Offering a Paradigmatic Model for a Sports city Designing Requirements

Ali Sajedi[1], Sayyed Mohammad Hussein Razavi[2] and Ma'asumeh Kalateh Sayfari[3]

[1] PhD student, Department sport management, Faculty of sport science, University of Mazandaran, Babolsar, Iran. a.sajedi22@umail.umz.ac.ir

[2] Professor, Department sport management, Faculty of sport science, University of Mazandaran, Babolsar, Iran. email: m.razavi@umz.ac.ir (Corresponding author)

[3] Associate professor, Department sport management, Faculty of sport science, University of Mazandaran, Babolsar, Iran. Mkalateh@umz.ac.ir

Abstract

A city's design should bring about balance in all the social, economic and bioenvironmental needs of the society. The present study offers a paradigmatic model for a sports city's design requirements. The study uses the grounded theory method of research. Interviews were made with 18 experts in this regard. The study findings indicated that, in designing a sports city, it is necessary to pay attention to the following matters: the sports places and spaces, all the individuals' interests, causal factors, planning, sports places' adjacency to other land uses, optimal siting in respect to background factors, designing requirements, proportion between the areas' dimensions and properties, services, population, strategic factors' users, quiddity and quality of creating and designing the pivotal factor, significant components of urban life, governmental responsibilities, city's contextual construct and shape, the balance between the residential uses and public spaces, urban management of the intervening factors, tourism attractions, economic and developmental effects, society's healthcare, reduction in economic dependency, bioenvironmental stability, serving justice and enhancement of quality by the city's proper designing and the model's outcomes.

Keywords: paradigmatic model, sports city, requirements

1 INTRODUCTION

The term "sports city" has been mostly granted to such western cities as Indianapolis, Melbourne and Sheffield. Still, it can also incorporate cities in other parts like Singapore, Doha and Dubai. Sports cities introduce one of the latest growing economic events of universal sports. Sports' support by the government has also been increasingly investigated daily in recent research in the area of economy (Gratton, Shibli and Coleman, 2006). However, there is no evidence indicating the growth in the world's insight into the sports capabilities and sports cities, and, currently, research is scarce about the social interests obtained from the sports cities (SBSC), with the number of these articles being few from the perspective of planning for social interests. Sports enjoy the ability to meet the positive social benefits and offer negative outcomes (Pye, Toohey and Cuskelly, 2015).

The design of Iran's contemporary cities features undeniable multidimensional shortcomings, and their most important documented objectivity is the inappropriate space/place of the Iranian cities. It appears that the most fundamental step to correcting the current situation is the recognition and elaboration of the existing substantive/procedural nature through the investigation of the theoretical and practical literature (Maryam, Mojtaba, Reza and Ali, 2015). The role that the urban design can play in the corroboration of the cities' competitiveness in the era of globalization (hosting Olympic and universal competitions) can lead to the serious study of the globalization theories and the contextual embodiment of the global city in the following seven principles for the designing of the open urban spaces in the historical centers of Tehran: 1) improvement of the global image of the city and strengthening of the local, national and

transnational (sports tourism) stream; 2) providing information and enabling access to such information; 3) enhancing efficiency in local scale; 4) continuation of the identity, legibility and meaning; 5) elevation of liveliness and sensory richness (physical education and healthiness); 6) augmentation of safety and security; and, 7) reviving memories and motivating role-taking (Farhani, 2019).

The urban designing knowledge features two aspects: one is the substantive aspect that deals with the study and ideation about the traits related to cities' forms as the products of the urban design, and the other is the procedural aspect that focuses on the study of processes required for achieving an urban form. In other words, the urban designing process, which has to do with the methodologies in designing decision-making and procurement of the required grounds for the actualization of the decisions, constitutes part of the procedural aspect of the urban designing knowledge. The designing process is important because it significantly influences the success and actualization of the intended byproduct and makes it conditional and well-elucidated. One concern is the failure in the urban development projects. Ignoring the role of processes in rendering conditional the quality of the urban designing byproducts means negligence of the process-byproduct bond, and it can be the factor giving rise to the failure in many the projects. To more precisely perceive the concept of the urban designing process, it is necessary to pay attention to the designing process within a larger framework named "process theory," which refers to a common kind of scientific research wherein every event is viewed as the result and output of a given input. Based on the process theory, the prerequisite for acquiring similar outputs following the repetition of the process is the use of similar raw materials (Golkar, 2001).

Sports Cities Conceptualized:

Cities' naming is not exclusively limited to such a name as sports. Concepts like cultural, musical, green, and fashion cities are other forms of urban identity that recently entered the world's theoretical literature (Chalip, 2006; Smith, 2005). The modern concept of "sports cities" dates back to certain times. Examples of shaping certain regions of cities or "urban districts" to be able to welcome sportsmen and sportswomen can be traced to Olympia in,

where the first Olympic games were held in 776BC (Smith, 2010), as well as to Delphi and its smaller festival called Hellenic that was held nearly in 586BC (Valavanes or Valavanis, Hardy and Boardman, 2004). The sports cities owe their growth to the global development of professional sporting and such major sports events (MSEs) as modern Olympic games, which stadiums and installations first accommodated in Greece. Although MSEs are not deemed as prerequisites for constructing sports cities, they can play both positive and negative roles. Munich, Montreal, Athena, Delhi and Berlin are the cities with negative images of their MSEs' hosting. Apart from the reputation risks, many cities have hosted MSEs or engaged in competition with other cities, believing they can add to the city's fame by hosting MSEs. Therefore, the term "sports cities" is often completed with sports for proving an image of growth or setting the commercialization grounds within a global competition environment using a sports event development strategy (Misener and Mason, 2010).

Despite the increase in the use of the term "sports city," there is no unique definition for it, and the sports cities is a title haphazardly taken by some cities and countries. Manchester, Tunisia and Dubai are amongst the places carrying such a title. There are also emerged several other words, as well, for the description of the sports cities: "international sports villages" like Cardiff; "sports regions" like Doha; "sports poles" like Singapore; and "international sports cities" like Birmingham, Glasgow and Sheffield (Pye et al., 2015).

The term "sports city" has been necessarily applied in three different forms: as a temporary fascination, for designing a section of a city as a sports region or pole or for commercializing the entire city (Smith, 2010). The sports cities also have different goals. For instance, Manchester used a sports city approach to mitigate eastern Manchester's post-industrialization traces; Melbourne applied sports to intensively pursue an agenda of the events, and Singapore utilized sports to actively encourage the general public to participate in sports and organized physical activities. The articles on the sports city also refer to the considerable promotion of the sports cities in the gulf countries rich in oil (Bromber and Krawietz, 2013); they use sports not only for their social and political interests but also for satisfying their specific native needs. For example, Dubai's sports city emerged as a strategy in line with the

enhancement of Dubai's international position and, meanwhile, reducing UAE's economic dependency on petroleum production (City, 2014). Dubai successfully blended its real assets' expansion with the absorption of multinational companies (Smith, 2010). Doha is another Arabian sports city; it could upgrade its position by presenting itself as a means of transformation into an Arabian amusement center, and it happened to enhance the living standards and modernity to some extent in Qatar (Gratton and Preuss, 2013). Abu Dhabi possesses its sports city, "Zayd," and it forms part of the real assets and infrastructures, largely contributing to the development of a rapidly changing Abu Dhabi society (City, 2014). In the end, the sports city of Basra is another example. Despite being situated in the south of Iraq, Basra features the competency of transformation into one of the largest sports cities in the Middle East; the sports city in Basra covers a region of 585 acres in area, and it contains four stadiums (Pye et al., 2015).

The use of international expertise for developing sports cities is a growing tendency; such expertise should be envisioned as an emerging example of sports globalization. Each of these Middle Eastern specimens has been made by an array of international designers; as a specimen, the American 360 architecture cohort[1] that has finished its designs in Iraq and Saudi Arabia and Bukhtir group[2] that developed Dubai and founded an unsuccessful project in Tunisia (Pye et al., 2015).

Other groups in the US have adopted different approaches to the concept of sports cities. Indianapolis has used sports to re-commercialize the city and develop its tourism sector. Other cities in the US, like Baltimore and Cleveland, have taken advantage of the title "sports city" to reflect the proportion between sports and their urban planning strategy or as a method for empowering the main league's voting right (Chapin, 2004). It is reasoned that the term "sports city" has been substantially applied in Britain to identify huge sports industry investments (Gratton, Shibli and Coleman, 2005).

Europe's residents, as well, have called these cities titles like sports cities. The European capital of sports association, based in Italy, uses ten scales for granting annual titles like "European sports city" and "European sports town" (ACES) (Pye et al., 2015). These scales evaluate the integrity of the sports events, innovations, facilities, general public participation and governmental policies. Sportcal (2014) also offers rankings for the effects of the global sport and is essentially concentrated on hosting the sports events. Although hosting the events, especially MSEs' hosting, is not considered a prerequisite, it is a growing activity in the sports cities. Besides the importance of the events, none of these organizations has offered a clear-cut definition of the sports cities beyond the mental evaluation scales for awarding the related certificates.

Four square meters is the sports per capita suggested concerning the various types of sports centers and environments for the Iranian citizens with the consideration of the sports facilities available for the children below three years of age, children between 7 and 14 years of age, adolescents, youths and adults. In line with this, the physical education organization has set 4.5 square meters as the sports per capita. Sports per capita differs in various countries. In England, 10 square meters is the sports centers' per capita for every individual; 35 square meters is the sports per capita for every residential unit in France; 15 square meters is sports per capita in the US for every person. On average, 25 square meters is the green space and sports area per capita for every individual in the international norms; out of the above, 18 square meters have been dedicated to green space and the rest to sports playing space. The comprehensive 1968's plan prepared with an approach to Tehran's conversion into a modern city predicted an area of 71.17 square meters to be made available per capita for green surfaces, recreation and sports playing until the 1991 as its horizon. The green space per capita in Tehran has been estimated based on the 2002-2006 studies by the consultant of the second comprehensive plan equal to 10.92 square meters. The sports space per capita has also been estimated equal to 1.36 square meters. The second comprehensive plan has suggested that the green, recreation and sports space per capita should reach about 17.6 square meters, i.e., the area proposed to be made available in the first plan's horizon, but with a 30-year delay in 2021's horizon. The studies performed on the green, recreation and sports

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[1] http://360architects.com/contact   [2] http://www.bukhatir.com

space and surface area per capita in Tehran reflect the idea that there is a large gap between the existing realities and the people's vital needs regarding the sporting and recreational areas. Although the green, recreation and sports space per capita of the city have undergone an increase by six times to reach a value from 1.181 square meters in 1966 to 12.28 square meters in 2006, the conditions are very much problematic and unfavorable. Between 1969 and 1999, 145 hectares and 17 hectares were allocated respectively to green spaces and recreation and sports spaces. This recent challenge is seriously among the problems reminding about the absence of justice in the distribution of the green, open and sports spaces. In 2016, the sports space per capita was 68cm in the country (Hamid, 2017).

Since planning for sports, the city should bring about a balance between the social, economic and bioenvironmental needs of the society and, simultaneously, maximize the development of the universal sports industry; the conceptual framework investigated in this research paper provides a structure by which a pattern of sports city can be designed and examined based on the designing requirements and standards.

1. Study's Theoretical Foundations:

1.1. Sports City's Functions:

Society's Physical and Psychological Health:
The extent to which the sports city's design and planning influences physical and psychological health can be somewhat specified by its capacity to replace negative behaviors with positive lifestyle behaviors. Gehl (2010a) and Coalter (2005) have concluded that the infrastructures are of a lot of importance for the potential offering of positive behavioral changes based on their observation of the potential health interests following the creation of infrastructures enhancing the society's awareness. In addition, Gehl (2010b) realizes infrastructure is important for physical activities and Coalter (2005) observed the effect of health interests in lieu of the mere sporting interests in getting involved in physical activities. Gehl (2010b and 2011) declared his support of the pedestrians' walkways and bicycling routes as a city's participation in healthcare enhancement and reasoned that a city could succeed in becoming an example of its type by legislation encouraging active lifestyles and living habits. Coalter (2005) adopted a more special perspective about the role of sports as a conduit to the active lifestyle, and he specified healthiness as a potential sports accomplishment. Therefore, "the city's health" identified by Gehl (2010b) as a significant indicator of a livable city can be compared with the class "improvement in the physical and psychological health" proposed by Coalter (2005). This comparison can be offered in the form of "planning for the improvement in the society's physical and psychological health" within the SBSC framework.

More extensive research is being done on the effects of a healthy lifestyle on obesity, cardiovascular diseases, diabetes type II, the cost-effectiveness of the physical activity and the potential share of sports in self-esteem and self-efficacy (Roult, Adjizian, Lefebvre and Lapierre, 2014). The article also contains diverse findings on the relationship between the direct health costs stemming from sedentary lifestyles (Balletto et al., 2021) and indirect costs like workforce production and loss of economy due to absenteeism (Cadilhac et al., 2011).

The thing that is currently non-transparent and unclear is whether the sports cities are followed by more physical and psychological health interests, especially interests that cannot be made available via the other political instruments for the society or not. Smith (2009 and 2010) expressed that despite the questions about the stability, sports events (as part of the sports cities' foundation cause) can offer health befits and enhance the social welfare levels. Mason and Misener (2009) reasoned that sports and playing sports are notable catalysts enabling overcoming the problems related to health and an important political conduit to healthiness. However, sports cities are also termed economic catalysts capable of being invested in parallel to paving the way for the acceleration of the urban plans and policies (OECD, MacRury and Pounter, 2010). This saying is especially true about hosting large sports events with non-extendable timetables, infrastructural investments and improving the city image. This capability accelerates the implementation of urban plans, providing the sports cities with an opportunity to enhance the health output concerning politics. This can happen through designing an inciting sports environment and planning for open spaces and advanced public transportation means for accessing sports installations, and enhancing direct and assessable interests in favor of the individuals and society's

health through enhancing participation in sports. As a result of the causal relationships between sports and improved health, the sports cities might be indicative of cities, countries and national authorities provided with a chance to create more effective inhibitive health-deterioration policies and other positive lifestyle programs.

Therefore, the first predicate offered within the SBSC framework considers healthcare planning within two individual and social levels. The research on sports cities' planning should also seek to unveil examples in which the sports cities describe sitting behaviors. Sports cities should also exhibit evidence of a reduction in healthcare costs, and urban plans and designs should apply sports in line with the creation and improvement of the healthcare rules and regulations (Pye et al., 2015).

Economic Development and Stability:
Sports cities enjoy a large quotient of economic development, urban reconstruction and internal investment. Manchester and Indianapolis are examples that have attained success in this area. However, to make long-term accomplishments, cities rely on effective sustainability plans (Balletto et al., 2021). Gehl (2010b) has also expressed that bioenvironmental stability is a key component of a successful city. It needs a long-term approach and stable and transparent policies within its urban governance.

Coalter's perspective about the role of stability is similar to Gehl's notion, although he suggested a sport-based vista. Coalter emphasizes the importance of sports' potential role and its support of sustainable development. He claimed that it would be more likely to achieve pervasive and stable results when sports enter the vaster social issues in such areas as economic development and employment (Caolter, 2007b). He used MSEs as a possible catalyst for economic growth, internal investment and stabilization of the city's position. However, he believed that sports might cause non-uniform promulgation of short-term economic interests that can per se be followed by social alienation inside and between the communities.

It has been deduced in more articles that the economic interests stemming from sports can be poured back into society. Rompton (2004) expressed that the indirect income received by society from investments in sports may be

sufficiently considerable for use in justifying the public sports' expenses. Mason and Misener (2009) reasoned that there is a growing recognition of social development's importance in the sports events' strategies. Palmer and Richards (2010) asserted in agreement with Crompton's theory that a city's being prone to many different happenings would be followed by excitement and mobility, and this is corroborative of the thought that sports events (often derived from commercialization growth and image or economy enhancements) enjoy a meaningful social share in the cities. Additionally, Sports England (2013) defined sports' economic interests as the insertion of monetary values in areas like voluntary hygiene, education and participation (Pye et al., 2015).

Society Development:
To enjoy a positive share in the society's development, the sports city planning should be ready for meaningful social interaction at individual and social levels. Gehl (2006, 2010b and 2011) interpreted the vast concepts of "liveliness" or "live city" based on the meaningful social activities and interactions such cities can offer. When Caotler (2005 and 2007a) wrote the cluster of "sporting capability" as a means for the social capital development, Gehl (2006 and 2010b) expressed that city needs to create regions for social interactions and design suitable spaces for encouraging the public masses to attend the events and take part in discussions about them.

Smith (2010) figured out the value of the social participation enhancement using sports and reasoned that an economy needs sports cities to provide opportunities to create social capital. He expressed that the cities enjoying higher levels of social coherence are more likely to embed large events.

Crime Reduction and Society's Safety and Security:
Researchers have proved that strong theoretical deductions indicate the potentially positive effects of sports on crime reduction and prevention. To comprehend the self-competency in the area of crime reduction or prevention, sports interventions should be necessity-centered instead of product-oriented; they should be very well implemented, and they should be offered through programs capable of strengthening the individual and social development. This conceptual SBSC framework provides a means for exploring the planning sections of the sports city, and it

especially expresses the issues related to crimes and society's safety.

Jenkins and Ellis (2011) and Moesch, Birrer and Seiler et al. (2010) concluded that sports participation gives variable results regarding crime, violence and antisocial behaviors reduction. The researchers also found out that "martial" sports and "highly contacting" sports absorb participants with a high risk-taking capabilities. Jenkins and Ellis (2011) concluded that martial sports possess a notable potential for reducing violent behaviors. In general, it was reasoned that playing sports is followed by four benefits: positive communication with the society, a means for more improvement and development in cognitive qualifications and an acceptable form of healthy excitement in social terms (Jenkins and Ellis, 2011).

Education and Employment:

The sports city's position can potentially add to the society's interests by increasing the sports-originating employment capacities and enhancing the long-term economy (Balletto et al., 2021).

Gehl does not specify an educational basis for the livable city; his writings point to the need for intra-city employment. His works about the dangers of the cities' abandoned centers stem from the people's exiting from the cities in search of jobs (Gehl, 2010b). Embedding of employment as a "planning class" for the sports cities in Gehl's research has been continued but, of course, not as a part of his definition of a livable city. The simultaneous embedding of education and employment within the SBSC framework signifies a close relationship. The government has well-recognized the relationship between education and employment has been well-recognized since long ago by the governments and it can be introduced through offices like education and employment. Thus, the SBSC framework concentrates not only on the immediate creation of jobs introduced through the development of the sports infrastructures but also on the extent to which the sports city's designing enjoys opportunities for lifelong learning and the creation of safe and long-term employment.

Three examples of sports cities from various continents showcase the global relationship and applicability of the conceptual SBSC framework. The eastern side of Manchester's sports city is the first example in which the urban planning has been embedded to bring about social-regional revitalization in areas well-recognized by high rates in such indicators as numerous deprivations (Great Britain, local communities and governance, 2012), crime perpetration, unemployment, educational negligence and sociological malfunctioning. Melbourne is a city selected by the global press as the best sports city in the world in 2010 (sports business, 2010). Concentrating on sports events and the infrastructures of them, Melbourne used sports for the commercialization of a city and, in doing so, it presented examples of civil pride and multi-culture similarities. An insular and small state in Singapore (Singapore's pole of sports, 2010) is a sports city that has recently opened a six-hub sports center with the panorama of enhancing a more stable, healthier and more active community in all aspects of the participation in the entire country. Singapore displayed a transparent social aiming at integrating sports with leisure time activity, lifestyle, and business. These examples indicated that cities enjoy different planning priorities, which are assigned with different weights in the categories of the conceptual SBSC framework.

1.2. Sports' Spaces:

Sports spaces are sorts of social spaces within human residences. In sports spaces, the following functions are served:

1) Simultaneous and dense presence of the large human populations
2) The spending of the leisure time and recreation by the members of the large and metropolitan cities
3) Face-to-face communication
4) Holding sports competitions and contests between population groups in sports spaces

Human activities are the primary axis and the existential reason for the places' designing and coming into existence, and the other factors follow this primary variable. Sports spaces, grounds, and fields are considerably diverse, and it is impossible to investigate them. Still, the specifications of some sports places more frequently constructed by the municipalities in the open urban spaces and parks will follow. It is helpful to mention the characteristics of the sports places based on the contextual hierarchy (Hamid, 2017).

1.3. The necessity of Sports Spaces' Development:

In today's cities and with the expansion in technologies, the individuals' levels of sports and physical-motor activities have undergone decreases and, contrarily, their levels of mental activities and psychological pressures (depression, aggression, anxiety and so forth) have been increased; so, to overcome the problems above, the promulgation of sports through the development and construction of sports spaces would be one of the best interventions. Sports are amongst the most appropriate factors enabling the enhancement of the social levels and general culture. The shortage of recreational and sports places is among the problems of various cities considering the population scattering in various regions; this shortage can lead to social disorders (delinquency, drug addiction tendencies, crimes and so on) amongst the adolescents and juveniles. The increase in the country's population, especially the youth group's population, makes it necessary to meet this class's needs (lack of proportion between the population and sports spaces) to plan for the development of the urban sports spaces in a principled manner. Individuals need sports spaces to be constructed and developed or equipped to spend their leisure time. The increase in the number of the citizens' work hours due to the increase in the life and welfare costs results in the physical and psychological fatigue; so playing sports is envisioned as the logical and scientific solution for reducing the individuals tiredness. This can be done by the development of the sports centers and spaces. One of the most pivotal attitudes toward sustainable urban development is organizing a healthy population within the framework of healthy citizens living in a healthy environment (Hamid, 2017).

2. Study Methodology:

Since this study seeks to discover the nature of a pattern to be offered for designing a sports city, the study adopts an overall approach within a philosophical and phenomenological framework. The study method is a combination of logical reasoning and grounded theory methods.

The current research paper uses analytical techniques by Corbin and Strauss (1998) to consider concepts as the unit of analysis within the contexts of a text, such as a paragraph, a sentence or a phrase. Decomposing a text into elements carrying a message within the format of lines or paragraphs, the study tries extracting open codes following which the preliminary concepts are categorized within the format of large conceptual sets. In the axial coding stage, the primary topic is seminally determined. Then, the other topics are classified within the format of a larger cluster of causes, strategies, background factors, environmental conditions and outcomes. In this stage, each component is given a title or a label. The title, commonly termed code, should be expressive of the data contents in such a way that the researchers and the readers can largely figure out the concept of the sentences upon observing the title. In implementing this stage, the factors related to business models were collected and tabulated, and a proper title was chosen for each of them in two stages. The first stage included modifications by the researcher. The limits of each pivotal topic and the other primary topics were not determined at the onset of the analyses. The topics were subjected to revisions in the entire course of analysis. In the next stage and axial coding, the emphasis is placed on the specification of a phenomenon by considering the conditions that help the creation thereof. These conditions also incorporate the ground on which the topic is situated. The information-gathering method included semi-structured interviews with 18 sports management, urban management, and urban planning experts, as well as informed professors who had at least travelled abroad once. Snowball is the sampling method continued to the theoretical saturation in this study.

3. Study Findings:

Study data were analyzed by coding based on the systematic theorization stemming from the phenomenological analysis. Coding is a process wherein the data are conceptualized and linked to form a theory. The data analysis in this process is not done apart from the data collection and sampling. As understood from the study's plan, phenomenological theorization is based on data analyses through open, axial and selective coding.

• Interviewees Introduced:

To gather data for the qualitative section, 18 experts were interviewed. Table (1) presents the specifications of the interviewees. It is worth mentioning that interviewing process was continued from winter 2020 to the fall of 2021.

Table (1) displays the demographic characteristics of the interviewees in the qualitative section of the research. In this section, the interviewees are

described in terms of their gender, age and education.

Table 1: demographic characteristics of the interviewees

Experts and professors									
Number of interviewees	Age (years)			Work history			Education major		
	40-50	51-60	Over 60	Below 20	21-25	Over 25	Architecture	Geography and urban planning	Sports management
18	7	7	4	2	5	11	1	7	10
Interview place	Considering the special Corona Virus pandemic conditions, the interviews were held in person but virtually.								

In this section, the interviewees are categorized based on education level, work history and age and the frequency of each category is calculated. Based on the above table's information, most interviewees have studied in sports management majors, with the lowest frequency going to architecture. Additionally, the individuals below the age of 20 accounts for 11% of the study participants, the 21 to 25-year-old individuals account for 28% of them, and individuals above 25 account for 61% of the respondents. Regarding the education level, all the study participants had Ph.D. degrees. In terms of age, the 40-50 and 51-60 age ranges are identical in size, and the above 60 age group was found smaller than all.

- **Open Coding:**

In this research stage, the key concepts and points about designing a sports city were obtained based on the theoretical literature and interviews and then listed. At first, the extracted expressions, concepts and items from the theoretical literature and interviews were subjected to exact analyses and equalization (selection of more correct words and elimination of common concepts). A total of 154 items were eventually attained and organized within a checklist format for further interviews. Some of them were corrected or eliminated as also agreed by the experts.

- **Axial Coding:**

As mentioned, the codes obtained from the axial coding were subjected to free coding, and the related and similar codes were categorized together within larger sets and topics. After the preparation and regulation of the table as part of the qualitative analysis of the data obtained from

the interviews, free coding of the extracted concepts was started at a higher and more abstract level for achieving the new topics. Topic extraction or titling is a process in which the concepts are grouped under a single title because confusion may arise otherwise. Therefore, a constant comparison of the concepts was conducted once more in the form of comparisons between each concept with a prior or a next one so that a general topic can be reached. Thus, after comparing the extracted concepts, the related ones were grouped under an overall topic. Next, general titles were coined for the topics based on the existing titles through theorization based on the obtained concepts.

This way, after comparing the responses obtained from the interview, the similar responses were matched, and similar concepts were accordingly extracted from them. In the meantime, the closely similar items were merged, and 31 items were eventually grouped under the title of five secondary topics and a single primary topic.

Topic One: causal factors illuminating the necessity of creating a sports city

This topic includes the necessity of sports places, benefits of sports places' construction, competitive business advantage, general public's interests in urban design, non-centralization of all the sports places in one location, making sports' playing pervasive and cheap, creation of specialized towns for every sports field.

Topic Two: strategic factors elucidating the necessity of sports city's creation

This topic includes the identification of the frameworks and standards, designing of sports city, recognizing the sports city dimension and properties, consideration of access to sports

places, and the proportion between the area and services and population and the users.

Topic Three: background factors designating the necessity of sports city's creation

It includes planning based on the facilities and budgets, social and economic effects of the sports places, adjacency of the sports places to the other land uses in the sports spaces, creation of sports spaces with regards to children and older adults, optimal siting of the sports places and so forth.

Topic Four: intervening factors indicating the necessity of sports city's creation

This topic includes the government's responsibility for the sports places and spaces, consideration of the region and the entire city's contextual construct and shape when designing a sports city, balancing the residential land uses and the public spaces like the sports places, the necessity of paying attention to the cultural, economic and social conditions when designing a city and necessity of enhancing the position of the municipalities in urban management.

Topic Five: pivotal (phenomenological) factor denoting the necessity of a sports city's creation

This topic incorporates the quiddity and quality of a sports city's creation and designing

Topic Six: consequential factors connoting the necessity of a sports city's creation

This topic encompasses facilities enhancing tourism absorptions according to the economic-development effects thereof, society health's enhancement and social harms' reduction, decrease in economic dependencies on the other resources, creation of safe and proper sports spaces, augmentation of bioenvironmental stability, creation of appropriate and fascinating sports cities and camps, creation of sports-specific paths for various age groups, creation of spaces capable of accommodating local and native sports and supply of justice and quality in designing the city. It is worth mentioning that the secondary and selective codes obtained in this stage were confirmed by five experts to be applied to delineate a paradigmatic model.

- **Selective Coding:**

Selective coding establishes relationships between the topics (generated in the axial coding stage). This is usually done based on the paradigm's pattern, and it helps theoreticians easily finish the theorization process. The essence of relating in axial coding is the expansion of one of the topics.

Table 2: axial coding of the topics extracted from the interview

Selected codes	Axial codes	Primary topic
The necessity of creating sports places	Causal factors	
Paying attention to the benefits of sports places' creation		
Acquisition of competitive business advantage		
Consideration of all of the individuals' interests in urban designing		
Non-centralization of the sports places in one place		
Making sports' playing pervasive and cheap		
Creation of sports places for each specific sport field		
Identification of the frameworks and standards of sports city's designing	Strategic factors	
Recognition of the sports city's dimensions and properties		Sports city's designing
Consideration of access to sports places		
Consideration of the proportions between the area and services and population and users		
Planning based on facilities and budget	Background factors	
The adjacency of the sports places to the other land uses in the sports spaces		
Optimal siting of the sports places		

Creation of sports spaces for older adults and children	Intervening factors
Identification of the important components of urban life	
Government's responsibility for the sports spaces and places	
Consideration of the entire city and region's contextual context and shape in urban designing	
The necessity of enhancing the position of municipalities in urban management	
Bringing about the balance between the residential land uses and public spaces like sports places	
Necessary consideration of the social, economic and cultural conditions in designing a city	
Quiddity and quality of creating and designing sports city	Pivotal (phenomenological) factors
Absorption of the sports tourists considering the economic and developmental effects thereof	Consequential factors
Enhancement of the society's health and reduction of the social harms	
Supply of justice and quality to the urban designing	
Reduction in the economic dependency on the other resources	
Creation of safe and proper spaces for playing sports	
Augmentation of the bioenvironmental stability and sustainability	
Creation of appropriate and attractive towns and camps	
Creation of sports-specific routes for various age groups	
Promotion of the native and local sports	

In the selective coding stage of the present research, the relationships between the primary topics and the other topics were determined. In this stage, the primary and secondary classes were linked so that theoretical concepts could be attained for offering a model in line with creating a sports city. These measures helped the researcher integrate the concepts obtained in the open and axial coding stages and use them to offer a model or a framework for the sports city. To do so and within the format of a qualitative research method, the paradigm proposed by Corbin and Strauss (2007) was applied to identify the role of the extracted topics within the format of the paradigmatic model, which contains the followings:

Diagram (1) demonstrates the method of establishing relationships between the various topics identified within the format of the paradigmatic pattern
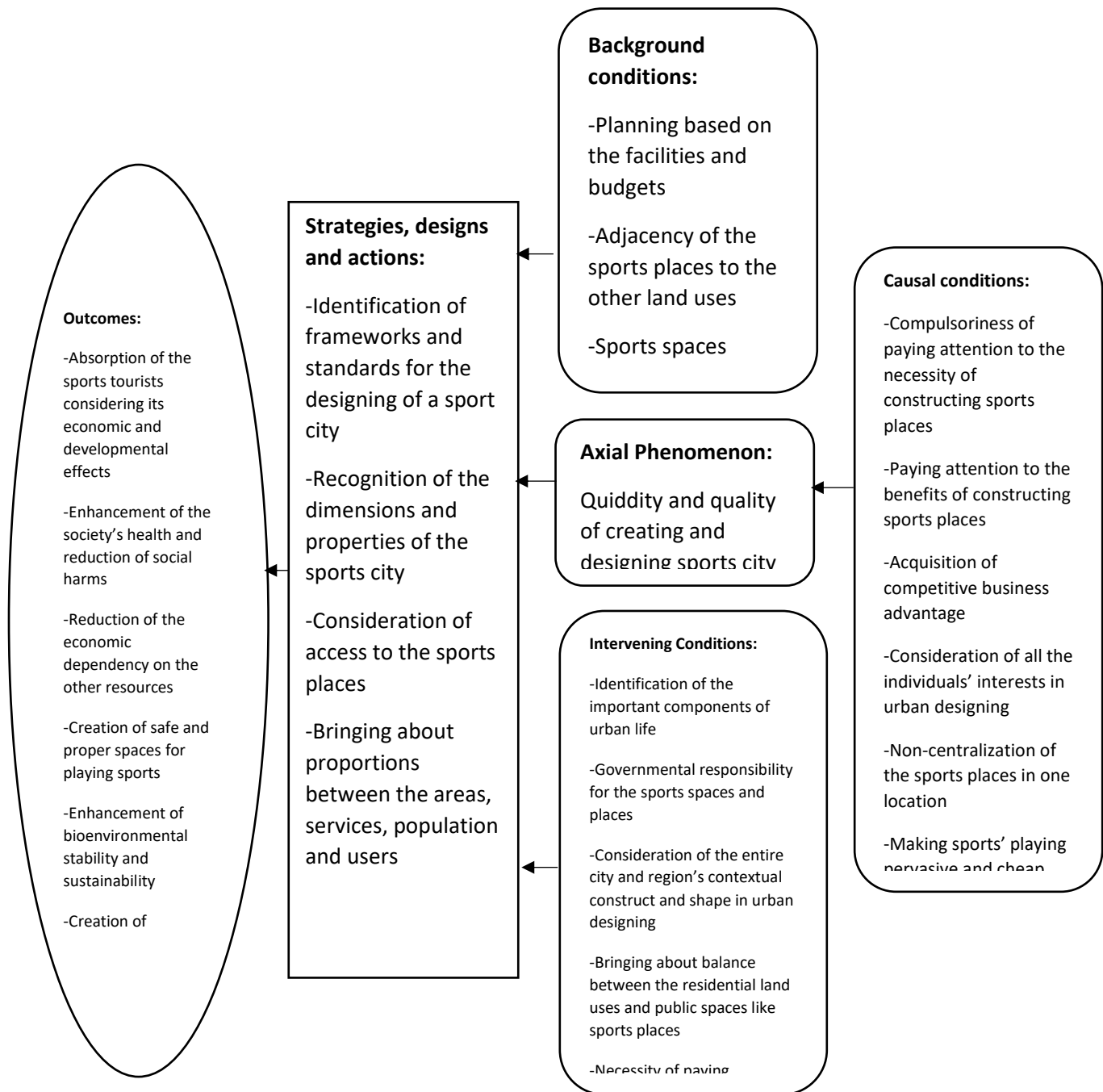
Background conditions:

-Planning based on the facilities and budgets

-Adjacency of the sports places to the other land uses

-Sports spaces

Strategies, designs and actions:

-Identification of frameworks and standards for the designing of a sport city

-Recognition of the dimensions and properties of the sports city

-Consideration of access to the sports places

-Bringing about proportions between the areas, services, population and users

Causal conditions:

-Compulsoriness of paying attention to the necessity of constructing sports places

-Paying attention to the benefits of constructing sports places

-Acquisition of competitive business advantage

-Consideration of all the individuals' interests in urban designing

-Non-centralization of the sports places in one location

-Making sports' playing pervasive and cheap

Axial Phenomenon:

Quiddity and quality of creating and designing sports city

Intervening Conditions:

-Identification of the important components of urban life

-Governmental responsibility for the sports spaces and places

-Consideration of the entire city and region's contextual construct and shape in urban designing

-Bringing about balance between the residential land uses and public spaces like sports places

-Necessity of paying

Outcomes:

-Absorption of the sports tourists considering its economic and developmental effects

-Enhancement of the society's health and reduction of social harms

-Reduction of the economic dependency on the other resources

-Creation of safe and proper spaces for playing sports

-Enhancement of bioenvironmental stability and sustainability

-Creation of

Diagram (1): the study's paradigmatic pattern based on the study's findings

4. Conclusion:

Factors influencing the paradigmatic model are presented below, each of which will be explained briefly.

Background Conditions:

- Programming based on the facilities and budget
- Adjacency of the sports places to the other land uses
- Creation of sports spaces
- Creation of sports spaces for the older adults and children
- Optimal siting of the sports places

Under the title of this topic, factors like the method of using the cities and zoning the residential, industrial, business and administrative areas, installations and urban equipment and general urban requirements, communication lines and urban passageways network, the area required for the creation of installations and public equipment, regions wherein the buildings are constructed or being renovated, and the corresponding priorities as well as protection of the historical buildings and so forth are determined. The criteria and regulations related to all of the cases are specified and executed so that the implementation of urban development plans can be feasible based on the previously made plans. Moreover, it is through the sports places' siting that the mistaken selection of the sports places' construction site and the subsequent spending of extravagant amounts of money imposed mostly on the sports managers and the officials involved in the construction of sports installations can be prevented.

Causal Conditions:

- Compulsoriness of paying attention to the necessity of sports places' construction
- Paying of attention to the benefits of sports places' construction
- Acquisition of competitive business advantage
- Consideration of all the individuals' interests in urban designing
- Non-centralization of the sports places in one locality

- Making playing sports cheap and pervasive
- Creation of sports-specific cities for all of the sports fields

The general and public usages of the places are not well serving the citizens' needs in many of the large cities due to high population density, lack of organization in the proper establishment of the uses and ignorance of their access paths. This is more exacerbated in the metropolitans and, especially, the land uses facing increasing daily demands. In between, sports spaces are enumerated somehow amongst the social-residential spaces. In recent years and due to the rapid growth in urbanization and lack of comprehensive management plans in the urban system, sports places and spaces like the other urban services centers have encountered numerous problems. The situation's improvement has rendered the responsibility of the urban planners heftier, and they are presently required to find a response to this large number of inconsistencies. Iran's management and planning organization has divided land use in its comprehensive service plans into 17 land uses, with sports land use being one. Therefore, the creation of sports spaces, including the creation of sports cities, is amongst the most significant services that the government of each country can offer on a national level.

Strategies, Plans and Actions:

- Identification of the frameworks and standards of the sports city's designing
- Recognition of the sports city's dimensions and properties
- Consideration of the access routes for the sports places and bringing about proportions between the area, services, population and users

High quality and proper designing of the sports cities would have a large deal of effect on the sports educational programs, exercising, holding and hosting universal competitions, upbringing and rearing of the sports talents at the national level and successful presence of the national athletes in the competitions and acquisition of regional, national and

international ranks and championships and, also, attracting of more spectators. Therefore, the construction of the sports places and spaces should match the conditions and standards in which all the various grounds of the sports-specific rules and regulations, safety and security and architectural and engineering principles of constructing and equipping are considered (Kim and So, 2012).

Axial Phenomenon:

- Quiddity and quality of creating and designing sports city

Sports cities are among the essential hardware segments in physical education at national and regional levels. Their optimal design is among the critical duties of urban planners and decision-makers. Designing is an activity that identifies the spatial and non-spatial talents of territory and provides the possibility of choosing the proper place for certain land uses (Adeleh, Hasan, Reza and Omid, 2016).

Intervening Conditions:

- Identification of the important components of urban life
- Government's responsibility for the sports places and spaces
- Consideration of the entire city and the region's contextual construct and shape in the urban designing
- Bringing about a balance between the residential land uses and public spaces such as sports places
- The necessity to pay attention to the cultural, economic and social conditions
- The necessity of enhancing the position of the municipalities in urban management

Intervening environmental conditions include bioenvironmental factors, social factors, economic factors, cultural factors, legal factors, political factors, institutional factors, supervisory factors and administrative factors, the proper consideration of which is effective in the creation of the requirements and regulations related to the sports city's model of both designing and construction.

Outcomes:

- Absorption of sports tourists according to its economic and developmental effects
- Society's health and reduction of social harms
- Reduction of economic dependency on the other resources
- Creation of safe and proper spaces for sports
- Enhancement of the bioenvironmental sustainability and stability
- Creation of proper and attractive towns and camps
- Creation of sports-specific routes for various age groups
- Creation and promotion of native and local sports
- Supply of justice and quality in urban designing

The creation of sports cities leads to the urban revitalization and enhancement of cities' livability, which is closely interlaced with the bioenvironmental stability and sustainability and the creation of justice in upgrading the social interests. The sports city's design augments the long-term and stable accomplishments opportunity and improves the production of a vaster spectrum of direct and indirect economic interests. The sports city's model can better perceive the relationship between social and economic sports participation. It possesses the capabilities required for posing conceptual, scientific and politics-related questions and provoking scientific and political discussions regarding the social effects' considerations in planning for sports city.

To improve the perception of the potential social interests of the sports city, the prospective research should compare the potential interests of the sports cities in a spectrum of national and cultural concepts. Although it is still deemed a substantially western phenomenon, the past decade witnessed an increasing daily growth in the construction of sports cities in several cities and regions of the world. Resultantly, the domain of the political and social environments exposed to the concept of sports cities has been considerably expanded. Based

thereupon, the research opportunities have also undergone growth in this area.

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