

Identification of Factors Influencing the Development of Athletics in Iraq

Received: 2024-11-29

Vol. 7, No.2.2026, 1-19

Accepted: 2025-12-23

Murtadha Abdalabas Diri
Alasadi¹

Abbas Naghizadeh Baghi^{2*} 
Nasrin Azizian Kohan²
Mehrddad Moharramzadeh²

¹ Ph.D. Student of Sport
Management, University of
Mohagheh Ardabili, Ardabil,
Iran

² Professor of Sport Management,
University of Mohagheh
Ardabili, Ardabil, Iran

***Correspondence:**

Abbas Naghizadeh Baghi,
Professor of Sport Management,
University of Mohagheh
Ardabili, Ardabil, Iran

Email: a.naghizadeh@uma.ac.ir

ORCID : [0000-0001-7231-7857](https://orcid.org/0000-0001-7231-7857)

DOI:

[10.22098/rsmm.2025.18927.1524](https://doi.org/10.22098/rsmm.2025.18927.1524)

Abstract

Purpose: Athletics, as one of the most fundamental disciplines in sport, plays a significant role in promoting public health, identifying and nurturing talent, and enhancing countries' international standing. Nevertheless, the development of this sport in Iraq faces various challenges. The purpose of the present study was to identify the factors influencing the development of athletics in Iraq.

Method: This research employed a qualitative approach, using qualitative content analysis and thematic analysis techniques. Participants included coaches, federation officials, and university faculty members who were selected through purposive sampling. Data were collected through semi-structured interviews, and theoretical saturation was achieved after conducting 20 interviews. To ensure the trustworthiness of the study, criteria such as credibility, transferability, confirmability, and test-retest reliability were applied.

Results: The data analysis process yielded 82 open codes, which were subsequently organized into 17 sub-themes and ultimately classified into seven overarching themes. These major themes included: managerial and organizational structure factors; financial and economic factors; infrastructural and technical factors; human resources and training factors; support and talent identification factors; cultural and social factors; and environmental and demographic factors.

Conclusion: The findings indicated that each of these factors can play a decisive role in either advancing or constraining the development of athletics in Iraq. Accordingly, it is recommended that sport policymakers adopt strategies such as restructuring managerial systems, improving financial provision mechanisms, investing in infrastructure, strengthening talent identification systems, and promoting the culture of fundamental sports to facilitate the sustainable development of athletics in Iraq.

Keywords: Athletics, Sport Development, Sport Infrastructure, Human Capital, Talent Identification

Copyright

©2026 by the authors. Published by the University of Mohagheh Ardabili. This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY 4.0) <https://creativecommons.org/licenses/by/4.0>



Introduction

Athletics is regarded as one of the oldest and most fundamental sport disciplines worldwide. With its diverse range of events including sprints, endurance running, jumps, and throws—it plays a central role in fostering both elite and mass sport development (Coakley, 2014). Athletics also provides a unique platform for talent identification, the enhancement of physical and mental health, and the promotion of social cohesion. Owing to its minimal requirements for complex equipment and its adaptability to various environments, athletics offers an exceptional opportunity for sport development in developing countries, including Iraq (Acquah-Sam, 2021).

With a predominantly young population and considerable geographical diversity, Iraq possesses substantial potential for the advancement of athletics. The country's population of over 40 million nearly 60 percent of whom are under the age of 25—constitutes a fertile ground for nurturing athletic talent. In such a context, athletics can contribute to strengthening national identity, increasing youth participation, and supporting the country's social and cultural development amid ongoing political and economic challenges (Alfahham & Asefi, 2025). However, multiple barriers have hindered the full realization of this potential. These obstacles can be broadly classified into three main categories: managerial and financial challenges; infrastructural and human-resource challenges; and socio-cultural challenges (Plenderleith, 2013). This typology provides a useful framework for conducting a comprehensive assessment of the current situation and identifying pathways for development.

In the domain of management and financial resources, weak sport governance and inefficient resource allocation represent some of the most critical barriers to the development of athletics in Iraq. These issues are further exacerbated by the absence of effective talent identification programs and the lack of

sustainable financial support (Mthombeni et al., 2024). Heavy reliance on government funding combined with international economic sanctions and currency fluctuations has made the procurement of modern equipment and engagement in international collaborations increasingly difficult (Elbargathi & Al-Assaf, 2019). Political and security instability has also negatively affected the financial and managerial landscape of sport by increasing the risks associated with hosting sport events and disrupting training camps and international competitions (Darnell, 2023). These conditions have significantly constrained long-term planning and the sustainable implementation of development initiatives.

In the domain of infrastructure and human resources, the scarcity of standard tracks, professional training facilities, modern equipment, and specialized educational centers has severely constrained the development of elite athletes and the organization of high-quality competitions (Mthombeni et al., 2024). Such limitations are commonly observed in many developing countries, and Iraq is no exception. The shortage of qualified coaches and the absence of continuous training programs have further hindered the cultivation of an effective human-resource base (Shadmehr, 2012). The lack of standardized coaching education systems has resulted in many current coaches lacking up-to-date knowledge and the competencies required to train athletes for international-level performance. Moreover, insufficient attention to youth categories and the absence of school-based talent identification programs have left a substantial portion of Iraq's young population's athletic potential untapped.

From a socio-cultural perspective, the relatively low status of athletics compared with team sports—particularly football—has reduced public participation and diminished the interest of media outlets and sponsors (Shadmehr, 2012). Limited media coverage and the public's

insufficient awareness of the benefits of athletics have further restricted opportunities for growth and development (Acquah-Sam, 2021). The concentration of sport facilities and training centers in major cities has eliminated equal opportunities for athletes in disadvantaged or peripheral regions, thereby intensifying regional inequalities. Additionally, the absence of a robust sport marketing culture has impeded the attraction of private-sector sponsorship and reinforced dependence on government funding (Shane et al., 2014). These socio-cultural conditions have posed significant challenges to the sustainable development of athletics. Restricted media visibility not only limits public recognition of athletics champions but also diminishes young people's motivation to engage in the sport (Moscoso Sanchez et al., 2018).

Athletics is among the earliest sport disciplines to have been featured in both the ancient and modern Olympic Games and has consistently held a central position in international competitions (Goetz, 2014). Consequently, the development of this discipline carries not only athletic significance but also symbolic and cultural dimensions at the global level. Successful participation in international athletics events can contribute to enhancing a country's standing on the world stage. At the regional level as well, countries such as Iran and Qatar have improved their competitive status and earned valuable medals through sustained investment in infrastructure and the implementation of systematic talent development programs. Despite its young population and diverse geographical and climatic conditions, Iraq has not yet succeeded in fully leveraging these opportunities. Regional experiences suggest that with strategic planning and targeted investment, achieving international success is attainable.

Moreover, athletics can serve as an effective platform for increasing women's participation in sport and promoting gender equality (Schulenkorf, 2012). In societies where cultural

and social barriers restrict women's involvement in sport, the individual nature of athletics and the variety of its events can offer suitable opportunities for women to engage. Such participation not only contributes to strengthening social capital but also provides positive role models for future generations. Additionally, due to its inclusive nature and relatively low cost, athletics holds considerable potential for improving physical and mental health and fostering economic development through attracting investment and sport tourism (Acquah-Sam, 2021). In a country like Iraq, which faces multiple social and economic challenges, athletics can serve as an effective tool for enhancing national cohesion and improving overall quality of life.

A review of the existing literature indicates that numerous international and regional studies have examined various dimensions of athletics development. At the global level, Acquah-Sam (2024) emphasized that sustainable sport development in developing countries requires continuous investment, strong institutions, and effective governance. These findings align with the results of Al-Zubaidi et al. (2024) in Iraq, who identified weak managerial structures and resource shortages as critical obstacles. Regarding infrastructure, the study by Wang et al. (2024) demonstrated that uneven development of sport facilities has a direct impact on overall sport advancement, highlighting the need to address geographical disparities and strengthen standardized infrastructure. From the perspective of education and human resources, Alkhafaji et al. (2022) found that standardized training programs have a significant positive effect on coaches' performance. Likewise, Thomas et al. (2019) reported that early supportive environments and strong social support networks are influential in the development of elite athletics athletes.

At the national level, Jabry et al. (2024) underscored the importance of scenario-based planning for professional sport development in

Iraq. Their study identified financial restructuring, maintaining gender equity, and strengthening infrastructure as core components. In a similar vein, Al-Zaidawi et al. (2025) proposed a five-dimension model for the development of student sport in Iraq, emphasizing the role of diverse stakeholders and developmental processes. Collectively, these studies indicate that sport development in Iraq requires a multidimensional approach and the active engagement of multiple stakeholders. However, the existing literature reveals a clear research gap: there is a notable shortage of qualitative studies specifically examining the factors influencing athletics development in Iraq. Most prior research has focused on general aspects of sport or macro-level managerial issues, with limited attention given to the interplay among managerial, infrastructural, and socio-cultural factors in the specific context of athletics.

This study distinguishes itself by simultaneously focusing on three major domains—management and financial resources, infrastructure and human resources, and socio-cultural factors—and by analyzing their interactions within a localized and qualitative framework. Moreover, through the use of thematic analysis, the study seeks to provide a deeper understanding of the complexities surrounding athletics development in the unique context of Iraq. Thus, conducting research that adopts an in-depth, data-driven approach to present a realistic portrayal of the current situation constitutes both a scientific and practical necessity. The findings of this study can serve as a basis for formulating national-level athletics development policies, designing effective talent identification programs, improving coach education initiatives, and enhancing international collaborations. They can also assist policymakers and sport managers in making more informed decisions by offering clearer insight into existing barriers and opportunities. In this way, the study not only addresses the

existing academic gap but also offers a conceptual framework for evidence-based decision-making within Iraq's sport sector. In line with these considerations, the primary aim of this research is to identify the factors influencing the development of athletics in Iraq using a qualitative approach and thematic analysis.

Materials and Methods

This study was designed to identify the factors influencing the development of athletics in Iraq. In terms of its nature, the research is qualitative, and in terms of its purpose, it is exploratory. Given the characteristics of the research topic, the qualitative approach enabled an in-depth exploration of stakeholders' experiences, perceptions, and understandings. Thematic analysis was employed to analyze the data. The research population included athletics coaches, officials and experts from the Iraqi Athletics Federation, university faculty members in physical education and sport sciences, and international athletics referees. These individuals were identified as key informants due to their direct experience and specialized knowledge regarding athletics in Iraq. A purposive, criterion-based sampling method was used, and the sampling process continued until theoretical saturation was reached. In this study, theoretical saturation occurred after 18 interviews, meaning that no new codes or themes emerged in the final interviews, and the information provided by participants overlapped with previously collected data. To ensure data adequacy, two additional interviews were conducted, resulting in a total of 20 participants. The inclusion criteria for participation were as follows: (1) a minimum of five years of professional experience in athletics; (2) possession of an academic degree in physical education and sport sciences or a recognized coaching certification in athletics; (3) sufficient expertise and in-depth knowledge relevant to the research topic; and (4) willingness and informed consent to voluntarily participate in the study. The final

sample consisted of eight athletics coaches (four youth-level coaches and four national team coaches), five officials and experts from the Iraqi Athletics Federation, four university faculty members in physical education and sport sciences, and three international athletics referees. This diversity within the sample enabled the collection of comprehensive and multi-perspective insights.

The primary data collection instrument was the semi-structured interview. Prior to conducting the interviews, an interview guide consisting of key and central questions was developed. These questions were designed based on a review of the relevant literature, the objectives of the study, and consultations with the supervisory and advisory faculty members. To ensure content validity, the interview guide was reviewed by five experts in sport management and qualitative methodology. These experts included two university faculty members specializing in sport management, one qualitative methodology specialist, and two professionals from the Iraqi Athletics Federation. After receiving their feedback and incorporating the recommended revisions, the final version of the interview guide was completed. Examples of the core interview questions included: How do you assess the current state of athletics infrastructure in Iraq? What is the role of media and advertising in the development of athletics in Iraq? What are the major managerial and financial challenges in advancing athletics in the country? How do cultural and social factors influence the development of this sport? These questions served as guiding prompts, and during the interviews, follow-up and probing questions were asked in accordance with participants' responses. Before each interview, the study's objectives and procedures were explained clearly to the participants. Oral informed consent was obtained from all interviewees for their voluntary participation and for audio recording of the sessions. Participants were assured that they could withdraw from the

study at any time without any consequences. To protect confidentiality and privacy, all identifying information was replaced with numerical codes, and no names were mentioned in any reports. The audio files were securely stored and accessible only to the research team. Participants were also informed of their right to access the final research findings. These ethical considerations enhanced participant trust and improved the quality of the collected data. The interviews were conducted in person between April and September 2025 at locations agreed upon by the participants, including office settings, universities, the Athletics Federation, and training facilities. Each interview began with the researcher's introduction, an explanation of the study's objectives, and the collection of demographic information. Subsequently, the core questions were posed, and each session concluded with an open-ended question such as: "Is there any important point that has not been addressed?" The duration of each interview ranged from 20 to 35 minutes. To ensure accurate data capture, all interviews were audio-recorded with prior consent, and concurrent note-taking was performed. After data collection, the analysis process followed Braun and Clarke's (2006) six-phase thematic analysis framework. MAXQDA software was used to facilitate the analysis and organization of the qualitative data. This software provided robust tools for code management, theme development, and systematic qualitative analysis.

To ensure the quality and trustworthiness of the findings, Lincoln and Guba's (1985) evaluative framework was employed. This framework encompasses three key criteria: credibility, transferability, and dependability. Multiple strategies were implemented to enhance the credibility of the findings. To assess the reliability of the data analysis, the inter-coder agreement method was applied. For this purpose, a doctoral student in statistics with experience in qualitative data analysis was invited to serve as the second coder. After

training this research collaborator in coding procedures and techniques, three interviews were randomly selected (Interviews 4, 9, and 16) and independently analyzed by both coders. In this approach, codes identified by both

coders were classified as “agreements,” whereas codes that differed were categorized as “disagreements.” The level of agreement between the two coders was calculated using the following formula:

$$\text{Reliability percentage} = (2 \times \text{number of agreements} / \text{total number of codes}) \times 100$$

Table 1. Results of Inter-Coder Reliability

Interview Number	Total Codes	Number of Agreements	Number of Disagreements	Reliability Percentage
4	15	7	3	93.33
9	13	6	3	92.30
16	17	7	4	82.35
Total	45	20	10	89.32

As shown in Table 1, the total number of codes identified by both coders was 45, with 20 agreements and 10 disagreements. The overall reliability exceeded 89 percent. Given that this value is above the 60 percent threshold, the

dependability and stability of the coding process were confirmed and deemed acceptable. This result indicates that the data analysis was conducted with a satisfactory level of precision and consistency.

Results

Table 2 provides a brief description of the demographic characteristics of the participants, including age, gender, and

professional role. The sample consisted of 20 experts in the field of athletics in Iraq, selected from various stakeholder groups.

Table 2. Participant Characteristics

No.	Gender	Age	Role
1	Male	45	Athletics Coach
2	Male	42	Athletics Coach
3	Female	38	Athletics Coach
4	Male	40	Athletics Coach
5	Male	35	Athletics Coach
6	Female	32	Athletics Coach
7	Male	36	Athletics Coach
8	Male	34	Athletics Coach
9	Male	50	Director of Athlete Training and Development, Federation
10	Female	48	Director of Competitions and Planning, Federation
11	Male	46	Secretary of Talent Identification Committee, Federation
12	Male	44	Expert in Infrastructure and Development, Federation
13	Female	42	Coordinator of Leagues and Youth Competitions, Federation
14	Male	55	University Faculty Member
15	Female	55	University Faculty Member
16	Male	48	University Faculty Member
17	Male	52	University Faculty Member
18	Male	40	International Athletics Referee
19	Female	38	International Athletics Referee
20	Male	41	International Athletics Referee

During the data analysis process using thematic analysis, the research identified 80 open codes, which were subsequently organized into 15 sub-themes. These sub-themes were ultimately grouped into four main themes: 1) economic and

infrastructural factors, 2) educational and talent development factors, 3) socio-cultural factors, and 4) managerial and policy-related factors. Notably, the sub-themes were derived directly from the interview transcripts through repeated reviews by the

researchers, while the main themes were conceptual relationships among the sub-themes formed based on the thematic and themes.

Table 3. Sample Coding Derived from One of the Interviews

Interview Excerpt	Identified Codes
“The presence of standard tracks and adequate training equipment, along with easy access to sports halls and athletic facilities across different regions, can accelerate the development of athletics and foster talent.”	<ul style="list-style-type: none"> – Level of infrastructure standardization – Accessibility of training facilities – Geographic distribution of sports facilities
“Continuous educational programs for coaches and referees, supported by the transfer of knowledge and experience across different levels, play a critical role in enhancing instructional quality and advancing athletics development.”	<ul style="list-style-type: none"> – Quality of coaching and referee training – Effectiveness of continuous education programs – Knowledge and experience transfer across generations

As demonstrated above, initial coding was conducted by identifying key factors influencing the development of athletics directly from the interview texts. This approach aligned closely with the primary aim of the study.

Using the thematic analysis approach, the study generated 82 open codes, which—after organizing and consolidating similar codes—were classified into 17 sub-themes. These sub-themes were ultimately grouped

into 7 overarching main themes. It is noteworthy that the sub-themes were extracted directly from the interview transcripts after multiple rounds of review by the researchers, whereas the main themes were developed based on the conceptual and thematic relationships among the sub-themes. Table 4 provides a comprehensive overview of the open codes, sub-themes, and main themes.

Table 4: Open Codes, Sub-Themes, and Main Themes

Open Codes	Sub-Themes	Main Themes
1. Quality of federation performance	Managerial structure and efficiency	Managerial Factors and Organizational Structure
2. Financial and administrative transparency		
3. Management accountability and transparency		
4. Level of expertise in sports management		
5. Coordination among sports institutions		
6. Quality of strategic planning	Institutional support and policymaking	Managerial Factors and Organizational Structure
7. Stability of federation policies		
8. Attention from the Ministry of Youth and Sports		
9. Level of governmental support for individual sports		
10. Existence of performance indicators		
11. Influence of national policies on sports	Financial resources and budgeting	Financial and Economic Factors
12. Adequacy of financial resources		
13. Budget allocated to athletics		
14. Resource distribution among different sports		
15. Dependency on governmental funding		
16. Diversification of funding sources		
17. Planning for sustainable financing		
18. Timely provision of equipment	Provision of equipment and resources	Financial and Economic Factors
19. Access to modern equipment		
20. Influence of economic conditions on equipment imports		
21. Cost of specialized equipment		
22. Domestic production of sports equipment		
23. Private-sector investment	Marketing and sponsorship	Financial and Economic Factors
24. Development of sports marketing culture		
25. Sponsor acquisition programs		
26. Revenue generation from competitions	Physical infrastructure	Physical and Technical
27. Adequacy of standard tracks		
28. Quality of sports facilities		

29. Access to indoor halls			
30. Availability of specialized training centers			
31. Maintenance of facilities			
32. Access to modern training equipment	Equipment and technology		
33. Access to advanced sports technologies			
34. Performance analysis systems			
35. Precision measurement equipment	Geographic distribution of facilities		
36. Balanced distribution of facilities			
37. Access to facilities in peripheral areas			
38. Geographic coverage of tracks			
39. Equity in resource distribution	Human capital and technical expertise	Human Resources and Training Factors	
40. Number of qualified coaches			
41. Technical and tactical knowledge of coaches			
42. International experience of referees			
43. Number of specialists within the federation			
44. Retention of elite coaches and experts			
45. Continuous training programs			Quality of training systems
46. Specialized professional training			
47. Access to international courses			
48. Knowledge and experience transfer across generations			Support for human resources
49. Practical workshops for coaches			
50. Level of support for coaches			
51. Salaries and incentives for coaches			
52. Integrated support for athletes			
53. Sports medicine services			
54. Psychological support			
55. Sports nutrition programs			
56. Stable employment opportunities	Talent identification and grassroots development	Talent and Support Development Factors	
57. School talent identification programs			
58. Attention to school sports			
59. Specialized training centers for youth			
60. Attention to various age groups			
61. Level of expertise among physical education teachers			
62. Regular domestic competitions	Competitive opportunities and interactions		
63. Talent discovery tournaments			
64. Collaboration with international federations			
65. Participation in international competitions			
66. Friendly matches with neighboring countries	Cultural factors and public awareness	Cultural and Social Factors	
67. Public awareness of athletics			
68. Status of individual sports in public culture			
69. Public attention distribution across sports			
70. Promotion of foundational sports			
71. Media coverage of athletics competitions	Role of media and social support		
72. Media advertising			
73. Social support for athletics			
74. Successful media role models			
75. Live broadcasting of competitions			
76. Climatic conditions for outdoor training	Environmental and climatic factors	Environmental and Demographic Factors	
77. Infrastructure adaptation to climate			
78. Impact of temperature on training	Demographic and motivational potential		
79. Youth population potential			
80. Athlete motivation			
81. Local coaches' motivation for talent discovery			
82. Women's participation in athletics			

As illustrated, the factors affecting the development of athletics in Iraq are

categorized into seven main themes: managerial and organizational structure factors, financial and economic factors, infrastructural and technical factors, human resource and training factors, support and talent development factors, cultural and social factors, and environmental and demographic factors. These themes are supported by 17 sub-themes and 82 open codes, reflecting the multifaceted and complex nature of the factors influencing

athletics development in Iraq.

Figure 1 presents the final model of the study, in which the central category—factors influencing athletics development—is positioned at the core, surrounded radially by the seven main themes. This model illustrates the conceptual interrelationships among the various dimensions affecting athletics development in the Iraqi context.

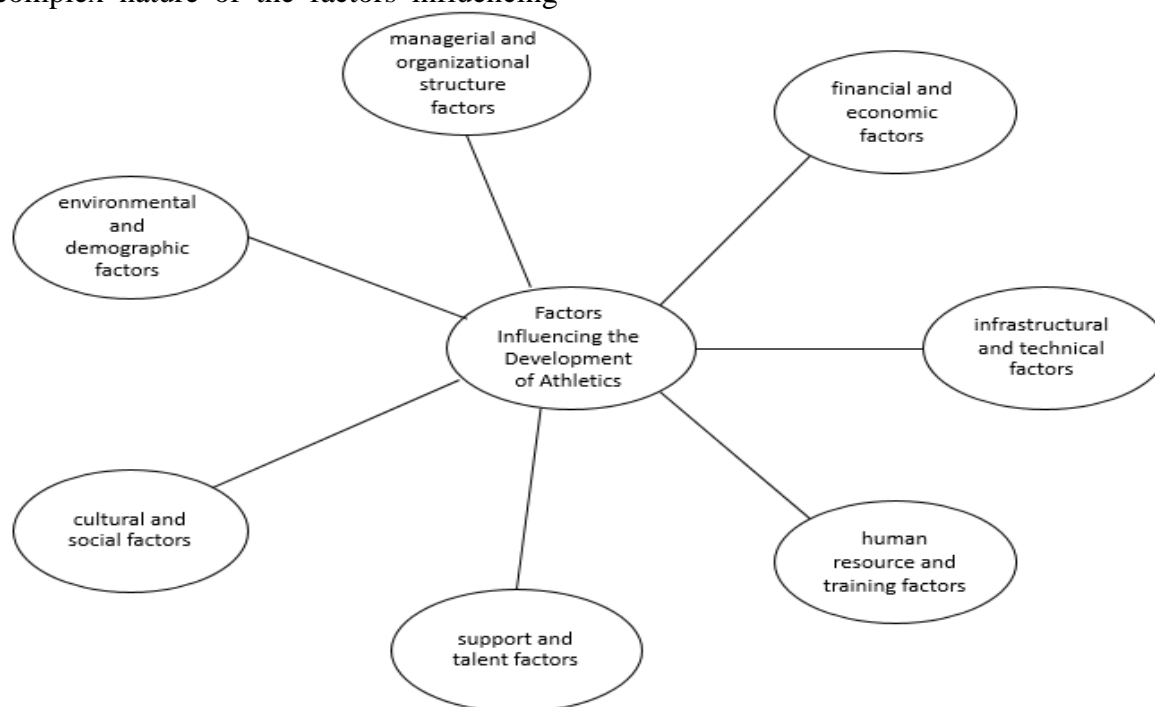


Figure 1. Factors Influencing the Development of Athletics in Iraq

To enhance the clarity of the findings, each main theme is presented below along with illustrative participant quotations.

The results indicated that the quality of management and organizational structures plays a fundamental role in the development of athletics. Many participants emphasized the importance of transparency, managerial expertise, and policy stability. As one federation official noted: “When we do not have clear and stable programs, we cannot expect long-term support from investors” (Participant 9). This perspective was echoed by one of the coaches, who stated: “When we do not know what budget we will have next year, we cannot plan effectively” (Participant 2). A faculty member also stressed: “The level of managerial expertise and transparency in

decision-making can attract trust from the private sector” (Participant 14). In addition, the degree of institutional support from the Ministry of Youth and Sports was identified as a key factor in resource allocation and in increasing attention to individual sports.

Financial resources and budget distribution were also identified as critical determinants in the development of athletics. One federation expert remarked: “The budget allocated to athletics is significantly lower compared to team sports” (Participant 12). This concern was reinforced by a coach who explained: “Sometimes we wait months for even a simple piece of equipment to be provided” (Participant 5). A faculty member highlighted the need for diversified financial sources, noting:

“Heavy reliance on government funding means that when budgets are reduced, all programs come to a halt” (Participant 16). The level of development of sport marketing and the ability to attract sponsors were further recognized as influential factors in diversifying financial resources. As one federation manager emphasized: “Sponsorship programs and revenue generation from competitions can greatly contribute to our financial independence” (Participant 10).

The quality and adequacy of physical infrastructure—including tracks, halls, and equipment—play a highly significant role in the development of athletics. One coach stated: “Our track quality is not sufficient to prepare athletes for international competitions” (Participant 1). This issue was consistent with the view of a federation expert, who noted: “Access to indoor facilities during Iraq’s extremely hot summers is essential” (Participant 12). An international referee further highlighted geographic disparities: “Most facilities are concentrated in major cities, and other regions lack access” (Participant 18). Moreover, access to modern technologies and performance-analysis systems was identified as a facilitating factor in athlete training and development. The security of training camps and competitions was also recognized as an influential factor in the optimal use of these infrastructures.

The number and quality of skilled human resources were found to be key factors in athletics development. One coach stated: “We need continuous training programs to become familiar with new methods” (Participant 7). This need was supported by a faculty member who noted: “The technical and tactical knowledge of coaches has a direct impact on athlete development” (Participant 15). A federation manager also pointed to the challenge of retaining talent: “Unfortunately, many experienced coaches and experts migrate due to poor working conditions” (Participant 11). Additionally, the level of support for coaches—including salaries, benefits, insurance, and job

security—was identified as a major factor influencing the recruitment and retention of high-quality personnel. As one coach emphasized: “If we have appropriate salaries and job security, we can focus more on our work” (Participant 4).

Comprehensive athlete support and the quality of talent identification programs were identified as decisive factors in cultivating the next generation of athletes. One coach stated: “Sports medicine services and recovery programs can prevent athlete injuries” (Participant 8). A federation member highlighted the importance of school-based talent identification: “If we implement regular talent identification programs in schools, we can discover many gifted individuals” (Participant 13). This view aligned with the perspective of a faculty member who noted: “The level of expertise among physical education teachers in schools plays an important role in the early identification of talent” (Participant 17). Furthermore, the organization of regular domestic competitions and participation in international events were recognized as competitive opportunities that foster athlete development. As one referee explained: “Continuous engagement with international federations can increase our access to competitions and training courses” (Participant 19).

The cultural status of athletics and the extent of media coverage were also identified as influential factors in the development of the sport. One coach remarked: “The status of individual sports in our public culture is low, and all the attention is directed toward football” (Participant 3). This reality was confirmed by a federation member who stated: “Media coverage of athletics competitions is extremely limited, and the public does not know our champions” (Participant 10). A faculty member emphasized the importance of cultural promotion: “Raising awareness about the benefits of athletics and promoting grassroots participation can increase engagement” (Participant 14). In

addition, live broadcasting of competitions and showcasing successful role models in the media were cited as factors that can attract broader public attention. Social support for athletics and the general level of public awareness were also identified within this theme.

Climatic conditions and demographic potential were further recognized as key factors influencing the development of athletics. One coach referred to environmental constraints: “Extremely high temperatures in the summer make outdoor training very difficult” (Participant 6). This challenge was consistent with the view of a federation expert, who noted: “Adapting

Discussion

This study was conducted with the aim of identifying the factors influencing the development of athletics in Iraq. The findings revealed that within the domain of managerial factors and organizational structure, elements such as the quality of federation performance, the level of financial and administrative transparency, managerial expertise in sport administration, and consistency across governing bodies, policy stability, and the degree of institutional support constitute fundamental determinants of athletics development in Iraq. The results indicate that weaknesses in managerial structures not only directly affect the quality of planning but also sequentially constrain the capacity to attract private-sector support and long-term investment. The absence of clear performance indicators and insufficient managerial accountability have diminished public and institutional trust, resulting in fragmented resources and uncoordinated efforts. These findings are fully aligned with the results of Al-Zubaidi et al. (2024), who identified weak managerial structures and limited resources as critical barriers to sports development in Iraq. Similarly, Rostamichaijan et al. (2025), in their assessment of the sports landscape in Iran, found that professionalization in sport remains dependent on the government and that

infrastructure to climatic conditions and providing cooling systems is essential” (Participant 12). Conversely, demographic potential was identified as an opportunity for development. A faculty member stated: “Leveraging the potential of the young population can serve as a major source for talent identification” (Participant 16). Additionally, the motivation levels of athletes and coaches to explore talent were identified as important drivers. A federation manager emphasized: “Increasing women’s participation in athletics can double our talent identification capacity” (Participant 9).

policy conflicts among sports organizations require resolution. In the same vein, Saboonchi et al. (2022) demonstrated that political stability is essential for fostering sports development and investment. The consistency between the present study and previous research can be attributed to structural similarities and governance challenges across countries in the region, all of which face issues related to managerial inefficiencies and fragile organizational systems. The primary innovation of this section lies in identifying the direct relationship between managerial transparency and the capacity to attract private-sector support within the specific socio-political context of Iraq. Unlike most previous studies, which examined managerial factors in isolation, the present research shows that the quality of strategic planning, the presence of performance indicators, and the stability of policies collectively shape the effectiveness of sports management. Accordingly, several measures are recommended to improve the current situation: establishing a strategic council for athletics development comprising representatives from all key stakeholders; implementing an integrated sports information system to enhance transparency and performance monitoring; formulating explicit performance indicators for the annual evaluation of managers; and creating coordination mechanisms among

various sports-related institutions. The findings of the study showed that the adequacy of financial resources, the amount of allocated budget, the distribution of resources across different sports, the degree of dependence on government funding, the diversification of financial sources, timely provision of equipment, and the development of a sport marketing culture are all decisive factors in the advancement of athletics. The analysis indicates that the heavy reliance on government budgets and the lack of financial diversification increase financial vulnerability and hinder long-term planning. The uneven distribution of resources in favor of team sports particularly football has deprived athletics of essential development opportunities. These results are fully consistent with Costa et al. (2024), who reported that countries with strong financial support systems experienced a 35 percent increase in the number of medal-winning athletes. Similarly, Li et al. (2025) found that targeted incentives for attracting private investment can significantly enhance the capacity for financing resilient sports infrastructure. In the same vein, Zbiljić and Isaković (2025) emphasized the need for collaborative efforts among governments, private-sector actors, and sports organizations. Additionally, Rija and Abed (2024), in their assessment of the economic landscape of sports in Iraq, underscored the need for investment in sports clubs to improve financial returns and attract private-sector support. The alignment between this study's findings and international research reflects the global importance of diversifying financial resources and reducing reliance on government budgets as foundations for sustainable sports development. The innovation of the present study lies in identifying the relationship between weak sport marketing culture and financial constraints in the Iraqi context. The study demonstrated that insufficient attention to sport marketing and the absence of systematic sponsorship programs not only

limit financial resources but also intensify reliance on government funding. Therefore, to improve the situation, several measures are essential: adopting tax incentive legislation for companies sponsoring athletics; establishing a Sports Development Fund through joint government-private sector participation; creating a dedicated sport marketing unit within the federation to manage broadcasting rights and attract sponsors; and designing public-private partnership models for financing infrastructure projects.

The findings revealed that the adequacy of standard tracks, the quality of existing infrastructure, access to indoor facilities, maintenance of equipment, availability of modern training tools, adoption of advanced technologies, and the balanced geographical distribution of facilities are critical determinants in the development of athletics. The analysis indicates that the scarcity and inadequate quality of physical infrastructure not only hinder the proper preparation of athletes for international competitions but also reinforce geographical disparities due to the concentration of facilities in major cities. This imbalance restricts talent identification opportunities in peripheral and underserved regions. These results are fully consistent with Wang et al. (2024), who demonstrated that uneven development of sports infrastructure has a direct impact on overall sports development. Similarly, Fay et al. (2010) argued that indoor facilities and cooling systems can mitigate adverse climatic conditions and ensure stable training environments. Conversely, Sundararajan and Suriyagoda (2016), in their assessment of advanced economies, showed that substantial investment in state-of-the-art infrastructure can offset harsh climatic conditions. This relative inconsistency reflects the economic and financial disparities between developed and developing nations. The alignment of the present study's findings with regional research stems from shared climatic

conditions and financial constraints across Middle Eastern countries. The novelty of this part of the study lies in identifying the direct relationship between geographical inequality in the distribution of facilities and the limitation of talent identification opportunities in Iraq. The study shows that the concentration of facilities in major cities such as Baghdad and Basra has prevented the identification of potential talents in other regions. Therefore, to improve the current situation, several actions are essential: establishing at least one standard athletics complex in every province; constructing indoor facilities equipped with appropriate ventilation and cooling systems in hot regions; implementing performance analysis systems and advanced technologies in training centers; and developing a systematic maintenance and upgrading program for existing facilities.

The findings indicated that the number and quality of specialized coaches, the level of technical and tactical knowledge, the international experience of referees, and the availability of continuous training programs, access to international courses, and the degree of human-resource support are among the key factors influencing the development of athletics. The analysis shows that even when adequate infrastructure is available, the absence of qualified coaches and deficiencies in technical knowledge substantially diminish the effectiveness of training programs. Moreover, the migration of elite coaches and experienced personnel—driven by low salaries and the lack of job security—has weakened the country's human-capital base. These results are fully consistent with Alkhafaji et al. (2022), who demonstrated that standardized training programs have a significant positive impact on coaches' performance. Similarly, Keliat and Al Munawar (2024) emphasized that continuous professional-development programs for coaches can considerably enhance athletes' technical proficiency. In addition, Thomas et al. (2019) found that

early supportive environments and social-support networks play a pivotal role in the development of elite athletes in track and field. The convergence between the present findings and the international literature underscores the global importance of investing in education and human-resource capacity building for sports development. The innovation of this section lies in identifying the link between weak educational systems and the migration of experts in Iraq. The study revealed that the absence of career-advancement pathways and low compensation packages have prompted experienced coaches and specialists to relocate to neighboring countries. Accordingly, improving the current situation requires establishing a national academy for coach and referee education in collaboration with international federations; implementing annual continuous-training programs with updated content; developing structured career-advancement pathways for coaches; increasing salaries and benefits for sports personnel; and strengthening collaboration with universities to design advanced academic programs in physical education and sport sciences.

The findings indicated that comprehensive athlete support, medical and psychological services, school-based talent identification programs, attention to school sports, consideration of different age categories, regular domestic competitions, and participation in international events are fundamental factors in the development of athletics. The analysis shows that the absence of an integrated support system and the lack of evidence-based talent-identification programs in schools have resulted in potential talents either remaining undiscovered or withdrawing from sport at early stages. Furthermore, limited competitive opportunities have reduced athletes' motivation and hindered their preparedness for international competitions. These results align closely with Rahmani et al. (2024), who found that athletes with stable financial support have

better access to educational resources, recovery services, and mental-health care. Mack et al. (2023) similarly emphasized that mental-health maintenance is essential for athletic performance, recommending annual screenings and continuous support. In the context of talent development, Zhao et al. (2024) showed that talent cultivation is a continuous, multi-stage process in which structured competition plays a pivotal role. Zong (2025) likewise demonstrated that increasing the number of domestic and international competitions directly enhances performance and facilitates the discovery of new talent. Conversely, Yasuda (2022) revealed that in Asian cultural contexts, intrinsic motivation and family support play a significant role. This relative divergence reflects cultural differences: while family support may be sufficient in some Asian countries, Iraq requires the establishment of institutional support systems. The innovation of this section lies in its integrated examination of the relationship between support structures, talent identification, and competitive opportunities within the Iraqi context. The study found that fragmented support mechanisms lack effectiveness, underscoring the need for a comprehensive and unified system. Accordingly, improving the current situation requires establishing an integrated athlete-support center that includes medical, psychological, nutritional, and recovery services; creating an athlete insurance fund; implementing a scientific school-based talent-identification system; developing a fixed annual calendar of domestic competitions; allocating dedicated budgets for regular international participation; and forging strategic partnerships with international federations. The findings indicated that the cultural status of athletics in society, the level of public awareness, the position of individual sports within societal culture, grassroots sport promotion, media coverage, media advertising, and the presence of successful media role models are determining factors in the development of athletics. The

analysis shows that the relatively low cultural standing of athletics compared with team sports—particularly football—and the weakness of media coverage have reduced public participation and discouraged young people from entering the sport. The uneven distribution of public and media attention has prevented athletics champions from gaining visibility and fulfilling their potential role as models for the younger generation. These results are consistent with Shamshirian and Halldorsson (2025), who emphasized that sporting success is intertwined with cultural foundations and social practices, and that effective cultural mechanisms can enhance public engagement in sport. Similarly, Sanatkha (2021) found that sport-based socio-economic capital indirectly influences sport-related cultural capital, thereby increasing citizens' interest in sport. In this regard, Chen et al. (2024) demonstrated that the media's role in creating role models for youth is a key factor in promoting individual sports. Anista (2023) further argued that international success can reinforce a culture of achievement and encourage greater investment. The alignment of this study's findings with prior research underscores the global importance of cultural development and media influence in advancing sport. The innovation of this section lies in its sociological examination of cultural and social determinants within the specific context of Iraq. The study revealed that without shifting public perceptions and increasing media visibility, other developmental measures will remain ineffective. Changing societal attitudes toward sport requires coordinated educational, media, and family-oriented initiatives to institutionalize sport as a social value. Accordingly, improving the current situation necessitates producing documentary programs on national athletics champions for broadcast on national media; allocating regular airtime for athletics competitions; launching active digital media channels; organizing public athletics

events in urban spaces; and integrating athletics education into school curricula. The findings indicated that climatic conditions for training, the alignment of infrastructure with environmental conditions, the effects of ambient temperature, the utilization of the youth population, athlete and coach motivation, and women's participation are influential factors in the development of athletics. The analysis shows that Iraq's harsh climate—particularly the extremely high summer temperatures—creates significant constraints for outdoor training. Nevertheless, the country's large youth population and the potential for increased female participation represent valuable resources for talent identification, provided that they are supported through appropriate planning. These findings are consistent with Asgari Gandomani et al. (2025), who demonstrated in their examination of sports facility distribution in Iran that equitable allocation of infrastructure can generate equal opportunities for talent development. Similarly, Asefi and Ghanbarpour (2020) emphasized that equitable access is essential for enhancing physical activity and sports participation. Regarding climatic challenges, Fay et al. (2010) showed that indoor facilities equipped with cooling systems can mitigate adverse weather effects. On the other hand, Kuhn et al. (2021) found that disparities in youth sports participation often stem from barriers such as financial constraints and limited access to facilities. In addition, Krasnova (2024) demonstrated that well-developed sports infrastructure significantly enhances human capital development. The convergence of this study's findings with prior research highlights the global importance of equitable access and balanced distribution of facilities for effective talent identification. The innovation of this section lies in identifying the dual relationship between climatic challenges and demographic opportunities in the Iraqi context. The study found that although Iraq possesses substantial potential due to its

large youth population, harsh climatic conditions—when unaccompanied by appropriate infrastructure—hinder the ability to capitalize on this potential. Furthermore, the uneven distribution of facilities and limited opportunities for women's participation have left considerable resources underutilized. Accordingly, improving the current situation requires constructing indoor facilities with adequate ventilation and cooling systems in hot regions; implementing infrastructure development programs in underserved areas to promote spatial equity; establishing athletics training centers in schools; designing dedicated programs to attract and support female athletes; and scheduling outdoor training sessions during favorable hours (early morning or evening) during the summer months.

This study faced several limitations that should be considered when interpreting the findings. First, the purposive sampling method and the relatively small number of participants (20 individuals), given the qualitative nature of the research, may limit the generalizability of the results to the broader athletics community in Iraq. Second, restricted access to certain geographic areas due to security concerns prevented the collection of perspectives from athletes and coaches across all regions of the country. Third, the limited timeframe of the study precluded long-term tracking of changes and developments. Nevertheless, these limitations did not hinder the accurate identification of factors influencing the development of athletics in Iraq; rather, they provide clearer directions for future research.

Based on the findings of this study, a comprehensive strategy for developing athletics in Iraq involves coordinated efforts across multiple domains: establishing a Strategic Council for Athletics Development and a comprehensive sports information system to enhance management transparency and coordination; implementing financial

mechanisms such as tax incentives, a Sports Development Fund, and public-private partnerships; expanding infrastructure with standard facilities in each province, indoor arenas with cooling systems, and performance analysis technologies; investing in human resources through a National Academy, continuous professional development, and improved salaries and career pathways; enhancing athlete support and talent development via comprehensive services, school-based identification programs, and a structured competition calendar; promoting cultural awareness and media visibility through documentaries, regular broadcasts, digital channels, and public events; and addressing environmental and demographic factors by providing equitable access to facilities, special programs for female participation, and adaptation to climatic challenges. Successful execution requires phased implementation, stakeholder collaboration, and resource prioritization to ensure sustainable growth and elevate Iraq's international standing in athletics.

Conclusion

This study provides a comprehensive exploration of the key factors influencing the development of track and field in Iraq. Findings indicate that the advancement of the sport is shaped by a multifaceted interplay of managerial, financial, infrastructural, human resource, supportive, cultural, and environmental factors. Effective governance, transparent

administration, and strategic planning are foundational, while diversified financial resources and adequate infrastructure ensure sustainable athlete development. Moreover, the availability of qualified coaches, continuous training programs, and systematic talent identification are critical for nurturing future athletes. Cultural awareness, media coverage, and societal support further enhance participation, and environmental considerations, including climate and demographic potential, influence accessibility and training opportunities. Addressing these interconnected factors through coordinated policies, strategic investments, and stakeholder collaboration is essential to promote sustainable growth and enhance Iraq's competitive standing in track and field at both national and international levels.

Acknowledgment

The authors of the present study wish to express their sincere gratitude to all individuals who contributed to this research. The participation and support of the respondents, who generously dedicated their valuable time and provided constructive insights, played an indispensable role in the completion of this study. Without the wholehearted cooperation of these esteemed individuals, this research would not have been possible. The authors therefore extend their deepest appreciation to all of them.

References

1. Acquah-Sam, E. (2021). Developing sports for economic growth and development in developing countries. *European Scientific Journal*, 17(15), 172-216. 10.19044/esj.2021.v17n15p172
2. Alfahham, Q. M. Y. and Asefi, A. A. (2025). Identifying and Analyzing the Effective Drivers on the Development of Sport for all in Iraq using Mutual Influence Analysis. *Sport Management Journal*, 17(1), and 161-139. 10.22059/jsm.2023.359513.3143 (In Persian).
3. Alkhafaji, S. M. E., Mirzazadeh, Z., Talebpour, M., Keshtidar, M., & Abed, M. A. (2022). Role of training programs approved by the Iraqi Athletics Federation on the performance of Iraqi coaches. *SPORT TK-Revista EuroAmericana de Ciencias Del Deporte*, 46-46. 10.6018/sportk.526651
4. AlZaidawi, M. R. S., Ghotnian, S. E. P. I. D. E. H., & Alkhafaji, M. I. (2025). Development of a Model for Student

- Sports Development in Iraq. Iranian journal of educational sociology, 8(2), 1-8. 10.61838/kman.ijes.8.2.8
5. Al-Zubaidi, A. Q. A., Eghbali, K., Ibrahim, S. H., & Khodaparast, M. (2024). Identifying Strategies and Intervening Factors in the Sustainable Development of Professional Sport in Iraq. *Journal of Resource Management and Decision Engineering*, 3(4), 57-65. 10.61838/kman.jrmde.3.4.7
 6. Anista, R. (2023). Transformasi kebudayaan: Dampak perkembangan teknologi dan media sosial. *Jurnal Pendidikan Sosial Indonesia*, 1(1), 35-43. <https://doi.org/10.62238/jupsi.v1i1.97>
 7. Asefi, A., & Ghanbarpour Nosrati, A. (2020). The spatial justice in the distribution of built outdoor sports facilities. *Journal of Facilities Management*, 18(2), 159-178. <https://doi.org/10.1108/JFM-09-2019-0051>
 8. Asgari Gandomani, R., Rahimi, A., Shahbazzpour, L., & Jokar Arsanjani, J. (2025). Spatial Justice and Accessibility: Optimizing Sports Facility Allocation in Tehran. *Land*, 14(7), 1318. <https://doi.org/10.3390/land14071318>
 9. Chen, Z., Liu, Y., Zhu, Z., CAI, P., & Hu, M. (2024). The Role of News Media in Promoting Sports. *Research and Commentary on Humanities and Arts*, 2(2). <https://doi.org/10.18686/rcha.v2i2.4051>
 10. Coakley, J., & Pike, E. (2014). Sports in society: Issues and controversies.
 11. Costa, C. S., Ordonhes, M. T., Souza, J. V. M. D., Mezzadri, F. M., & Cavichioli, F. R. (2024). The influence of receiving financial resources and participating in events to achieve sporting results: the Brazilian case. *Journal of Physical Education*, 34, e3447.
 12. Darnell, S. C. (2023). Global sport and the challenges of political life. *Frontiers in Sports and Active Living*, 5, 1208264. 10.3389/fspor.2023.1208264
 13. Dubgorn, A., Zaychenko, I., & Grashhenko, N. (2018). A rationale for choosing the mechanism of public-private partnership for the sustainable development of social infrastructure facilities. In *MATEC Web of Conferences* (Vol. 170, p. 01056). EDP Sciences. 10.1051/MATECCONF/201817001056
 14. Elbargathi, K., & Al-Assaf, G. (2019). The impact of political instability on the economic growth: an empirical analysis for the case of selected Arab countries. *International Journal of Business and Economics Research*, 8(1), 14-22.
 15. Fay, M., Iimi, A., & Perrissin-Fabert, B. (2010). Financing greener and climate-resilient infrastructure in developing countries - challenges and opportunities. *Research Papers in Economics*. 15(2), 34-58. https://econpapers.repec.org/paper/risei/bpap/2010_5f007.htm
 16. Ghorbani Asiabar, D. M., Ghorbani Asiabar, M., & Ghorbani Asiabar, A. (2025). Sports and human rights: a new approach in promoting peace and social justice. *ScienceOpen Preprints*. DOI: 10.14293/PR2199.001665.v1
 17. Goetz, D. H. (2014). Six Artistic Perspectives from the Vietnamese American Diaspora in Southern California. University of California, Irvine.
 18. Gümüşdağ, H. (2024). Sport Economics and Financial Management. *Economic Research*, 8(4), 155-166. <https://doi.org/10.21325/jotags.2024.1541>
 19. Houamed, K., & Jamil, H. (2024). Sports policies as a mechanism for rationalizing political behavior and achieving societal security. *Wisdom Journal for Studies & Research*, 4(04), 944-971. <https://doi.org/10.55165/wjfsar.v4i04.349>

20. Jabry, A., Khorvash, M., Atea dakheel, A. and askari, A. R. (2024). Providing scenarios for the development of professional sports in Iraq. *Research in Sport Management and Marketing*, (), -. 10.22098/rsmm.2024.15005.1351
21. Kantartzi, I. M. (2025). Sport for development in crisis: Revisiting old ideals in an era of political volatility.
22. Keliat, P., & Al Munawar, A. (2024). Analysis of the Impact of the Pencak Silat Coach Training Program on Athlete Development in North Sumatra in 2024. *International Journal of Education, Social Studies, And Management (IJESSM)*, 4(3), 1351-1357.
23. Kosnikova, O. V., Zolkin, A. L., Bobkov, V., & Zhukareva, G. M. (2024). Economic aspects of the organization and financing of sports events. *Èkonomika i Upravlentie: Problemy, Rešeniâ*, 10/9(151), 47–56. <https://doi.org/10.36871/ek.up.p.r.2024.10.09.006>
24. Krasnova, M. A. (2024). Assessing the impact of sports infrastructure on human capital development. *Regional'naâ Èkonomika: Teoriâ i Praktika*, 22(6), 1071–1095. <https://doi.org/10.24891/re.22.6.1071>
25. Kuhn, A. W., Grusky, A. Z., Cash, C. R., Churchwell, A. L., & Diamond, A. B. (2021). Disparities and Inequities in Youth Sports. *Current Sports Medicine Reports*, 20(9), 494–498. <https://doi.org/10.1249/JSR.00000000000000881>
26. Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.
27. Mack, A., Baron, D., & Reinert, J. (2023). The role of mental health care in reaching optimal performance in sports. *Sports Psychiatry*. 2(4):121–123. <https://doi.org/10.1024/2674-0052/a000050>
28. Moscoso Sanchez, D., Fernandez Gavira, J., & Perez Flores, A. (2018). The media construction of the sports' elite from the European perspective: An analysis of the European Symposium of Sports 2010. *Sport in Society*, 21(3), 516-528. 10.1080/17430437.2017.1346624
29. Mthombeni, S., Coopoo, Y., & Noorbhai, H. (2024). Factors enabling and hindering sporting success among South African elite athletes from historically disadvantaged areas: Through a coaching lens. *International Journal of Sports Science & Coaching*, 19(4), 1415-1428. 10.1177/17479541241245534
30. Parra-Martinez, F. A., & Wai, J. H. O. (2023). Talent identification research: a bibliometric study from multidisciplinary and global perspectives. *Frontiers in Psychology*, 14, 1-22. <https://doi.org/10.3389/fpsyg.2023.1141159>
31. Plenderleith, L. (2013). Sport and the making of world cities: a case study of South Africa (Doctoral dissertation).
32. Rahmani, M., Majedi, N., & Naderi Nasab, M. (2024). The Importance of Financial Support for Professional Athletes in Competitive Sports. *Technology in Entrepreneurship and Strategic Management*, 3(3), 70–78. <https://doi.org/10.61838/kman.jtesm.3.3.8>
33. Rija, T. H., & Abed, M. T. (2024). The Reality of Financial funding and Its Relationship to the Economics of Sports in the Participated Clubs in the Iraqi Premier League 2022-2021. <https://doi.org/10.62540/mjss.conf.4th.2023.29>
34. Rostamichaijan, H., Sotiriadou, P., & Loghmani, M. (2025). Mapping the influence of government on the professionalization process of national sport federations in Iran. *Managing Sport and Leisure*, 30(5), 1089-1108. <https://doi.org/10.1080/23750472.2024.2366967>
35. Saboonchi, R., Shariati Feizabadi, M., & Bahmani, M. (2022). Sport as a

- determinant of national security. *Journal of New Studies in Sport Management*, 3(2), 452-465.
36. Sanatkhah, A. (2021). Sociology and Sport, the Analysis of Social Grounds Affecting the Tendency of Citizens, Toward the Public Sport in Iran: Case Study: the City of Kerman in 2020. <https://doi.org/10.20944/PREPRINTS202101.0089.V1>
 37. Schulenkorf, N. (2012). Sustainable community development through sport and events: A conceptual framework for sport-for-development projects. *Sport management review*, 15(1), 1-12. [10.1016/j.smr.2011.06.001](https://doi.org/10.1016/j.smr.2011.06.001)
 38. Shadmehr, B. (2012). Talent identification in athletics. The 2nd National Conference on Sports Talent Identification, Tehran. [in Persian]
 39. Shamshirian, S., & Halldorsson, V. (2025). Collective sports success through effective social performances: The case of Olympic wrestling in Iran. *International Review for the Sociology of Sport*, 60(2), 278-298. <https://doi.org/10.1177/10126902241268363>
 40. Shane, A., Hiebert, J., Sherrard, L., & Deehan, H. (2014). Inside this issue: Measles in Canada. *Can Commun Dis Rep*, 40, 12.
 41. Soltanhoseini, M., Salimi, M. and Tayebi, M. (2021). Analyzing the key success factors behind of the construction of the sports facilities projects (Case study: The Sports Complex of Naghsh-e-Jahan in Isfahan). *Sport Management Studies*, 13(66), 171-206. doi: [10.22089/smrj.2019.7170.2509](https://doi.org/10.22089/smrj.2019.7170.2509)
 42. Sundararajan, S. K., & Suriyagoda, N. (2016). Climate Risks and Resilience in Infrastructure PPPs: Issues to be considered. <http://documents.worldbank.org/curated/en/806681548305215515/Climate-Risks-and-Resilience-in-Infrastructure-PPPs-Issues-to-be-Considered>
 43. Thomas, C. E., Chambers, T. P., Main, L. C., & Gastin, P. B. (2019). Factors influencing the early development of world-class Caribbean track and field athletes: a qualitative investigation. *Journal of Sports Science & Medicine*, 18(4), 758.
 44. Wang, J., Li, J., & Cheng, J. (2024). Spatial disparity of sports infrastructure development and urbanization determinants in China: evidence from the sixth National sports venues census. *Applied spatial analysis and policy*, 17(2), 573-598. [10.1007/s12061-023-09557-4](https://doi.org/10.1007/s12061-023-09557-4)
 45. Yasuda, Y. (2022). The Potential of Cultural Psychology in Sports Settings. *International Journal of Sport and Health Science*. 20, 19-25. <https://doi.org/10.5432/ijshs.202123>
 46. Zbiljić, G., & Isaković, M. (2025). Synergizing sports and economics for sustainable development goals: a strategic alliance. *Glasnik Za Društvene Nauke*, 17(1), 127–147. <https://doi.org/10.46793/glasnikdn17.1.127z>
 47. Zhao, J., Xiang, C., Kamalden, T. F. T., Dong, W., Luo, H., & Ismail, N. (2024). Differences and relationships between talent detection, identification, development and selection in sport: A systematic review. *Heliyon*, 10(6), 1-17.
 48. Zong, Y. (2025). Analysis of the Impact of International Event Organizations on the Level of National Sports Development. *Advances in Economics, Management and Political Sciences*, 133(1), 162–167. <https://doi.org/10.54254/2754-1169/2025.19660>