (institutional reform, intercity competition, and flexible arrangements) with different normative goals (efficiency, democracy, equality, and economic competition) at different (local and metropolitan) scales (Tomas, 2016). For example, one of these approaches was to divide the metropolitan areas into smaller, then more manageable units, which means separating the inner city from its suburbs and satellite cities and multiplying small units of local autonomy in all such different places. One of the most famous schools of economic thought originated in the United States believes that the fragmentation of the metropolitan government into countless small local competencies creates a set of municipalities, each of which has special packages of public goods with their own tax rates. According to this argument, metropolis citizens are in search of an area with better public goods deliveries and lower taxes. Unfortunately, this school of economics was not compatible with real life. A metropolis is a single, indivisible entity which should not be subdivided into smaller parts.

Political Management of Metropolitan Space

Over the past forty years, there has been a significant international trend away from centralized development-oriented approaches by national governments and their replacement by a set of local or location-based development strategies initiated

by the sub-national layers of government (Christian and Jayne, 2019). Usually, the growth of metropolitan areas leads to non-compliance of interdependencies between municipalities and existing institutional arrangements for coordinating policies such as public transportation, waste management, land use, and housing planning. In response to this non-compliance, different types of governance and political management have accordingly emerged in many metropolises with different results in terms of effectiveness. From the 1990s onwards, in particular we see the emergence of a very different perspective on governance and political management of metropolitan areas (Zimmermann, 2014). International organizations, including the World Bank, the European Union, recognize tourism as a promising development sector in governments. This can be a powerful tool for good management in developing countries (Lahcene et al., 2022). Urban development is directly associated with increase in impervious areas. Given the growing population concentration in urban areas particularly in developing countries, it is essential to plan and control expansions to minimize their adverse impacts on hydrological cycle components (Vasconcelos et al., 2022). The first and foremost condition of success is good governance, meaning that processes are inclusive, accountable, and place-based. By increasing the agency of people most connected to the environments, good governance creates space for nature to thrive (Wilkes, 2022).

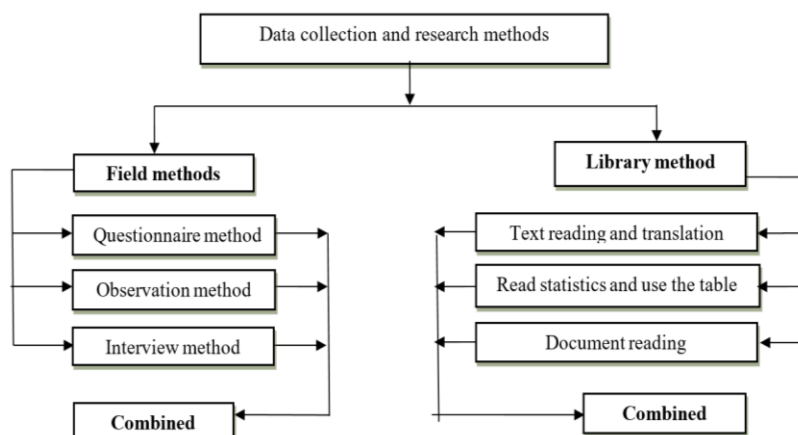


Figure 1. Methodological Diagram (Source: Authors)

Table 1. Final criteria using fuzzy DEMATEL technique (Source: Authors)

Symbol	Dimension	Symbol	Components
C1	Political-Security Indicator	S1	Organizing political space in Tehran metropolis depends on security-political considerations
		S2	Political considerations of officials in organizing political space in Tehran metropolis
		S3	Political-security considerations in electing the mayor of Tehran
		S4	Competition of political factions in choosing urban management complex
		S5	Political-security considerations can cause inefficiency in organizing political space in Tehran metropolis
		S6	The concentration of political institutions in Tehran can cause issues in communication with organizing political space
		S7	Tehran city officials have sufficient independences in political decisions for the metropolis
		S8	Political-security institutions affiliated to the government provide necessary cooperation in organizing political space for the urban management complex
C2		S9	Organizing political space in Tehran metropolis requires taking into account geographical principles
		S10	Organizing political space in Tehran metropolis through spatial and territorial indicators
		S11	To what extent can the geographical-communication indicator affect the political organization of space in Tehran metropolis?
		S12	To what extent do regional, spatial, and territorial relations affect the political organization of space in Tehran metropolis?
C3		S13	To what extent do socio-cultural issues play role in organizing political space in Tehran metropolis?
		S14	Individual characteristics and habit of system to focus on organizing political space in Tehran metropolis
		S15	The extent of spirit of cooperation of city managers and government officials in organizing political space in Tehran metropolis
		S16	The extent of civic participation of citizens on organizing political space in Tehran metropolis
		S17	Effect of existence/non-existence of non-governmental organizations in Tehran metropolis on the way of organizing political space in Tehran metropolis
		S18	Role of organizations, institutions, and socio-cultural authorities in organizing political space in Tehran metropolis
C4		S19	To what extent does the existence of a centralized political system in the constitution of the Islamic Republic of Iran play role in organizing political space in Tehran metropolis?
		S20	To what extent do the existing laws related to the division of the country impact the political organization of space in Tehran metropolis?
		S21	Existing laws with regard to relationship between government and urban management in Tehran metropolis
		S22	Existing laws cause inefficiency in organizing political space in Tehran metropolis
		S23	The legal relationship between the municipality and the government in the current situation can improve the performance of the political organization of space in Tehran metropolis

RESEARCH METHODOLOGY

The DEMATEL method was used to reveal the effect and cause criteria, and to increase the model applicability in terms of linguistic variables combined with triangular fuzzy numbers. As a multi-criteria decision-making method, DEMATEL contributes to a different view of risk assessment literature by providing an evaluation that enables modeling cause-effect relationships among the risk factors and exposing the degree of relation or the strength of influence analytically (Seker and Zavadskas, 2017). In this sense, fuzzy logic, appropriate to deal with situations of uncertainty and subjectivity, would be a good alternative to cope with the problem of productivity analysis. Many measures of a qualitative and ambiguous nature

can be described subjectively through linguistic terms, which is not possible via using traditional approaches to performance evaluation (Jatoba et al., 2018; Takalo et al., 2013), integrated fuzzy logic and the system’s dynamic approach to choose a sustainable supplier. They provided a new model for integrating information on the supplier’s behavior in a fuzzy environment with a dynamic system modeling technique that results in a reliable and responsive support system (Izadyar et al., 2021). Data were collected by taking into account the view of experts who were selected through purposive sampling. After identifying and analyzing effective indicators on the political management of space in Tehran metropolis, a fuzzy DEMATEL technique was used to evaluate the status of causal relationship between these factors. Likewise, the research is applied in terms of purpose and descriptive in terms of data collection, and is based on a causal method. The statistical population of this study consists of experts and professors familiar with the field of political space management. The number of 70 university professors and senior managers of political management of space in Tehran metropolis were selected and asked to comment on the impact of the given factors in each line and column at five levels ranging from ineffective to very effective. In this study, 23 factors using the 70 sampled people were identified as shown in Table 1. In the second part, using the opinions of the 70 sampled people, the superiority of each of the 23 indicators was determined and compared to each other.

Findings

Democracies are experiencing historic disruptions affecting how people engage with core institutions such as the press, civil society organizations, parties. These processes of citizen interaction with institutions operate as a democratic interface shaping self-government and the quality of public life (Bennett et al., 2018). In response to both the very large scale of metropolitan spatial frameworks, and critiques of their ineffectiveness, several metropolitan municipalities in South Africa have been exploring ways to ground their spatial plans. Initiatives include, inter alia, attempting to link spatial planning to infrastructure planning (Spaliviero et al., 2019). Urbanization is defined as the process of growth or increment in the number of people in localities being classified as urban, or it could be regarded as the growing concentration of population and activities in urban and metropolitan areas, or the rapid growth and movement of people into urban areas. Government and city officials are entreated to identify new ways of providing for the overpopulated cities by strategically using the available limited resources without inflicting further harm on the natural environment (Antwi-Afari et al., 2021). Still, the overall aim is to build a resilient city, to minimize human and economic losses. This implies that as more urban residents in the DCs can adapt to the hazard, the more chances the society has to harness its natural potential towards a sustainable urban development (Nkwunonwo et al., 2020).

Step 1: At this stage, the evaluation factors that are causal in nature and usually involve a large number of complex situations were compiled. To deal with the ambiguity of human judgment, a fuzzy verbal scale was accordingly designed based on the model given in Table 2.

Table 2. Fuzzy verbal scale pattern: effect of variables on each other (Source: Authors)

Verbal Expressions	Without Effect	Very Low Effect	Low Effect	High Effect	Very High Effect
Numerical Scale	0	1	2	3	4
Triangular Fuzzy Numbers	(0.00, 0.00, 0.25)	(0.00, 0.25, 0.50)	(0.25, 0.50, 0.75)	(0.50, 0.75, 1.00)	(0.75, 1.00, 1.00)

Step 2: At this stage, experts' opinions were obtained and their average was also calculated. Considering P the number of experts, we had $Z^1 Z^2 \dots Z^P$ of matrix P, each of their knowledge was identified by the corresponding fuzzy numbers.

Step 3: Next, through standardizing relationship, scales of indicators were transformed into the comparable ones. In this regard, matrix X is called the fuzzy matrix of standardized direct relations. It should be noted that for the sake of brevity, the matrix of the average opinion of experts and the normalized matrix were accordingly ignored.

Step 4: In this stage, the fuzzy matrix of the total relations T was obtained. Here, $x_{ij} = (l'_{ij}, m'_{ij}, u'_{ij})$ and the elements of the matrices X_1, X_m and X_u contain the values l', m' and u' in matrix X, respectively.

The next step is to determine the importance of indicators $(\tilde{D}_i + \tilde{R}_i)$ and the relationship between the criteria $(\tilde{D}_i - \tilde{R}_i)$. If $\tilde{D}_i - \tilde{R}_i > 0$, the relevant criterion is then effective; if $\tilde{D}_i - \tilde{R}_i < 0$, the relevant criterion is impressionable, as shown in Figure 4.

Step 5: The acquired values for D+R and D-R were fuzzy numbers that had to be defuzzified to obtain a causal graph; to draw this, the values $(D+R)^{def}$ and $(D-R)^{def}$ were required. The center surface method was used for defuzzification. In the causal graph, the X axis involves $(D+R)^{def}$ whose values are always positive, indicating their weight or importance; and the Y axis includes $(D-R)^{def}$, whose positive value means that the effective index is definite; otherwise, its impressionism will be definite, which is remembered as the effect ratio in the system. In this step, the fuzzy numbers $\tilde{D}_i + \tilde{R}_i$ and $\tilde{D}_i - \tilde{R}_i$ obtained from the previous step are de-fuzzy (Authors).

Table 3. Causal relationship pattern Of subcomponents (Source: Authors)

D-R	D+R	R	D	
-0.460	3.893	2.176	1.717	S1
-0.152	3.622	1.887	1.735	S2
0.353	3.727	1.687	2.040	S3
-0.055	3.325	1.690	1.635	S4
0.093	3.303	1.605	1.698	S5
0.333	3.809	1.738	2.071	S6
-0.524	2.740	1.632	1.108	S7
-0.105	3.364	1.735	1.630	S8
-0.232	3.791	2.012	1.780	S9
-0.363	2.917	1.640	1.277	S10
-0.180	3.576	1.878	1.698	S11
1.169	4.042	1.436	2.606	S12
0.735	3.309	1.287	2.022	S13
-0.370	3.595	1.983	1.613	S14
-0.251	3.310	1.780	1.529	S15
0.008	3.139	1.565	1.573	S16
-0.504	2.609	1.600	1.096	S17
0.332	3.808	1.738	2.070	S18
-0.525	2.739	1.632	1.107	S19
-0.105	3.365	1.735	1.630	S20
-0.232	3.792	2.012	1.780	S21
-0.37	2.910	1.640	1.270	S22
-0.769	3.979	1.874	1.105	S23

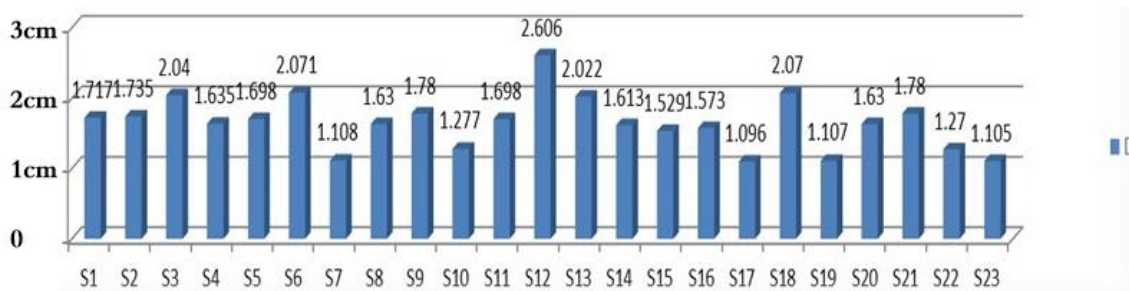


Figure 2. Priority of sub-criteria influence with each other (Source: Authors)

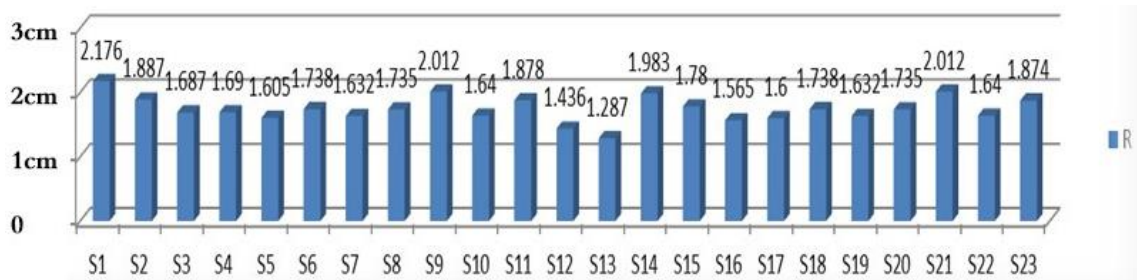


Figure 3. Priority of sub-criteria impressibility with each other (Source: Authors)

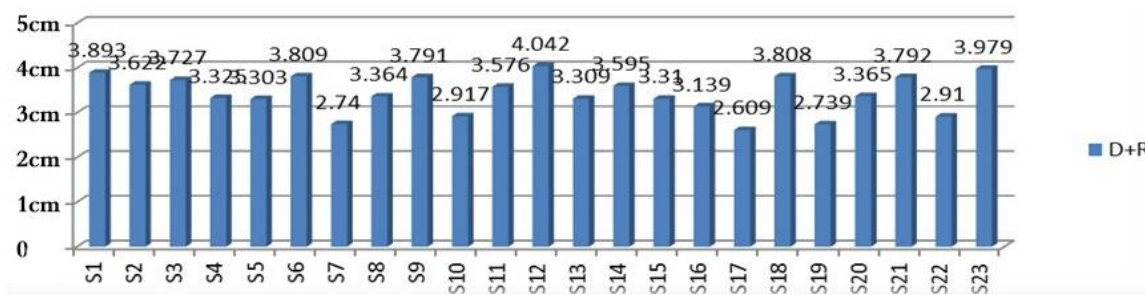


Figure 4. Priority of sub-criteria interaction with each other (Source: Authors)

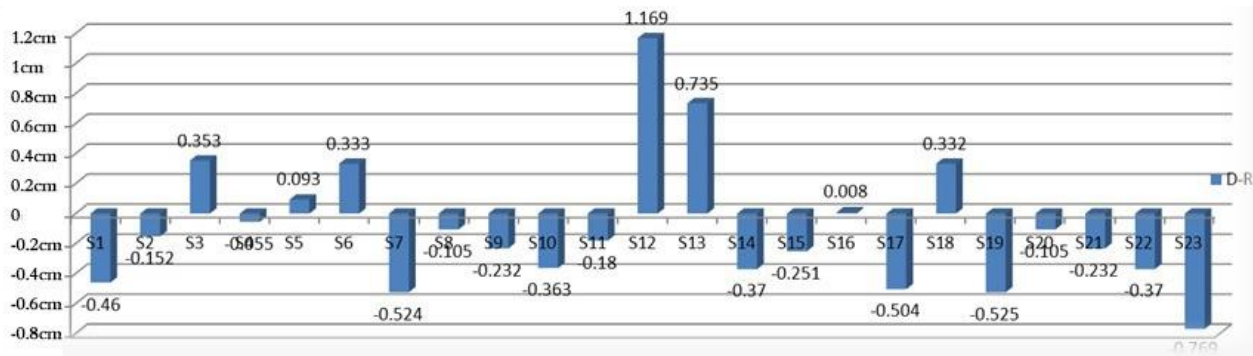


Figure 5. Priority based on net effectiveness/impressiveness of sub-criteria (Source: Authors)

CONCLUSIONS

The aim of this study was to analyze the indicators affecting political management of space in Tehran using the fuzzy DEMATEL technique. The regional, spatial, and territorial relations showed the largest impact on the political management in Tehran metropolis. Existing laws have caused inefficiency in the political management of space in Tehran, but according to the present results, it (political management of space) has the least impact. A number of threatening factors including increasing political-economic concentration, disregard for cultural geography of the country, formation of local and regional competition, formation of government cavities, infiltration of informal factors in the political management of Tehran metropolis, disregard for public participation and a single-agent political management space were also investigated. It was found that the criterion of political space management in Tehran depends on security-political considerations and enjoys a very high degree of effectiveness. Socio-cultural issues in the political management of space in Tehran also showed the least impression compared to the other criteria. The criterion of regional, spatial, and territorial relations on the political management of space in Tehran also showed the strongest interaction with the other criteria. The criterion "presence/absence of non-governmental institutions in Tehran metropolis on the manner of political management of space" showed in contrast the weakest interaction with the other criteria. The criterion of regional, spatial, and territorial relations on the political management of space in Tehran was also found to be the cause of net effect.

The concentration of governmental organizations and institutions in Tehran alongside the urban management complex has created a kind of incompatibility in the political management of the metropolis. As a result, once there is no proper and rational management in urban and political spaces, lack of some factors including transparency, law, use of facilities for personal purposes, equal access, and responsibility and accountability of managers have led to lack of development of political management of space in Tehran metropolis. Therefore, it can be inferred that inefficient, centralized, top-down management causes a lack of attention to long-term and strategic plans, the weak structure and place of the Islamic city council, non-operational of local councils and non-participation of citizens in the administration of city affairs. These are indeed different from the reasons underlying the weakness of municipalities and government organizations, important to achieving political management of space in cities and metropolises.

To improve the political management of space, the present work proposes the following measures: strengthening judicial oversight bodies, fighting against administrative and organizational corruptions, making people-centered urban plans, segregation of duties and clarifying the scope of authority of Tehran municipality and governmental organizations, and preparing the ground for stronger interactions between people and city managers.

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REFERENCES

- Ahmadipour, Z., & Heidarian, M. (2019). Political organization of city space from distribution of polling stations' point of view: Case study: Eyvan City. *Research Political Geography Quarterly*, 4(1), 97-120. <https://doi.org/10.22067/pg.v4i1.84036>
- Agyemang, F.S., Amedzro, K.K., & Silva, E. (2017). The emergence of city-regions and their implications for contemporary spatial governance: Evidence from Ghana. *Cities*, 71, 70-79. <https://doi.org/10.1016/j.cities.2017.07.009>
- Allal, A., Boudjemma, K., & Dehimi, S. (2022). The effect of spatial differences on the quality of urban life a comparative analytical study of three cities in the high plateaux region of Algeria. *GeoJournal of Tourism and Geosites*, 40(1), 181-190. <https://doi.org/10.30892/gtg.40122-818>
- Antwi-Afari, P., Owusu-Manu, D.G., Ng, S.T., & Asumadu, G. (2021). Modeling the smartness or smart development levels of developing countries' cities. *Journal of Urban Management*, 10(4), 369-381. doi.org/10.1016/j.jum.2021.06.005
- Bennett, W.L., Segerberg, A., & Knüpfer, C.B. (2018). The democratic interface: Technology, political organization, and diverging patterns of electoral representation. *Information, Communication & Society*, 21(11), 1655-1680. <https://doi.org/10.1080/1369118X.2017.1348533>
- Biswasa, R., Janaa, A., Aryab, K., & Ramamrithamb, K. (2018). A good governance framework for urban management. *Journal of Urban Management*, 8(2), 225-236. <https://doi.org/10.1016/j.jum.2018.12.009>
- Christian, M., & Jayne, M. (2019). Tourism local economic development and inclusion: evidence from overstrand local municipality south africa. *GeoJournal of Tourism and Geosites*, 25 (2), 293-308. <https://doi.org/10.30892/gtg.25202-360>
- Damurski, L., & Andersen, H.T. (2022). Towards political cohesion in metropolitan areas. An overview of governance models. *Bulletin of Geography, Socio-economic Series*, (56), 43-62. <https://doi.org/10.12775/bgss-2022-0012>
- Dehkordy, L.F., Shakhshian, F., Nawaser, K., Vesal, S.M., & Kamel, A. (2013). Identification of Factors Influential in Policy Making and Presenting a Combined Model of Iran's Policy-Making. *Journal of sustainable development*, 6(8), 118. <https://doi.org/10.5539/jsd.v6n8p118>
- Dehghanan, H., Gheitarani, F., Rahimi, S., & Nawaser, K. (2021). A Systematic Review of Leadership Styles in Organizations: Introducing the Concept of a Task-Relationship-Change Leadership Network. *International Journal of Innovation and Technology Management*, 18(07), 2130007. <https://doi.org/10.1142/S021987702130007X>
- Etemadi, M., Hamzehpoor, M., Nawaser, K., & Hanifah, H., & Vafaei-Zadeh, A. (2022). Identification and prioritisation of factors affecting lean leadership model. *International Journal of Management Practice*, 15 (3), 364-388, <https://doi.org/10.1504/IJMP.2022.10046035>
- Gharleghi, B., Afshar Jahanshahi, A., & Nawaser, K. (2018). The outcomes of corporate social responsibility to employees: Empirical evidence from a developing country. *Sustainability*, 10(3), 698. <https://doi.org/10.3390/su10030698>
- Gheitarani, F., Guevara, R., Nawaser, K., & Jahanshahi, A.A. (2022a). Identifying Dimensions of Dynamic Technological Capability: A Systematic Review of the Last two Decades of Research. *International Journal of Innovation and Technology Management*, 2230002. <https://doi.org/10.1142/S0219877022300026>
- Gheitarani, F., Nawaser, K., Hanifah, H., & Vafaei-Zadeh, A. (2022b). Human-behavioral micro-foundations of dynamic capabilities: A systematic review of the last two decades of research. *International Journal of Management and Decision Making*. <https://doi.org/10.1504/IJMDM.2022.10044203>
- Gogheri, A.S., Nawaser, K., Vesal, S.M., Jahanshahi, A.A., & Kazi, R. (2013). Which organizational culture moves towards organizational excellency. *Asian Social Science*, 9(11), 221. <https://doi.org/10.5539/ass.v9n11P221>
- Hakkak, M., Nawaser, K., Vafaei-Zadeh, A., & Hanifah, H. (2021). Determination of Optimal Leadership Styles through Knowledge Management: A Case from the Automotive Industry. *International Journal of Innovation and Technology Management*, 18(04), 2150012. <https://doi.org/10.1142/S0219877021500127>
- Hakkak, M., Hossein Azadi, M., Nawaser, K., Hanifah, H., & Vafaei-Zadeh, A. (2022). The dialectic of failure or hope in organisations: a grounded theory study in a developing country context. *International Journal of Management and Decision Making*, 21 (2), 195-221, <https://doi.org/10.1504/IJMDM.2022.10041094>
- Hanifah, H., Abd Halim, N., Vafaei-Zadeh, A., & Nawaser, K. (2021). Effect of intellectual capital and entrepreneurial orientation on innovation performance of manufacturing SMEs: mediating role of knowledge sharing. *Journal of Intellectual Capital*. <https://doi.org/10.1108/JIC-06-2020-0186>
- Hashemzadeh, G.R., Khaksar, S.M.S., Nawaser, K., & Jahanshahi, A.A. (2011). Technological dimension of customer relationship management. *Indian Journal of Science & Technology*, 4(11), 1565-1572. <http://dx.doi.org/10.17485/ijst/2011/v4i11/30288>
- Hassall, J.P. (2012). Community governance; A global perspective. *International Journal of Asian Social Science*, 3 (5), 1122-1127.

- Izadyar, M., Toloie Eshlaghy, A., Agha gholizadeh sayar, A., & Mehri, Z. (2021). Developing a Model for Sustainability Assessment in LARG Supply Chains using System Dynamics. *International Journal of Industrial Mathematics*, 13(2), 181-198. <https://doi.org/10.1001/1.20085621.2021.13.2.9.4>
- Jahanshahi, A.A., Nawaser, K., & Brem, A. (2019). The effects of customer capital on customer response speed and innovativeness: the mediating role of marketing capability. *International Journal of Innovation Management*, 23(06), 1950058. <https://doi.org/10.1142/S1363919619500580>
- Jahanshahi, A.A., Maghsoudi, T., & Nawaser, K. (2020). The effects of social capital and psychological resilience on employees' positive work attitudes. *International Journal of Human Resources Development and Management*, 20(3-4), 231-251. <http://dx.doi.org/10.1504/IJHRDM.2020.107956>
- Jatoba, A., Bellas, H.C., Koster, I., Burns, C.M., Vidal, M.C.R., Grecco, C.H.S., & de Carvalho, P.V.R. (2018). Supporting decision-making in patient risk assessment using a hierarchical fuzzy model. *Cognition, Technology & Work*, 20(3), 477-488. <https://doi.org/10.1177/2055207616664619>
- Jiang, H., Geertman, S., & Witte, P. (2021). Smartening urban governance: An evidence-based perspective. *Regional Science Policy & Practice*, 13(3), 744-758. <https://doi.org/10.1111/rsp3.12304>
- Kahlil, I., Alananzeh, O., & Alerefaie, S. (2022). Applications of digital models in integrated management in smart tourist cities: aqaba city of Jordan as a case study. *Geo Journal of Tourism and Geosites*, 40 (1), 313-318, <https://doi.org/10.30892/gtg.40137-833>.
- Khaksar, S.M.S., Nawaser, K., Jahanshahi, A.A., & Kamalian, A.R. (2011). The Relation between After-Sales Services and Entrepreneurial Opportunities: Case Study of Iran-Khodor Company, *African Journal of Business Management*, 5(13), 5152-5161. <http://dx.doi.org/10.32479/irmm.8108>
- Lahcene, F., Mohamed, A., & Hamid, B. (2022). Thermal tourism as a driver of local development an illustration opportunities and constraints.case study of hammam_guergour in the province of setif Algeria. *GeoJournal of Tourism and Geosites*. 40 (1), 2022, 136-143. <https://doi.org/10.30892/gtg.40116-812>
- Moezzi, H., Nawaser, K., Shakhshian, F., & Khani, D. (2012). Customer relationship management (e-CRM): New approach to customer's satisfaction, *African Journal of Business and Management*, issue 6(5), 2048-2055 <https://doi.org/10.5897/AJBM11.1736>
- Moore-Cherry, N., Kayanan, C.M., Tomaney, J., & Pike, A. (2022). Governing the Metropolis: An International Review of Metropolitanisation, Metropolitan Governance and the Relationship with Sustainable Land Management. *Land*, 11(5), 761. <https://doi.org/10.3390/land11050761>
- Mustafa, N., Bajrami, A., & Islami, X. (2022). Electronic Services Management in Local Governance – Evidence from a Transitional Economy. *International Journal of Sustainable Development and Planning*, (17) 2, 615-621. <https://doi.org/10.18280/ijstdp.170226>
- Nelles, J. (2012). Regionalism Redux: Exploring the Impact of Federal Grants on Mass Public Transit Governance and Political Capacity in Metropolitan Detroit. *Urban Affairs Review*. <https://doi.org/10.78087412458255>.
- Nkwunonwo, U.C., Whitworth, M., & Baily, B. (2020). A review of the current status of flood modelling for urban flood risk management in the developing countries. *Scientific African*, 7, e00269. doi.org/10.1016/j.sciaf.2020. e00269
- Noring, L., Ohler, L.P., & Struthers, D. (2021). City government capacity and patterns in urban development project governance. *Urban Affairs Review*, 57(5), P. 1343-1371. <https://doi.org/10.1177/1078087419897808>
- Raven, R., Sengers, F., Spaeth, P., Xie, L., Cheshmehzangi, A., & De Jong, M. (2019). Urban experimentation and institutional arrangements. *European Planning Studies*, 27(2), 258-281. Rowman & Littlefield Publishers.
- Ruoso, L.E., & Plant, R. (2018). A politics of place framework for unravelling peri-urban conflict: An example of peri-urban Sydney, Australia. *Journal of Urban Management*, 7(2), 57-69. <https://doi.org/10.1016/j.jum.2018.05.001>
- Subedi, S.R., & Subedi, S. (2021). The Status Local Governance Practice: A Case Study of Local Government in Dhangadhi Sub-metropolitan City, Nepal. *American Journal of Educational Research*, 9(5), 263-271. <https://doi.org/10.12691/education-9-5-3>
- Skocpol, T. (1979). *States and Social Revolutions: A Comparative Analysis of France, Russia and China*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511815805>
- Seker, S., & Zavadskas, E.K. (2017). Application of fuzzy DEMATEL method for analyzing occupational risks on construction sites. *Sustainability*, 9(11), 2083. <https://doi.org/10.3390/su9112083>
- Spaliviero, M., Boerboom, L., Gibert, M., Spaliviero, G., & Bajaj, M. (2019). The Spatial Development Framework to facilitate urban management in countries with weak planning systems. *International planning studies*, 24(3-4), 235-254. doi.org/10.1080/13563475.2019.1658571
- Taherinia, M., Nawaser, K., Shariatnejad, A., & Moshtaghi, M. (2021). The Evolution of the E-Business Value Cycle Through Value Co-Creation during the COVID-19 Pandemic: An Empirical Study from Iran. *The Journal of Asian Finance, Economics and Business*, 8(10), 19-28. <https://doi.org/10.13106/jafeb.2021.vol8.no10.0019>
- Takalo, S.K., Abadi, A.R.N.S., Vesal, S.M., Mirzaei, A., & Nawaser, K. (2013). Fuzzy Failure Analysis: A New Approach to Service Quality Analysis in Higher Education Institutions (Case Study: Vali-e-asr University of Rafsanjan-Iran). *International Education Studies*, 6(9), 93-106. <http://dx.doi.org/10.5539/ies.v6n9p93>
- Thanh, N.N., & Chien, N.B. (2022). The Impact of Good Governance on the People's Satisfaction with Public Administrative Services in Vietnam, *Administrative Sciences*, 12(1), 35. <https://doi.org/10.3390/admsci12010035>.
- Tomas, M. (2016). Explaining metropolitan governance. The case of Spain. *Raumforschung und Raumordnung, Spatial Research and Planning*, 75(3), 243-252. <https://doi.org/10.1007/s13147-016-0445-0>.
- Vafaei-Zadeh, A., Ng, S.X., Hanifah, H., Teoh, A.P., & Nawaser, K. (2021). Safety technology adoption: predicting intention to use car dashcams in an emerging country. *International Journal of Innovation and Technology Management*, 18(05), 2150022. <https://doi.org/10.1142/S021987702150022X>
- Vasconcelos, A.F., Barbassa, A.P., dos Santos, M.F.N., & Imani, M.A. (2022). Barriers to sustainable urban stormwater management in developing countries: the case of Brazil. *Land Use Policy*, 112, 105821. <https://doi.org/10.1016/j.landusepol.2021.105821>
- Wilkes, J. (2022). Reconnecting with Nature through Good Governance: Inclusive Policy across Scales. *Agriculture*, 12(3), 382. doi.org/10.3390/agriculture12030382
- Zimmermann, K. (2014). Democratic metropolitan governance: Experiences in five German metropolitan regions. *Urban Research & Practice*, 7(2), 182-199. <http://dx.doi.org/10.1080/17535069.2014.910923>