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Designing a Paradigmatic Model for the Development of Sports for Persons with Disabilities in Iraq

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Abstract

This research aims to design a paradigmatic model for the development of sports for persons with disabilities in Iraq using grounded theory. This research is qualitative and aimed at being developmental-applicative. Participants included 21 experts and specialists in the field of sports for persons with disabilities in Iraq, who were selected through purposeful sampling using a snowball method for interviews. Data analysis was conducted through open, axial, and selective coding of interviews until theoretical saturation was achieved.

Conclusion: The development of sports for persons with disabilities in Iraq requires a comprehensive and holistic approach. It is suggested that a national committee consisting of representatives from the government, NGOs, sports federations, and persons with disabilities be formed to coordinate and supervise the implementation of development programs.

Introduction:

Disability is a prominent issue, with the World Disability Report (WRD) indicating that nearly one billion people worldwide have disabilities. These individuals generally have poorer health than others. As a major global problem, they have less access to healthcare services, receive less education, and live in greater poverty (Frontera, 2014) Disabilities resulting from diseases or genetics include cerebral palsy, Down syndrome, and depression, along with personal and environmental factors including war and internal and international conflicts (Erdmann, 2018) Individuals with physical disabilities face numerous challenges. Society views them negatively, public buildings and spaces are often inaccessible, and the government does not provide adequate support (Liban & bin Ahsan, 2024) Disabled individuals and their families are at a higher risk of poverty and deprivation due to lower socio-economic status and limited access to education and employment, as well as high care costs (Yehuda et al., 2023) (Rahman & Parvez, 2024) Disabled individuals encounter daily barriers that prevent them from fully integrating into society. Health impairment is a complex and multidimensional phenomenon with multiple specific characteristics (Shafaghatian et al., 2025) Disability is a significant global issue because there is a widespread problem for disabled individuals to participate in everyday life equally with their non-disabled peers (Frontera, 2014) Disabled individuals face various forms of discrimination, including pitying views, underestimation of their abilities, and the expectation that they will not play an active role in society. Additionally, disabled women may feel shame and avoid sports and training spaces due to internal and external discrimination (Afroozeh et al., 2025)

Over the years, society has attempted to integrate persons with disabilities with healthy individuals (Erdmann, 2018) Disability is a pervasive issue that, due to impairment or limited ability, some individuals are unable to move freely or engage in physical activities independently (Mohd Aznan et al., 2022) In many countries, the living conditions of persons with disabilities have become a priority as one of the most vulnerable social groups (Erdyneeva et al., 2021). Having a disabled identity limits their opportunities for sports and physical activity (Afroozeh et al., 2025) However, on the other hand, persons with disabilities reflect on the changes that occur in their lives after engaging in active sports (Stangova et al., 2022) According to research findings, better access to sports facilities increases the physical activity of disabled individuals (Mohd Aznan et al., 2022)

As researchers, specialists, and sometimes participants in sports activities, understanding the barriers to accessing sports and physical activity is of great importance (Kitchin & Crossin, 2018) The increased presence of persons with disabilities in society is generally improving thanks to enhanced policies and public actions (Alcaraz-Rodríguez et al., 2021) Attention should be paid to the rights of persons with disabilities, and policies should be established to promote physical activity and sports for these individuals (Alcaraz-Rodríguez et al., 2021) The number of individuals interested in recreation and sports despite their disabilities is increasing (Erdmann, 2018) Many view sports as the most beautiful means for the participation of persons with disabilities (Stangova et al., 2022) Coaches and athletes must pay attention to both physical and mental aspects to achieve the best results (Erciş, 2018) The world of sports has undergone significant changes in recent years. Now, athletes with disabilities have the opportunity to participate in sports and have their rights recognized. Sports today are not only important for maintaining physical health but also serve as a means for better jobs and lives (Kurniawan & Rizky Samudro, 2024) The type of sports they engage in depends on their type of disability. For example, someone with walking difficulties may be more interested in swimming or water sports (Mawena & Sorkpor, 2024)

According to researchers, studies on sports for persons with disabilities can be broadly categorized into three groups: assessment of the current situation, development of comprehensive programs, and implementation and monitoring. Some studies have focused on assessing the current situation (identifying barriers, needs assessment, and evaluating infrastructures). Research by (Hammond, 2022) identifies

existing barriers to sports for persons with disabilities in Iraq, including adaptation challenges, policymaking, and lack of facilities. Research by (Mawena & Sorkpor, 2024) and (Alcaraz-Rodríguez et al., 2021) examines the specific needs of athletes with various disabilities, especially those with visual impairments. The study by (Shafaghatian et al., 2025) evaluates the state of sports infrastructure, including facilities, equipment, and financial resources. A study conducted by (Raghdaa, 2022) in Iraq concluded that certain sports activities significantly improve various psychological variables, including mutual social confidence and self-esteem among individuals with physical disabilities, whether they engage in sports activities or not.

Some research has focused on developing comprehensive programs (setting goals, designing sports programs, and creating suitable infrastructures). Research by (Kurniawan & Rizky Samudro, 2024) and (Erdyneeva et al., 2021) sets goals such as social participation, economic empowerment, and social adaptation for disabled athletes. Studies by (Hammond, 2022) and (Ramsden et al., 2023) design diverse sports programs for different age groups and types of disability. Research by (Shafaghatian et al., 2025) presents a comprehensive plan for improving sports infrastructure, including constructing suitable sports halls, procuring specialized equipment, and securing funding. (Atiya & Moseekh, 2023)

Some research has also focused on implementation and monitoring (implementing programs, training coaches, supporting athletes, and collaborating with clubs). Research by (Wen et al., 2024) ensures that designed programs are implemented under close supervision. According to research by Hammond (2022), specialized training courses for coaches are held to enable them to work effectively with disabled athletes. Research by (Kurniawan & Rizky Samudro, 2024) and (Albrecht et al., 2019) provides financial, psychological, and social support for disabled athletes. Research by (Kitchin & Crossin, 2018) follows collaboration with major clubs to integrate disabled athletes into sports activities.

According to the United Nations representative in Iraq, this country has the highest number of persons with disabilities in the world. Disabled individuals make up 13% of the population of over 40 million, and due to ongoing causal factors such as widespread protests in 2019, traffic accidents, illegal weapons, wars, and conflicts, the number of disabled persons increases each year. "Majid Al-Tamimi," a member of the Iraqi parliament, stated that the number of disabled persons in Iraq exceeds 5 million, and this group faces many problems due to the lack of an appropriate environment for dignified living. Additionally, the allocated rights for them are minimal and do not meet even their basic needs, and the design of streets and buildings is not suitable for their physical conditions (Hussein, 2023) believes that persons with disabilities are the silent wealth of the Iraqi nation whose voices must be heard worldwide, especially after the recent achievements of the Iraqi National Paralympic Committee at Asian and international levels. However, this committee lacks adaptive strategic management and a national framework for classifying Iraqi Paralympic athletes to ensure the implementation of laws and strategies within a specific timeframe.

Given that a large population (about five million) in Iraq is disabled, sports can provide a suitable platform for these individuals, as participation in sports activities leads to joy, happiness, and physical and mental health. Therefore, the relevant sports organizations should facilitate the presence of disabled athletes from beginner to elite levels in sports. Due to the lack of a scientific and research model in the comprehensive development of sports for persons with disabilities in Iraq, the main issue of the research is to design a model for the development of sports for persons with disabilities in Iraq. The researcher seeks to answer the question: What is the appropriate model for the development of sports for persons with disabilities in Iraq?

Research Methodology:

This research adopts a qualitative and exploratory strategy to identify and formulate a model for the development of sports for persons with disabilities in Iraq. The research method is grounded theory with a systematic approach by Strauss and Corbin. Data were collected through semi-structured interviews with

experts in the field of sports for persons with disabilities in Iraq, including specialists, university professors, coaches, and sports managers. Sampling was conducted purposefully and through a snowball method until theoretical saturation was reached.

Data analysis was conducted using inductive coding in three stages: open, axial, and selective. In this research, the central phenomenon is the development of sports for persons with disabilities in Iraq, and the factors affecting it include causal, contextual, intervening conditions, strategies, and outcomes, which are presented in a logical paradigm. Through coding the data, according to Figure 1, axes (axial codes) emerged from open codes (indicators), categories (selective codes) from axes, and theories from categories.

Data → Open Codes → Axes → Categories → Theory

Figure 1. The process of transforming data into theory in grounded theory

Table 1. Demographic Characteristics of Interviewees in Interviews

Index	Characteristics	Total
Gender	Male	18
	Female	3
Education Level	Bachelor's	9
	Master's	5
	Doctorate	7
Organizational Role	Researcher or Faculty	5
	Executive Manager	9
	Coach, Sports Manager	7

According to Table 1, 18 interviewees were male and three were female. The educational level of the interviewees included bachelor's, master's, and doctorate degrees, with nine, five, and seven individuals, respectively. The backgrounds included five researchers or faculty members, nine executive managers, and seven coaches and sports managers. Therefore, the total number of experts participating in the research was 21 until reaching theoretical saturation through semi-structured interviews. That is, from the nineteenth individual, the data became repetitive, and for further assurance, interviews continued until the twenty-first expert, but no new open codes (indicators) were added. Sampling for selecting experts was done purposefully and through snowball methods. Interviews with experts in the research group were analyzed inductively using open, axial, and selective coding in 6 constructs of the Strauss and Corbin paradigmatic model.

Based on the study of scientific and research documents and the opinions and views of specialists, the research was conducted qualitatively: To assess the credibility of the research, the four criteria of Lincoln and Guba (1985) were employed: credibility, dependability, confirmability, and transferability. To confirm the reliability of the results obtained from the interviews, the inter-coder reliability method was used. In this context, one of the specialists in sports management assisted in the coding process, and a desirable percentage of agreement between the two coders was obtained.

Research Findings:

The summary and aggregation of interviews (the outcomes of the research group's responses and interviews) are presented in Table 2 after outcomes and theoretical saturation. According to the systematic guide provided by Corbin and Strauss, the main categories were determined. Regarding open, axial, and selective coding, it should be noted that the text of the interviews was divided into elements with messages within the lines or paragraphs to select open codes, and then coded in relation to the development of sports for persons with disabilities in Iraq. In the next stage, those axes and indicators were categorized into larger selective categories, and then efforts were made to classify the categories within the larger constructs of the Strauss and Corbin systematic model, meaning that categories were categorized into six main constructs: causal conditions, central phenomenon, strategies, contextual conditions, intervening conditions, and outcomes. Finally, in the selective coding stage, relationships between categories were clarified, and the paradigmatic model and theories were provided.

The factors "cultural," "policy-making," and "adherence to international laws" play a role as causal factors in the "model for the development of sports for persons with disabilities in Iraq," as reported in Table 3.

Table 2. Coding of Interviews in the Causal Conditions Construct

Row	Construct	Category	Axial Code	Open Codes
1	Causal Conditions	Cultural Factors	Community culture	1.Public awareness and education about the importance of sports for persons with disabilities (P16 p21) 2.Challenging misconceptions and stereotypes about sports for persons with disabilities (P17)
2			Family Support	1.Providing necessary conditions for family participation in sports for persons with disabilities (P16) 2. Raising family awareness about the benefits of sports for persons with disabilities by encouraging and supporting their disabled children in sports activities (P11 P18 P20)
3		Policy-Making	Government Policy	1.Changing management perspectives on sports for persons with disabilities and addressing all aspects of sports for persons with disabilities by enacting supportive laws and regulations (P10 P14 P16 P17 P20) 2. Commitment and seriousness of government officials in promoting sports for persons with disabilities by creating appropriate organizational structures for the development of sports for persons with disabilities (P16 P20)
4			Formulation and Implementation of Comprehensive Policies	1.Setting clear and measurable goals for enhancing participation, achievements, and welfare of disabled athletes (P16) 2.Utilizing precise indicators for monitoring and evaluating progress towards achieving set goals (P18)
5		Adherence to International Laws	International Obligations	1.Convention on the Rights of Persons with Disabilities (CRPD) and its comprehensive action framework and guidelines (P16 P20) 2. Increasing the population of persons with disabilities due to natural disasters like floods, earthquakes, droughts, through injuries, accessibility issues, loss of

				abilities, and the lack of adequate rehabilitation services (P15 P21) 3. Destruction of many sports infrastructures in the country and the increase in the disabled population due to wars and political unrest (P16) 4. Empowerment and quality of life enhancement through accessible tourism, creating new opportunities for disabled athletes to travel and participate in sports events (P17 P21)
6			International Cooperation	1.Exchange of experiences and knowledge with other countries in the field of sports for persons with disabilities through active participation in international competitions and events (P16 P17 P21) 2.Membership in relevant international federations and organizations for sports for persons with disabilities (P19 P15)

"Strategies related to planning," "human resources strategies," "financial management strategies," "Supportive policy strategies" and "collaboration and partnership strategies" are actions aimed at realizing the "model for the development of sports for persons with disabilities in Iraq," as reported in Table 4.

Table 3. Coding of Interviews in the Strategies Construct

Row	Construct	Category	Axial Code	Open Codes
1	Strategy	Factors related to collaboration and participation	Intersectoral collaboration	1.Collaboration between the Ministry of Sports, Education, and other relevant institutions (P15). 2. Establishing and developing cooperation agreements between organizations in Iraq (P16).
			Private sector participation	1. Attracting technical support from the private sector (P16 P19). 2. Engaging donations and NGOs (P15). 3. Exchanging knowledge and experiences among various stakeholders in the private sector regarding sports for persons with disabilities (P16).
2		Factors related to planning	Developing a comprehensive program for the development of sports for persons with disabilities	1.Planning with a long-term approach based on the needs and conditions of Iraq (P15). 2.Setting goals and key performance indicators (P16). 3.Developing successful strategies by highly experienced individuals (P1 P6 P7 P9 P10 P12).
			Strengthening the monitoring and evaluation system	1. Continuous monitoring and oversight of programs and activities (P15). 2. Providing periodic reports to relevant authorities (P16)
3		Supportive policies	Government commitment and support for sports for	1.Allocating necessary, sufficient, and sustainable budget, facilities, and infrastructures (P1 P16). 2.Enacting supportive laws and regulations (P6 P19).

4			persons with disabilities	3.Government support for human resources in sports for persons with disabilities (P3 P20). 4. Professional approach of the government towards sports for persons with disabilities (P3 P19).
			Establishing an appropriate organizational structure	1.Structure and governance of federations, national committees for sports for persons with disabilities, and the Iraqi National Paralympic Committee (P15). 2.Developing and equipping associations for sports for persons with disabilities in provinces (P18).
			Specialized planning and oversight	1.Developing long-term and short-term programs for the development of sports for persons with disabilities (P15). 2.Monitoring performance and continuous evaluation of sports programs for persons with disabilities (P16).
			Localizing successful models and experiences	1.Localization considering the conditions and culture of Iraq (P16). 2.Studying and examining innovative and successful methods in advanced countries using the experiences of leading countries in the field of sports for persons with disabilities (P10 P15 P20).
5		Factors related to human resources	Developing and empowering human resources	1.Enhancing the level of knowledge and specialized sports skills by developing educational programs based on the models of other successful countries (P1 P3 P16 P21). 2.Training coaches, referees, managers, and other sports specialists by holding advanced training courses for staff (P2 P10 P15 P21). 3.Creating interest and motivation among staff and athletes by providing advanced sports educational programs and continuous communication with strong teams and athletes (P1 P2 P3 P5 P13 P14 P21). 4.Developing an extensive curriculum over a period of more than three years (P2).
			Identifying and attracting specialized and committed individuals	1.Providing trained sports human resources and the correct selection of athletes (P1 P2 P19). 2.Developing specialized human resources for sports for persons with disabilities by hiring experienced and qualified individuals (P8 P16 P21). 3.Selecting suitable and academic coaches for disabled athletes by validating active coaches through reviewing their backgrounds (P3 P11). 4.Focusing on basic age categories and inclusive sports for persons with disabilities (P6 P20).

6		Financial management	Securing adequate financial resources	1.Allocating appropriate budgets by the government (P10 P19). 2.Creating sustainable income sources for federations and sports clubs for persons with disabilities (P15).
			Cost management	1. Providing facilities and tax exemptions to supporters of sports for persons with disabilities (P16). 2.Optimally utilizing available resources through precise economic planning (P15).

The external environment, as the intervening conditions for the development of sports for persons with disabilities in Iraq, includes: “physical-psychological health factors,” “social conditions,” “management barriers,” and “environmental driving and empowering factors.” These create a general framework for implementing the strategies of the “model for the development of sports for persons with disabilities in Iraq,” which is reported in Table 4.

Table 4. Coding of Interviews in the Framework of Intervening Conditions

Row	Construct	Category	Axial Code	Open Codes
1	Intervening Conditions	Physical-Psychological Health Factors	Physical Weakness	1.Low participation in sports activities due to physical disabilities (P15). 2. Low participation due to lack of mobility, muscle weakness, or balance issues (P16).
2			Mental Health Issues	1. Low motivation among individuals with disabilities to participate in sports due to isolation (P16, P21). 2. Negative past experiences (P17).
3		Social Conditions	Negative Perception of Society Regarding the Abilities of Persons with Disabilities	1.Misconceptions in society about individuals with disabilities regarding participation in sports and incorrect beliefs about their ability to compete at high levels (P15, P18). 2. Unsuitable talent identification for sports for persons with disabilities (P15).
4			Lack of Social Support	1.Weak media support for sports for persons with disabilities (P15). 2.Social restrictions on women's participation in sports (P18). 3. Discrimination between individuals with disabilities and those without (P18). 4. Lack of suitable recreational activities for individuals with disabilities (P12, P20). 5. Lack of prioritization of sports for persons with disabilities from the perspective of rulers and politicians (P15).
5		Management Barriers	Weak Appropriate Planning	1.Lack of competency in human, technical, cognitive skills, etc., in sports in Iraq (P15). 2.Absence of a comprehensive vision and strategy and lack of operational programs (P16, P18). 3.Unsuitable conditions for holding sports events for persons with disabilities and lack of attention to their specific needs (P13, P15, P21).

				4. Lack of a specific management system for sports for persons with disabilities in Iraq (P15). 5. Failure to appoint sports managers based on competency (P15).
6			Insufficient Budget and Financial Resources	1. Insufficient budget allocation and unfair distribution of resources (P15, P16). 2. Lack of financial support for sports for persons with disabilities and dependence on external funding sources (P15).
7			Weak Coordination Between Governmental and Non-Governmental Organizations	1. Lack of a coordinating body and insufficient financial and equipment support from international organizations (P15, P20). 2. Weak joint cooperation in Iraq's management structure due to high ethnic and religious diversity, etc. (P15).
8			High Costs of Sports	1. High costs of specialized sports equipment for individuals with disabilities (P15). 2. Transportation costs due to the lack of an appropriate transport system (P15). 3. High tuition fees for sports training classes (P16, P21).
9		Environmental Driving and Empowering Factors	External Empowerment Factors	1. International collaborations and financial assistance from global sports organizations (P5, P12, P20). 2. need for additional financial resources from international organizations to support programs for sports for persons with disabilities (P15, P20).
10			External Drivers	1. Transfer of up-to-date knowledge and experiences from leading countries in sports for persons with disabilities (P16, P17, P21). 2. Drivers of hardware and software technology in sports for persons with disabilities (P4, P16). 3. Sports collaboration and partnerships with other countries for transferring athletes with disabilities to teams and utilizing sports facilities in other countries for training athletes (P5, P20).

The internal environment as the contextual conditions for the development of sports for persons with disabilities in Iraq includes "infrastructure-related factors," "Promoting sports" and "education and research." These provide a specific framework for implementing the strategies of the "model for the development of sports for persons with disabilities in Iraq," which is detailed in Table 6.

Table 5. Coding of interviews in the contextual condition construct

Row	Construct	Category	Axial Code	Open Codes
1	contextual conditions	Factors Related to Infrastructure	Facilities and Venues	1. Development of domestic and international sports training camps (P7, P8). 2. Development of multi-purpose sports complexes for persons with disabilities and modern sports facilities specifically for persons with disabilities (P7, P15, P19). 3. Development of infrastructure

				suitable for various types of athletes with disabilities (P1, P3, P6, P9, P10, P12, P13).
2			Development of modern technologies	1. Utilization of modern technologies to facilitate access for persons with disabilities to sports (P16). 2. Provision of sports services online and virtually with the help of media and audio-visual stimuli (P4, P16, P21).
3			Development of sports equipment	1. Procurement and distribution of modern sports equipment tailored to the needs of athletes with disabilities (P1, P2, P5, P7, P8, P13). 2. Provision of specialized medical and sports services (P17). 3. Development of modern educational equipment for persons with disabilities while ensuring the safety and security of sports equipment (P4, P6, P9, P11, P21).
4			Access to sports services	1. Creating facilities for easy access for persons with disabilities to sports venues with fair distribution of sports facilities and services across the country (P2, P18, P21). 2. Planning training tours specifically for athletes with disabilities (P3, P21). 3. Providing sports services at various levels (educational, competitive, recreational) with trained staff (P1, P15, P21). 4. Development of transportation infrastructure and recreational facilities specifically for athletes with disabilities (P8, P10, P21).
5		Factors Related to Promoting Sports	Community awareness	.1 Shifting from a purely sympathetic and supportive perspective to an empowering and justice-based approach (P17). .2 Cultural attitudes towards athletes with disabilities and the participation of persons with disabilities in various sports disciplines (P3, P21)..3 Raising awareness to encourage greater participation of persons with disabilities in festivals, national events, and tourism programs (P15).
			Support for Athletes with Disabilities	1. Creating a suitable working environment and providing conditions for persons with disabilities to actively participate in sports (P9, P17, P21). 2. Encouraging persons with disabilities to emulate successful athletes with disabilities (P18).
6			Changing societal attitudes towards disability	1. The dual paradox of a perspective of sympathy and compassion versus a perspective of empowerment, respect, and pride for persons with disabilities (P15). 2. Increasing public awareness through educational and media programs (P13, P20). 3. The need for moral and social support (P11). 4. Community awareness

				programs and information dissemination regarding sports for persons with disabilities (P14, P21).
7			Promoting an inclusive and comprehensive culture of sports	1. Creating equal opportunities for persons with and without disabilities to participate more in sports (P15). 2. Designing and equipping sports facilities to be fully inclusive (P15, P21).
		Education and Research	Up-to-date knowledge	1. Conducting scientific studies in various fields of sports for persons with disabilities (P15). 2. Developing knowledge and technology in the field of sports for persons with disabilities (P6, P19). 3. Using research findings to improve programs and policies (P16, P21). 4. Limited research in the area of sports for persons with disabilities (P15).
8			Specialization	1. Establishing faculties and specialized training in sports for persons with disabilities (P15). 2. Developing ongoing programs to enhance the knowledge and skills of current coaches (P15). 3. Equitable distribution of specialized coaches in sports for persons with disabilities across the country (P16, P21).

The implementation of the "strategies related to planning," "strategies related to human resources," "strategies for financial management," "Supportive policy strategies" and "strategies related to collaboration and participation" of the model for the development of sports for persons with disabilities in Iraq will result in "individual outcomes," "social outcomes," "economic outcomes," and "sports outcomes," which are reported in Table 6.

Table 6. Coding of interviews in the Outcomes.

Row	Construct	Category	Axial Code	Open Codes
1	Outcomes	Individual Outcomes	Improvement of Physical Health	1. Strengthening the immune system and increasing longevity (P15). 2. Reducing pain and disease symptoms, and maintaining a healthy lifestyle among athletes with disabilities (P8, P21).
2			Strengthening Self-Confidence and Self-Belief in Persons with Disabilities	1. Strengthening through positive sports experiences and success in competitions (P3). 2. Introducing successful role models of athletes with disabilities in society (P15).
3			Mental Health	1. Development of inner personality and creativity of athletes with disabilities (P15). 2. Enhancing self-confidence and self-belief among athletes with disabilities, and focusing on the psychological aspects of these athletes (P3, P5, P11, P17, P19).

4		Social Outcomes	Communication and Interactions	1. Increasing social interactions and reducing isolation and social exclusion (P15). 2. Creating a sense of belonging to the community, strengthening social skills, and fostering a sense of worth among athletes with disabilities (P15, P16, P21).
5			Attention and Development	1. Paying more attention to the needs of sports for persons with disabilities and promoting a culture of sports among persons with disabilities (P6, P8, P9, P17). 2. Attracting more governmental support and creating equal opportunities for persons with disabilities (P9, P10, P12, P18).
6		Economic Outcomes	Independence and Welfare	1. Reducing healthcare and treatment costs by decreasing dependency on others (P15, P17). 2. Increasing employment and improving the economic status of sports for persons with disabilities, leading to financial independence (P15, P17).
7			Profitability	1. Increasing revenue from hosting global competitions and enhancing economic productivity (P6, P15). 2. Attracting more financial support (P1, P2, P4).
8		Sports Outcomes	Growth and Development	1. Greater public interest among persons with disabilities in sports activities and improving physical fitness levels (P15). 2. Selecting suitable sports for each individual with disabilities along with discovering and nurturing athletic talents (P8, P13, P14). 3. Developing sports for persons with disabilities at national and international levels (P7)
9			Honors and Success	1. Achieving sports success at the highest levels and increasing the number of sports medals (P5, P9, P11, P17). 2. Hosting international sports events and gaining national and international experiences (P4, P10, P13, P14, P19). 3. Improving rankings in Paralympic and Asian Para Games events (P13).
10			Empowerment	1. Attracting and nurturing youth based on scientific principles and improving motor and cognitive skills (P2, P3, P5, P20). 2. Optimally utilizing the capacities of athletes with disabilities and hosting more competitions throughout the season (P2, P12, P19, P21). 3. Careful planning for organizing sports competitions and sending teams to training camps (P11). 4. Prescribing scientific and systematic training for athletes with disabilities and preparing internal and external training

				camps for readiness and player development (P2, P4, P6, P10, P12, P13).
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In Tables 2 to 6, the outcomes of the research group on the 6 constructs of the paradigmatic model for the development of sports for persons with disabilities in Iraq has been classified by category, axis, and indicators. The final model of the research and the relationships between each construct and the categories of each construct are illustrated in Figure 1.

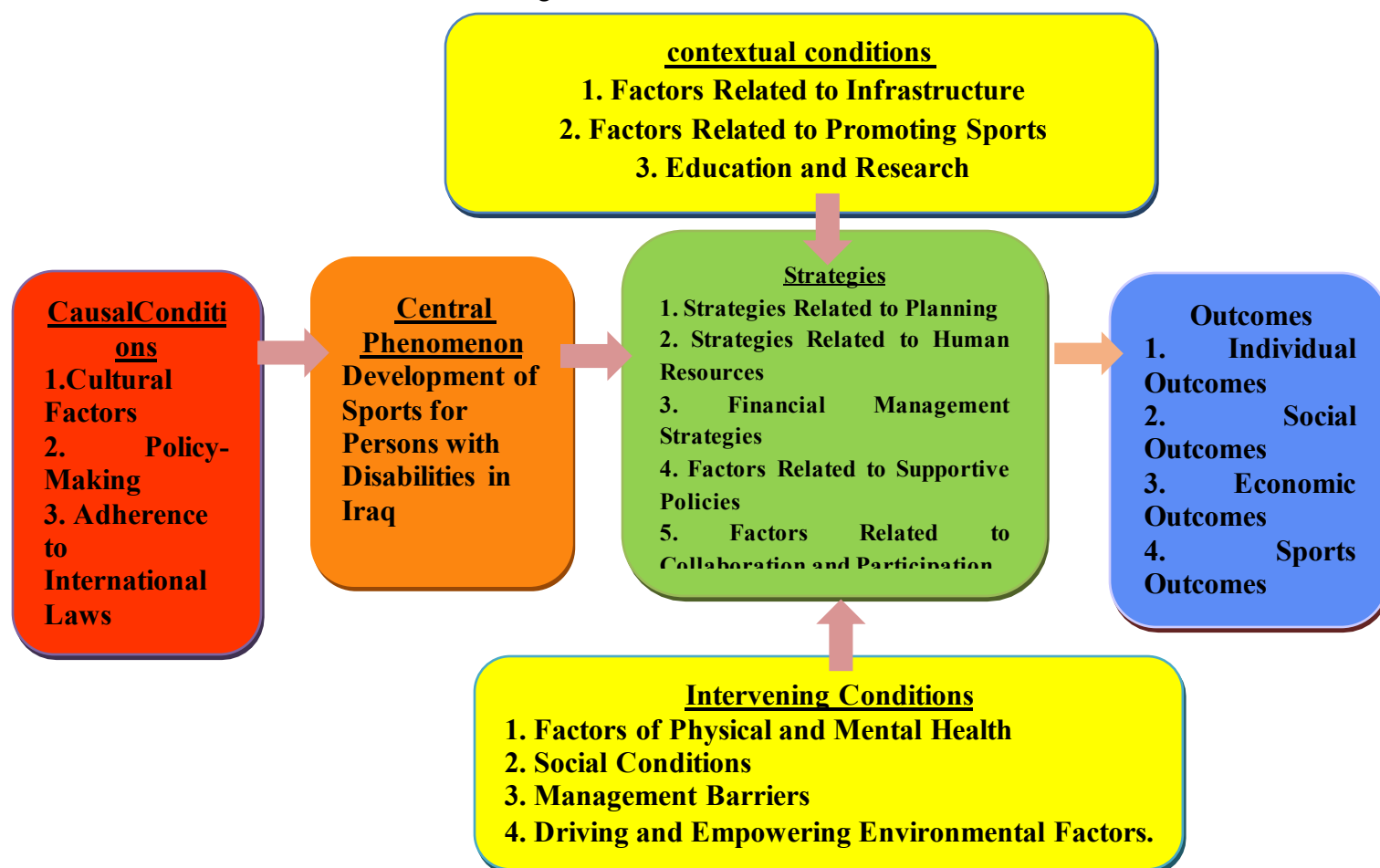


Figure 1. The Paradigmatic Model of the Development of Persons with Disabilities in Iraq

Discussion:

The aim of this research was to design a model for the development of sports for persons with disabilities in Iraq. There is no doubt that regular and appropriate physical activities have a significant impact on the health of these individuals and reduce the side effects associated with disabilities. Persons with disabilities constitute an important part of society, and anyone may face some form of disability during their lifetime. The noteworthy statistics of persons with disabilities in Iraq further emphasize the need for special attention to the sports of these individuals. Therefore, designing and explaining a model for the development of sports for Iraqi persons with disabilities requires the assistance and support of relevant authorities and the establishment of specific laws so that in the near future, all Iraqi persons with disabilities can participate increasingly and significantly in sports halls and complexes, just like their peers.

The results for each construct were explained in terms of the categories, concepts, and exploratory items. For the development of sports for persons with disabilities in Iraq, according to the research findings, the

categories for the causal conditions construct include: cultural factors, policymaking, and adherence to international laws. Cultural factors may promote or limit the participation of persons with disabilities in sports activities. The existence of supportive policies and laws for appropriate sports for persons with disabilities, the government's commitment to their effective implementation, Iraq's commitment to treaties and international agreements concerning the rights of persons with disabilities, and respect for local values and culture to create a suitable environment for the development of sports for persons with disabilities, as well as adherence to international laws such as the Convention on the Rights of Persons with Disabilities (CRPD) to support and guarantee the rights and freedoms of persons with disabilities, including the right to engage in sports and recreational activities, can facilitate and promote sports for persons with disabilities. The findings of this research align with the results of (Wen et al., 2024), (Lincoln, 1985), and (Hussein, 2023). (Wen et al., 2024) suggested policy guidelines in their research on the challenges facing sports for persons with disabilities in China. The findings of (Lincoln, 1985) regarding the issues faced by individuals with physical disabilities in Bangladesh recommend that the government and society take actions such as building accessible public buildings and environments, creating job opportunities for persons with disabilities, improving education, and raising public awareness about disabilities. Based on (Hussein, 2023) research, the researcher suggested that the Iraqi National Paralympic Committee should have specific policies for the integration of persons with disabilities, and with appropriate strategies and support from authorities and families, more opportunities can be created for the participation of persons with disabilities in sports, and operational plans for implementing these policies can be developed. Therefore, it is recommended that the mentioned managers establish a strong and professional policy-making structure aligned with international laws in Iraq.

The categories of the intervening conditions construct include: physical-psychological health factors, social conditions, management barriers, and driving and empowering environmental factors. In fact, access to and provision of appropriate health and medical services for persons with disabilities, enhancing public awareness and attitudes towards persons with disabilities, creating equal social and sports opportunities for persons with disabilities, the existence of supportive laws and regulations, allocation of budget and suitable sports facilities for persons with disabilities, appropriate processes for management and optimal planning in the field of sports for persons with disabilities, and the development of effective monitoring and evaluation systems can help overcome management barriers, improve the conditions for sports for persons with disabilities, and enhance their health and quality of life in Iraq. The results of this research are in line with the findings of (Kurniawan & Rizky Samudro, 2024), (Afroozeh et al., 2025), (Albrecht et al., 2019), (Ramsden et al., 2023), (Yehuda et al., 2023), and (Moon & Kim, 2021)

According to (Kurniawan & Rizky Samudro, 2024), social and structural barriers that hinder the participation of persons with disabilities in sports should be removed. (Afroozeh et al., 2025) identified the lack of experienced coaches, insufficient accessible buildings and transportation, and social attitudes as the most significant barriers to participation, citing the social model of disability. (Ramsden et al., 2023) highlight the health and social benefits as key determining factors for the participation of players with and without disabilities. (Albrecht et al., 2019) examined the importance of a wide range of individual and structural factors for the social integration of persons with disabilities in European sports clubs. The results show that individual factors such as the level of activity in clubs are more important than club conditions. Additionally, the training environment also has an impact. Individuals who train with both non-disabled and disabled individuals communicate better with others. Children and adolescents with disabilities are at greater risk of developing heart diseases (Yehuda et al., 2023) The results of (Moon & Kim, 2021) indicate that individuals with higher self-confidence and self-esteem generally have better mental health. Conversely, individuals with low self-confidence and self-esteem are more prone to mental health issues. Therefore, to improve the mental health of persons with disabilities, it is essential to help them strengthen their self-confidence and self-esteem.

The categories of the contextual conditions construct include: infrastructural factors such as education and research, and factors related to the promotion of sports. Considering these three fundamental factors (education and research, infrastructure, and sports promotion) in the internal environment of Iraq can provide a suitable basis for implementing strategies for the development of sports for persons with disabilities in this country. The existence of negative cultures, beliefs, and attitudes towards persons with disabilities can hinder the development of sports for persons with disabilities. However, raising awareness and understanding in society about the importance and benefits of sports for persons with disabilities can lead to increased support and justification for investment in the field of sports for persons with disabilities. The findings of this research in this construct align with the results of (Mohd Aznan et al., 2022) (Erdyneeva et al., 2021), (Hammond, 2022), and (Moon & Kim, 2021).

The results of (Mawena & Sorkpor, 2024) indicate that students with disabilities can continuously and long-term participate in physical activities when provided with appropriate opportunities and facilities. Based on these findings, in addition to organizing sports events and physical activities tailored to the needs of students with disabilities in special schools, it is essential for various stakeholders to prioritize strategic actions for the development of sports for persons with disabilities at the national level. The existence of negative cultures, beliefs, and attitudes towards persons with disabilities can hinder the development of sports for persons with disabilities. However, raising awareness and understanding in society about the importance and benefits of sports for persons with disabilities can lead to increased support and justification for investment in the field of sports for persons with disabilities. The findings of this research in this construct align with the results of (Mawena & Sorkpor, 2024) to provide more opportunities for the participation of students. The findings of (Mohd Aznan et al., 2022) indicate that improving access to sports facilities can play a significant role in increasing the physical activity of persons with disabilities. According to (Erdyneeva et al., 2021), to promote sports among persons with disabilities, existing barriers must be removed, and necessary support from the government and sports organizations should be provided. The most important barriers include the lack of awareness of existing sports organizations and sectors, insufficient equipment in sports halls, low attendance of others in halls, and inadequate development of sports institutions for persons with disabilities. (Hammond, 2022) suggests that disability education should be included in broader training and coach development programs to align with the broader goals of the government and the Australian Swimming Federation for improving the participation of persons with disabilities in sports. To strengthen the self-confidence and self-esteem of persons with disabilities, educational and intervention programs should be implemented to help individuals with disabilities face life's challenges and believe in themselves (Moon & Kim, 2021)

Therefore, it is recommended that the relevant managers take various actions as a solution, such as organizing social campaigns to justify and encourage sports for persons with disabilities in the country, while raising awareness of the positive effects of sports on the mental and physical health of male and female persons with disabilities in society. Creating a positive sports environment contributes to the development of sports for persons with disabilities in Iraq. Establishing suitable transportation infrastructure, sports facilities for persons with disabilities such as playgrounds, and empowering various sports unions and community associations are among the research proposals for the relevant authorities and managers.

The categories of the strategies construct include: strategies related to planning, supportive policies, human resource strategies, factors related to collaboration and participation, and financial management strategies. Effective implementation of these strategies requires knowledge sharing and intersectoral collaboration, which aligns with the findings of (Kurniawan & Rizky Samudro, 2024), (Mohd Aznan et al., 2022), (Erdyneeva et al., 2021), (Shafaghathian et al., 2025) and (Kitchin & Crossin, 2018). The findings of (Shafaghathian et al., 2025) identified 13 success factors for better organizing sports events specifically for persons with disabilities and veterans in Iran, ranging from financial and medical issues to cultural

programs. (Kurniawan & Rizky Samudro, 2024) emphasized the necessity of formulating and implementing inclusive sports policies for persons with disabilities to overcome barriers and fully realize the benefits of sports for persons with disabilities, indicating that behavioral and structural barriers impede the full potential of sports for persons with disabilities. The Indonesian government is committed to improving sports inclusion and creating a better platform for the participation of persons with disabilities by establishing regional training centers and holding national Paralympic games. According to (Mohd Aznan et al., 2022), the availability of facilities alone is insufficient to attract the participation of persons with disabilities. Facility providers must be prepared and demonstrate readiness to include persons with disabilities in the community. One of the barriers faced by persons with disabilities in joining any activity is that society is not ready to accept them, which may lead to other problems. The lack of funding for adaptive sports and sporting events for persons with disabilities is one of the main challenges mentioned (Erdyneeva et al., 2021). The findings of (Kitchin & Crossin, 2018) indicate that the brand and size of the organization contributed to building integration capacity.

Based on the findings, it is recommended that managers of sports for persons with disabilities strive to achieve the following strategies: securing necessary budgets for the development of sports for persons with disabilities and attracting financial support from institutions, companies, and organizations; organizing special festivals related to sports for persons with disabilities in Iraq; forming NGOs for optimal management and planning of sports for persons with disabilities; enhancing the managerial, technical, and educational levels of players in teams and sports clubs for persons with disabilities; creating collaboration networks with relevant institutions and organizations such as education to develop educational training for sports for persons with disabilities with the participation of local teams and clubs at the national and international levels; establishing and optimizing common sports infrastructure in neighborhoods for persons with disabilities; developing suitable public spaces for physical activity and sports for persons with disabilities in parks and streets on holidays in collaboration with the community. These actions play a vital role in the advancement and development of sports for persons with disabilities in Iraq.

The categories of the outcomes construct include: the implementation of planning and policy-making strategies, human resource strategies, and financial management strategies of the research model, leading to individual, social, economic, and sports outcomes. Given the exploratory nature of the results in this section, they align with the research of (Kurniawan & Rizky Samudro, 2024), (Shafaghatian et al., 2025), (Stangova et al., 2022), (Alcaraz-Rodríguez et al., 2021) (Battalio et al., 2020) and (Erciş, 2018)

According to Kurniawan et al. (2024), sports can help achieve sustainable development goals, especially those related to social participation, economic welfare, engagement, and equality. Based on the findings of (Shafaghatian et al., 2025) persons with disabilities reflect on the changes that have occurred in their lives after starting active sports. Through sports, they have been able to not only improve their physical condition but also experience positive changes in mental and social aspects. Our research also confirmed the positive impact of sports on the autonomy of persons with disabilities. According to (Stangova et al., 2022) sports play a crucial role in improving the lives of persons with disabilities. When persons with disabilities engage in sports, they can connect with others, gain self-confidence, and enhance their social skills. Additionally, sports help them cope better with life's challenges. The findings of (Alcaraz-Rodríguez et al., 2021) indicate that sports programs lead blind individuals to feel better about themselves, improve their social skills, become healthier, and be more accepted in society. Sports can be an effective solution for improving the mental health of individuals with physical disabilities (Battalio et al., 2020) The results of (Erciş, 2018) showed that physical fitness has a significant impact on the mental strength and athletic performance of players. Therefore, to improve athletic performance, attention must be given to both physical and mental aspects.

Explaining the outcomes resulting from the development of sports for persons with disabilities in Iraq means improving physical and mental health, increasing independence and self-sufficiency, enhancing the

quality of life for persons with disabilities, leading to increased social acceptance, reduced discrimination and negative attitudes, strengthened social participation, and the presence of persons with disabilities in society. This, in turn, leads to reduced healthcare costs, increased employment and income for persons with disabilities, reduced dependence on government assistance, prevention of negative outcomes related to inactivity, violence, and substance abuse, and achieving sports successes at national and international levels. Expanding educational and practical programs with diverse sports experiences to improve athletes' performance; increasing the use of technology, the internet, and media coverage for effective promotion and communication in sports for persons with disabilities are also essential. Thus, the responsible managers of sports for persons with disabilities in Iraq can identify and strengthen the various capabilities and potentials of Iraqi persons with disabilities by successfully implementing these strategies, providing them with opportunities for active participation in sports activities and improving their quality of life.

Conclusion:

Since the results of the interviews in this research, due to the exploratory approach in identifying and designing the paradigmatic model for the development of sports for persons with disabilities in Iraq using a grounded theory approach based on the systematic method of Strauss and Corbin, are unique. Therefore, the managerial and executive authorities in sports for persons with disabilities in Iraq, considering the abundant human capital and the various age and gender audiences in sports, can leverage this opportunity for the development of inclusive and elite sports for persons with disabilities, advancing organizational goals, and solving organizational and managerial problems. The qualitative findings of this research provide a comprehensive and potential overview of all aspects and events that may occur in the path of developing sports for persons with disabilities in Iraq. In other words, this research, through interviews and reviewing existing documents and using qualitative research methods, has attempted to identify and examine all possibilities, opportunities, challenges, and limitations that exist in the way of developing sports for persons with disabilities in Iraq. Finally, it is suggested that the managers of sports in Iraq strive to increase the use and employment of young, creative, and innovative human resources in planning and implementing the developmental model of this research and consider clear missions for executing the research strategies based on the social, cultural, and scientific requirements of coaches, referees, and players. Overall, the results of this research, based on the systematic approach of Strauss and Corbin, demonstrate the antecedents and outcomes that will be faced in the development of sports for persons with disabilities in Iraq. Sports, as a socio-cultural phenomenon, play a central role in promoting the physical and mental health of individuals and communities. Extensive research indicates that participation in sports activities, in addition to improving physiological health indicators, enhances cooperative spirit, increases self-confidence, and creates a sense...

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Conflict of Interest

The authors declare that they have no conflict of interest.

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