

Identification of Factors Influencing the Development of Sports for Children with Special Needs

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ABSTRACT

The present study aimed to identify and analyze the key institutional, educational, socio-cultural, and psychological factors that influence the development of sports for children with special needs in Tehran. This study employed a qualitative research design using a phenomenological approach to explore the lived experiences and perceptions of stakeholders involved in inclusive sports. The participants included 21 individuals comprising teachers, parents, coaches, rehabilitation specialists, and policymakers selected through purposive sampling from Tehran. Semi-structured, in-depth interviews were conducted until theoretical saturation was achieved. Each interview lasted between 45 and 75 minutes and was transcribed verbatim. Data were analyzed using thematic analysis, following Braun and Clarke's six-step model, with the assistance of NVivo 14 software to facilitate systematic coding and theme extraction. Trustworthiness of the results was ensured through member checking, peer debriefing, and maintaining an audit trail in accordance with Lincoln and Guba's criteria. Analysis revealed four overarching themes: (1) Institutional and policy support, encompassing weak inter-organizational coordination and lack of inclusive policy frameworks; (2) Socio-cultural and family factors, including parental overprotectiveness, social stigma, and low public awareness; (3) Educational and infrastructural conditions, referring to limited accessibility, untrained staff, and insufficient adaptive facilities; and (4) Psychological and motivational dimensions, focusing on children's self-efficacy, emotional development, and peer inclusion. These themes collectively highlight that inclusive sports development is constrained by structural, attitudinal, and environmental barriers, yet facilitated by supportive relationships and empathetic teaching practices. The findings demonstrate that effective development of sports for children with special needs requires integrated policy frameworks, inclusive educational reform, cultural transformation, and psychosocial empowerment.

Keywords: *Inclusive sports; children with special needs; qualitative research; institutional support; socio-cultural factors; psychological empowerment*

1. Introduction

The inclusion of children with special needs in sports activities has become an increasingly critical concern in contemporary educational and social policy discourse. Participation in sports provides multidimensional benefits for children, including physical health, psychological resilience, and social integration. However, despite global commitments to inclusion, children with disabilities or developmental challenges often encounter significant barriers that restrict their engagement in sports programs designed for their peers (Orhan, 2025). In inclusive educational systems, sports are recognized not merely as a recreational activity but as a crucial developmental tool that supports self-esteem, motor coordination, teamwork, and interpersonal skills (Afridawati et al., 2025). These outcomes are especially vital for children with special needs, whose development often depends on structured social and physical interaction opportunities.

Inclusive physical education and sports initiatives are therefore gaining traction in schools, yet the quality of their implementation varies widely across regions and institutions (Ali, 2023). Studies in Indonesia and other contexts have revealed that teachers often lack the training, resources, and pedagogical frameworks necessary to support children with diverse needs (Hastuti & Musslifah, 2023). As a result, inclusion remains more of a policy aspiration than a consistent practice. Furthermore, sports educators and policymakers must confront systemic obstacles such as insufficient adaptive infrastructure, inadequate funding, and minimal inter-agency collaboration (Baías & Șandor, 2022). While inclusion policies formally promote equality, their success depends on how these policies are translated into daily pedagogical and community practices (Marni et al., 2024).

One of the most powerful arguments for inclusive sports comes from research linking physical activity to improved mental health and social functioning among children with disabilities. According to (Borges-Silva et al., 2024), sports participation contributes significantly to the psychological well-being and self-regulation of children with specific learning disorders, strengthening their social adjustment and emotional intelligence. Likewise, the development of independent life skills has been found to increase when children engage in sports activities tailored to their physical and cognitive capacities (Dossal et al., 2024). Participation in inclusive sports therefore becomes a form of rehabilitation, education, and empowerment simultaneously

(Baías & Șandor, 2022). Such multidimensional benefits underscore the need for schools and communities to move beyond segregated or symbolic inclusion toward practical, meaningful participation.

Research also emphasizes the evolving role of educators and institutions in implementing adaptive and inclusive sports programs. The findings of (Heenan & Sumner, 2025) demonstrate how organizations such as Special Olympics Ontario have transformed the landscape of inclusive sports by promoting structured participation, community advocacy, and evidence-based pedagogies. Similarly, (Mercea & Mateescu, 2024) highlighted that adapted football training can effectively enhance motor skills and cooperation abilities in children with disabilities when supported by trained educators and inclusive methodologies. These insights suggest that sports inclusion depends not only on policy design but also on institutional commitment and teacher competencies. In this sense, inclusion in sports becomes a test of systemic adaptability—of how education systems translate inclusive ideals into daily practices.

The concept of inclusive education has expanded significantly since the Salamanca Statement of 1994, yet its local interpretations differ widely (Nurfadhillah et al., 2022). Research in Southeast Asia and Eastern Europe shows that inclusive schooling often lacks coherence between physical, cognitive, and social development programs (Kolosova et al., 2022). While many schools formally enroll children with special needs, they rarely provide comprehensive sports and physical education components tailored to those children's abilities (Schoeff et al., 2021). In some cases, inclusion is confined to classroom integration without parallel efforts in extracurricular or physical domains (Streda, 2021). This situation reflects an enduring dichotomy between academic inclusion and physical inclusion, where sports are seen as an optional add-on rather than an essential developmental domain (Puzanova et al., 2021).

From a social perspective, cultural norms and parental attitudes also influence children's sports participation. According to (Rahmawati et al., 2024), family encouragement and parental involvement are critical in fostering an inclusive environment where children with special needs feel accepted and motivated to participate in physical activities. However, persistent cultural stigma surrounding disability, particularly in conservative societies, often discourages public visibility and participation (Thaibah et al., 2024). Research suggests that inclusive sports initiatives can act as powerful instruments of social change, helping communities challenge stereotypes and

normalize diversity through shared physical experiences (Sarima, 2023). By emphasizing ability rather than disability, such programs can create new social narratives around competence and participation.

Nevertheless, institutional weaknesses continue to impede progress. (Nurhasan & Madhakomala, 2024) argued that the absence of quality control mechanisms in inclusion programs leads to inconsistent implementation and poor accountability. Similarly, (Shytikova et al., 2022) showed that without clear operational guidelines, even well-intentioned inclusive sports projects fail to achieve measurable outcomes. A major challenge is the lack of specialized teacher training programs and adaptive learning resources (Sugmawati et al., 2022). Many educators are willing to include children with disabilities but lack the professional tools or institutional support to do so effectively. This skills gap often results in the exclusion of children from active participation during sports sessions (Palshkova, 2023). Moreover, logistical barriers such as the absence of adaptive playgrounds, specialized equipment, and accessible transportation further restrict participation opportunities (Zokirjonovna et al., 2023).

Recent international studies indicate that technological and managerial innovations can enhance the inclusivity of sports programs (Bižić, 2022). Digital tracking tools, personalized performance apps, and adaptive training systems have begun to transform inclusive education by making individualized instruction more feasible (Simaeva & Churkin, 2023). However, technology alone cannot substitute for inclusive pedagogy; it must be integrated into a broader strategy that values diversity, accessibility, and empowerment (Tabaie et al., 2022). The sustainability of inclusion efforts thus depends on the synergy between teachers, parents, institutions, and communities. In this collaborative ecosystem, the teacher becomes a facilitator of participation rather than a transmitter of standard physical education routines (Pilipchuk & Skripka, 2021).

At the same time, the psychological and emotional aspects of sports inclusion require attention. (Mercea & Mateescu, 2024) observed that tailored physical activities not only enhance motor skills but also improve children's confidence and emotional regulation. Similarly, (Borges-Silva et al., 2024) emphasized that the joy and social connection derived from sports can act as a therapeutic mechanism for children with learning or behavioral difficulties. Yet, without appropriate psychological support and sensitivity from educators, children may experience stress or exclusion in competitive environments (Afridawati

et al., 2025). Hence, training programs must integrate psychological awareness into physical education frameworks.

Inclusive sports are also important from a rights-based perspective. The implementation of inclusive education policies in many regions has been guided by the principle that every child has a fundamental right to participate fully in society, including through sports and recreation (Marni et al., 2024). However, (Dossal et al., 2024) pointed out that mere policy declarations are insufficient without structural and institutional reform. Programs must be evaluated not only on enrollment numbers but also on meaningful participation and developmental outcomes. This requires long-term collaboration between education ministries, local governments, and non-governmental organizations (Heenan & Sumner, 2025). The growing recognition of adaptive and inclusive sports within educational policy frameworks reflects an evolving understanding of inclusion as a collective responsibility, not an individual adjustment (Kolosova et al., 2022).

From a developmental standpoint, participation in physical activity offers children with special needs a pathway toward autonomy, resilience, and skill mastery (Baías & Şandor, 2022). Research in both Eastern and Western contexts shows that adaptive sports interventions can significantly enhance physical coordination, communication skills, and social adaptability (Bižić, 2022). The presence of supportive teachers, accessible facilities, and inclusive peer groups fosters motivation and reduces dropout rates (Hastuti & Musslifah, 2023). Yet, (Puzanova et al., 2021) warns that without structured monitoring systems, the progress of inclusion remains anecdotal and fragmented. Therefore, establishing evidence-based models that combine physical education, therapeutic support, and community engagement remains a priority.

The complexity of inclusive sports development is further illustrated by cross-national comparisons. (Schoeff et al., 2021) discussed the risks of early sport specialization and emphasized the importance of balanced, child-centered programs for all participants, including those with special needs. Similarly, (Streda, 2021) stressed that inclusive school-based sports activities require not only pedagogical innovation but also institutional willingness to transform evaluation standards and success criteria. These insights align with findings by (Sarima, 2023), who argued that inclusion in Islamic educational frameworks must harmonize moral education, empathy, and social justice principles. Therefore, inclusive sports programs should be

culturally sensitive and contextually adaptive, reflecting the values and expectations of their communities.

Overall, the literature underscores that inclusive sports are not just educational or therapeutic interventions but vital social mechanisms that promote equality, well-being, and holistic development. The diversity of findings—from policy analysis (Nurhasan & Madhakomala, 2024), pedagogical innovation (Afridawati et al., 2025), and community integration (Rahmawati et al., 2024)—points to the need for comprehensive models tailored to local contexts. However, research in developing countries, including Iran, remains limited, particularly regarding the multidimensional factors—institutional, educational, social, and psychological—that influence the development of sports for children with special needs.

Therefore, the aim of this study is to identify the key factors influencing the development of sports for children with special needs in Tehran through qualitative exploration of stakeholders' experiences and perspectives.

2. Methods and Materials

2.1. Study Design and Participants

This study employed a qualitative research design using a phenomenological approach to explore the factors influencing the development of sports among children with special needs. The aim was to gain an in-depth understanding of experiences, perceptions, and contextual factors shaping sports participation and development for this population. The participants consisted of 21 individuals, including physical education experts, special education teachers, rehabilitation specialists, sports coaches, and parents of children with special needs residing in Tehran.

A purposive sampling method was used to select participants who possessed rich and relevant experiences related to the topic. Sampling continued until theoretical saturation was reached—when no new themes or insights emerged from additional interviews. The inclusion criteria included having at least three years of experience in working with children with special needs and willingness to participate voluntarily in the study.

2.2. Measures

Data were collected through semi-structured, in-depth interviews conducted individually with participants. Each interview lasted between 45 and 75 minutes, depending on the participant's engagement and availability. The

interviews were conducted face-to-face in safe and comfortable settings chosen by the participants, such as schools, sports centers, and rehabilitation facilities in Tehran.

An interview guide was developed based on prior literature and expert consultation. Key open-ended questions focused on participants' perceptions of challenges, enabling factors, policy support, social attitudes, and infrastructural needs in developing sports programs for children with special needs. Follow-up questions were asked to clarify and deepen understanding of the participants' responses. All interviews were audio-recorded with the participants' consent and then transcribed verbatim for analysis.

2.3. Data Analysis

The collected data were analyzed using thematic analysis, following the six-step framework proposed by Braun and Clarke (2006). NVivo software version 14 was employed to assist in organizing, coding, and managing the qualitative data systematically.

Initially, all interview transcripts were read multiple times to achieve familiarization with the data. Subsequently, meaningful units were identified and coded. Similar codes were grouped into subthemes, which were then further refined into main themes representing the key factors influencing the development of sports for children with special needs.

To ensure the rigor and trustworthiness of the findings, the study employed Lincoln and Guba's (1985) criteria of credibility, dependability, confirmability, and transferability. Credibility was enhanced through member checking, where participants reviewed and verified the accuracy of their statements and the extracted themes. Dependability and confirmability were established by maintaining a detailed audit trail of the research process and peer debriefing with two qualitative research experts. Transferability was addressed through rich, thick descriptions of the context and participants to allow readers to judge the applicability of the findings to other settings.

3. Findings and Results

A total of 21 participants took part in the study, representing a diverse range of professional and personal experiences related to the development of sports for children with special needs in Tehran. The participants included 6 special education teachers (28.6%), 4 adaptive physical education coaches (19.0%), 3 rehabilitation specialists

(14.3%), 3 policymakers and administrators from sports or education departments (14.3%), and 5 parents of children with special needs (23.8%). The age of participants ranged from 29 to 57 years, with an average age of approximately 41 years. In terms of gender distribution, 12 participants were female (57.1%) and 9 were male (42.9%), reflecting the active involvement of both genders in inclusive education and sports development contexts.

Regarding educational background, 15 participants (71.4%) held at least a master's degree, mostly in physical

education, rehabilitation sciences, or psychology, while 6 participants (28.6%) had a bachelor's degree. Participants' years of professional experience ranged from 4 to 25 years, with the majority ($n = 13$; 61.9%) having over 10 years of experience in their respective fields. The parents in the sample had children aged between 7 and 13 years, representing various types of disabilities, including physical ($n = 6$), intellectual ($n = 4$), and autism spectrum disorders ($n = 3$).

Table 1

Themes, Subthemes, and Concepts Extracted from Qualitative Data

| Main Themes (Categories) | Subthemes (Subcategories) | Concepts (Open Codes) |
|---|---|--|
| 1. Institutional and Policy Support | Lack of coherent national policies | Absence of a unified plan; fragmented responsibilities; insufficient inter-ministerial coordination; lack of national sports strategy for special needs children |
| | Resource allocation and budgeting | Limited government funding; inadequate sports facilities; lack of adaptive equipment; dependency on external donors; short-term project funding |
| | Policy implementation barriers | Bureaucratic delays; lack of monitoring mechanisms; top-down decision-making; weak enforcement of inclusion laws |
| | Institutional cooperation and networking | Poor collaboration between education, sports, and welfare organizations; absence of cross-sectoral initiatives; weak NGO involvement |
| | Legislative and advocacy frameworks | Insufficient legal protection; lack of advocacy groups; unrecognized rights to equal participation; weak enforcement of disability laws |
| 2. Socio-Cultural and Family Factors | Parental attitudes and awareness | Low awareness about sport benefits; overprotective parenting; emotional fear of injury; prioritizing therapy over sports; limited motivation for participation |
| | Social stigma and cultural beliefs | Negative public perceptions; labeling of children; exclusion in community events; limited social acceptance |
| | Peer and community support | Absence of inclusive community sports; low peer engagement; lack of volunteerism; limited neighborhood initiatives |
| | Family economic conditions | Financial barriers; cost of transportation and equipment; limited access to subsidized programs |
| | Role models and media representation | Few visible athletes with disabilities; limited media coverage; lack of inspiring stories; underrepresentation in children's programs |
| 3. Educational and Infrastructural Conditions | School readiness and inclusion | Inadequate inclusive physical education; lack of adapted curricula; teacher resistance; shortage of PE teachers with special training |
| | Accessibility of facilities | Poor design of school sports spaces; lack of ramps and adaptive tools; transportation difficulties; unsafe environments |
| | Training of professionals | Insufficient pre-service training; lack of workshops for adaptive sports; limited awareness among coaches |
| | Availability of specialized programs | Scarcity of organized adaptive sports clubs; limited after-school programs; lack of continuity between rehabilitation and school sports |
| | Technological and digital support | Absence of assistive technologies; limited virtual training tools; lack of data systems for program monitoring |
| 4. Psychological and Motivational Dimensions | Collaboration with rehabilitation centers | Weak connection between schools and therapists; lack of follow-up programs; minimal interdisciplinary planning |
| | Self-efficacy and confidence of children | Low self-esteem; fear of failure; past experiences of rejection; dependence on adults |
| | Motivation and interest in sports | Limited awareness of sports options; lack of intrinsic motivation; previous negative experiences; absence of encouragement |
| | Emotional and social development | Feelings of belonging; social anxiety; enjoyment through teamwork; improvement in emotional regulation |
| | Influence of coaches and teachers | Supportive coaching behavior; empathy and understanding; communication skills; adaptive goal-setting |
| | Parental emotional reinforcement | Encouragement and praise; sharing experiences; positive reinforcement; trust-building between parents and children |
| | Peer influence | Role of inclusive classmates; modeling from peers; support from siblings; encouragement in joint play |

1. Institutional and Policy Support

A central theme emerging from participants' perspectives was the limited institutional and policy support for promoting sports among children with special needs. Participants consistently emphasized the *lack of coherent national policies* and fragmented institutional responsibilities that hinder systematic development. As one policymaker noted, *"Every organization has its own plan, but there is no single roadmap that connects education, sports, and welfare systems together."* Resource constraints were frequently mentioned, including *limited government funding, shortage of adaptive equipment, and dependence on short-term projects*. Furthermore, *policy implementation barriers* such as bureaucratic delays and weak enforcement mechanisms prevented inclusive sports programs from reaching schools and communities. A coach explained, *"Even when new programs are approved, they get stuck in administrative steps and never reach the children."* Participants also identified *poor inter-agency cooperation* and *insufficient advocacy frameworks* as obstacles, indicating the absence of strong legal mandates or civil society organizations to ensure the right to sports participation for children with disabilities. These findings suggest that structural and political reforms are essential for sustainable progress in this domain.

2. Socio-Cultural and Family Factors

Socio-cultural attitudes and family contexts were another dominant factor shaping sports participation. Many parents reportedly held *overprotective attitudes* and *limited awareness* about the developmental benefits of physical activity. One mother described, *"I was afraid my son might get hurt, so I kept him away from sports until his therapist convinced me otherwise."* Social stigma and negative cultural beliefs also discouraged community engagement, as children with special needs were often *excluded from neighborhood games* and *rarely seen in public sports facilities*. Another participant mentioned, *"People still stare when a child with Down syndrome plays in the park—it makes parents uncomfortable."* Economic constraints further compounded the issue, with many families struggling to afford *transportation, special equipment, or private sports classes*. In addition, the *lack of visible role models* and *limited media representation* reduced children's motivation and societal support for inclusive sports. Participants agreed that improving public awareness campaigns and highlighting successful athletes with disabilities could help reshape cultural perceptions and increase family involvement.

3. Educational and Infrastructural Conditions

The educational and infrastructural environment emerged as a key determinant of sports development for children with special needs. Participants reported that most schools were *not adequately prepared* for inclusive physical education. A teacher explained, *"Our PE curriculum is the same for all children, and we have not been trained to adapt it for those with physical or cognitive challenges."* Schools often lacked *accessible sports facilities*, such as ramps, adapted equipment, or safe environments. The *shortage of specialized teachers and coaches* trained in adaptive sports was another critical issue raised by interviewees. Moreover, the *disconnection between schools and rehabilitation centers* limited the continuity of children's physical development programs. One rehabilitation expert noted, *"When therapy ends, there is no follow-up or link with school activities—the progress stops."* Participants highlighted that technological innovation, such as *assistive tools and virtual training modules*, could potentially improve accessibility and monitoring, but such tools remain largely unavailable. The findings underscore the need for systemic reform in educational planning, teacher training, and infrastructural investment to promote sustainable sports inclusion.

4. Psychological and Motivational Dimensions

The final theme emphasized the psychological and motivational aspects influencing participation and persistence in sports among children with special needs. Many children reportedly experienced *low self-esteem, fear of failure, and previous experiences of rejection*, which inhibited their willingness to participate. A coach shared, *"Some children avoid joining the team because they think others will laugh at them."* Conversely, when children received emotional encouragement, their *self-efficacy and confidence* improved significantly. Parental support played a vital role in motivation; as one parent expressed, *"When I cheer for my daughter during training, she smiles and tries harder."* Participants also emphasized the importance of *empathetic and patient coaches* who adapt their communication style to each child's needs. The presence of supportive peers and inclusive group activities was also linked to greater emotional and social development, helping children feel *a sense of belonging and joy through teamwork*. These findings highlight that beyond physical infrastructure, the emotional climate surrounding children—shaped by parents, teachers, and peers—is fundamental to their sustained engagement in sports activities.

4. Discussion and Conclusion

The findings of this qualitative study shed light on the complex, interrelated factors that influence the development of sports for children with special needs in Tehran. Through the perspectives of teachers, parents, rehabilitation specialists, and policymakers, four overarching themes emerged: *institutional and policy support*, *socio-cultural and family factors*, *educational and infrastructural conditions*, and *psychological and motivational dimensions*. These findings not only reflect structural gaps in inclusive sports development but also reveal deep-rooted social and attitudinal challenges that shape the participation of children with special needs. The results align closely with international research emphasizing the need for a holistic, multi-sectoral approach to inclusion in physical education and sports (Afridawati et al., 2025; Heenan & Sumner, 2025; Orhan, 2025).

The first major theme—*institutional and policy support*—highlighted the lack of coherent strategies and fragmented responsibilities among government agencies. Participants repeatedly noted the absence of a unified national policy on inclusive sports, leading to duplication of efforts and inconsistent implementation. This finding resonates with the work of (Marni et al., 2024), who reported that decentralized policy execution and poor coordination among educational, social, and sports departments undermine inclusive education systems. Similarly, (Nurhasan & Madhakomala, 2024) observed that the absence of a clear quality control framework in inclusion programs results in uneven progress across regions. The limited budget allocation for adaptive sports and the bureaucratic barriers mentioned by participants mirror the institutional inefficiencies discussed by (Baías & Şandor, 2022), who emphasized that the sustainability of inclusive physical education depends largely on continuous state funding and policy coherence. Furthermore, the lack of advocacy groups and public accountability mechanisms, as highlighted in this study, aligns with (Dossal et al., 2024), who argued that effective advocacy and civil society involvement are essential for protecting the rights of individuals with intellectual disabilities to participate in sports. Thus, the current findings reaffirm that without institutional integration and accountability, inclusion efforts risk remaining symbolic rather than transformative.

The second key finding related to *socio-cultural and family factors* revealed that parental attitudes, public perceptions, and cultural stigma play a decisive role in

determining whether children with special needs participate in sports. Many parents expressed overprotectiveness, fearing injury or social judgment. Similar parental hesitations were reported by (Borges-Silva et al., 2024), who found that while parents generally recognize the benefits of sports for children with learning disorders, emotional fears and lack of awareness often prevent consistent participation. The persistence of negative stereotypes and limited social acceptance of children with disabilities in Iran is consistent with findings from (Thaibah et al., 2024), who described how cultural norms and community misconceptions can impede the creation of truly inclusive environments. Moreover, (Rahmawati et al., 2024) demonstrated that family engagement and community support are pivotal in encouraging children's participation, reinforcing the importance of awareness campaigns to reshape social attitudes. The limited visibility of athletes with disabilities in Iranian media and public life also parallels the conclusions of (Sarima, 2023), who argued that media narratives must actively challenge exclusionary attitudes by highlighting stories of ability, perseverance, and achievement. Overall, this study underscores that changing cultural mindsets is as crucial as institutional reform for advancing inclusive sports.

The third theme, *educational and infrastructural conditions*, was among the most frequently mentioned challenges. Participants consistently reported that schools are poorly equipped to accommodate students with disabilities in physical education programs. The shortage of trained teachers, inaccessible facilities, and absence of adaptive curricula represent systemic barriers that restrict participation. This aligns with research by (Ali, 2023), who found that inclusive schools in Indonesia often lack the technical expertise and adaptive resources necessary for physical education. Likewise, (Hastuti & Musslifah, 2023) emphasized that individualized instruction and adapted teaching methods are critical for the effective inclusion of children with special needs. The lack of cooperation between schools and rehabilitation centers identified in the present study echoes the concerns raised by (Kolosova et al., 2022), who reported that educational and health sectors rarely collaborate effectively in inclusive education contexts. Moreover, the shortage of accessible infrastructure resonates with findings from (Zokirjonovna et al., 2023), who stressed the importance of designing inclusive playgrounds and adaptive sports environments that encourage participation among children with developmental delays. The participants' call for technological support and digital learning tools also aligns with (Simaeva & Churkin, 2023),

who found that virtual and assistive technologies can enhance accessibility for children with sensory or mobility impairments. Collectively, these findings suggest that without major educational reform and infrastructural investment, inclusion will remain partial and exclusionary.

The final theme—*psychological and motivational dimensions*—emphasized the role of self-efficacy, emotional support, and positive social interaction in fostering engagement. Many children with special needs were reported to experience low confidence and social anxiety, especially when faced with competitive sports settings. This finding is supported by (Afridawati et al., 2025), who demonstrated that physical education grounded in positive youth development models improves self-esteem and social skills among students in inclusive schools. Similarly, (Mercea & Mateescu, 2024) found that adaptive football programs enhanced emotional regulation and cooperation among children with developmental challenges, confirming that emotional empowerment is integral to physical inclusion. The pivotal influence of teachers and coaches in building self-belief also mirrors (Heenan & Sumner, 2025), who noted that supportive coaching styles in Special Olympics programs helped children with developmental disabilities feel valued and motivated. Furthermore, (Dossal et al., 2024) highlighted that inclusive sports promote independence and social competence by providing safe spaces for experiential learning. This study also revealed that peer acceptance plays a significant role in sustaining children's motivation—a finding consistent with (Streda, 2021), who stressed that inclusive peer interactions within schools are vital to breaking isolation and fostering belongingness. These converging findings suggest that psychological empowerment and community inclusion must be addressed simultaneously to achieve holistic development through sports.

When the results of this study are viewed collectively, a multi-layered picture emerges. Institutional structures provide the foundation for inclusion, but their effectiveness depends on cultural, educational, and emotional ecosystems. The interplay among these domains underscores the need for systemic alignment. (Bižić, 2022) emphasized that innovation and strategic management in sports organizations are essential for addressing the evolving needs of special groups, an observation that supports the present study's findings on institutional deficiencies. Likewise, (Baías & Šandor, 2022) advocated for integrating rehabilitation principles into educational settings, bridging the gap between therapy and sports—a reform also demanded by the

participants in this study. Cross-national experiences reinforce this perspective: for instance, (Puzanova et al., 2021) found that national inclusion programs in Russia remain effective only when guided by coherent monitoring systems and inter-ministerial coordination, echoing the fragmented structure observed in Iran. Furthermore, (Pilipchuk & Skripka, 2021) demonstrated that adaptive methods, such as judo-based physical health classes, enhance both discipline and psychosocial development, reinforcing the importance of tailored interventions in inclusive sports programs.

From a global perspective, the results align with emerging scholarship emphasizing that inclusive sports must be grounded in principles of equity, empathy, and accessibility. (Tabaie et al., 2022) identified adaptive sports participation as a vital developmental tool in pediatric populations, arguing that inclusion in sports settings fosters emotional growth and resilience. Similarly, (Sugmawati et al., 2022) showed that individualized learning and adaptability are necessary to meet diverse developmental needs, even under challenging circumstances such as the COVID-19 pandemic. The findings from this study extend these global insights by contextualizing them within Tehran's educational and cultural environment, where inclusion is still evolving amid institutional and societal challenges. Moreover, (Shytikova et al., 2022) and (Kolosova et al., 2022) both underscored that inclusion is not achieved merely by physical presence but by meaningful engagement supported by appropriate infrastructure, teacher training, and monitoring systems—all factors identified by the participants of this research as urgent priorities.

In synthesizing these findings, it becomes evident that inclusive sports for children with special needs require a systemic transformation that bridges the policy-practice gap. Institutional fragmentation must give way to collaborative governance where ministries of education, sports, and social welfare work in coordination. At the same time, community-level interventions—rooted in family empowerment, cultural awareness, and peer education—are equally essential. The findings also reaffirm the need for psychological support systems within schools and sports institutions to enhance self-efficacy and social belonging among children with special needs. The present study contributes to this growing body of evidence by providing an integrated, empirically grounded understanding of the institutional, socio-cultural, and psychological barriers and enablers of inclusive sports in the Iranian context.

Although this study provides valuable insights into the multifaceted factors influencing the development of sports for children with special needs, several limitations should be acknowledged. First, the research was conducted exclusively in Tehran, which may limit the transferability of the findings to other Iranian regions with different cultural, social, or institutional dynamics. Second, as a qualitative study, the results rely heavily on participants' subjective experiences and interpretations, which may not capture the full diversity of perspectives in this domain. Additionally, although theoretical saturation was achieved after 21 interviews, a larger and more heterogeneous sample might have revealed additional nuances, especially regarding rural contexts or marginalized subgroups. Finally, because the data were self-reported, there remains a possibility of social desirability bias, particularly among policymakers and educators who may have portrayed their institutions more favorably.

Future research should adopt a mixed-methods or longitudinal design to complement qualitative insights with quantitative data, allowing for generalization and comparison across different regions. Expanding the participant pool to include rural areas, local NGOs, and children themselves could provide a richer understanding of how inclusive sports evolve across social strata. Comparative cross-national studies between Iran and other countries in the region may also help identify successful policy models and contextual best practices. Additionally, future inquiries should focus on evaluating the long-term developmental impacts of inclusive sports participation on children's physical, emotional, and social outcomes. Finally, incorporating experimental or action research designs could help test specific interventions, such as teacher training modules, parental empowerment programs, or adaptive technology integration, to assess their effectiveness in real-world educational settings.

From a practical standpoint, this study highlights the urgent need for a national strategic framework to guide inclusive sports development for children with special needs. Policymakers should prioritize inter-ministerial coordination and allocate consistent funding for adaptive infrastructure, equipment, and training. Educational institutions should integrate inclusive physical education into teacher training curricula and establish partnerships with rehabilitation centers for holistic child development. Parents and communities must be actively engaged through awareness campaigns that promote positive attitudes toward disability and inclusion. Sports coaches should receive

continuous professional development to acquire the skills necessary for adaptive instruction and psychological support. Ultimately, inclusion in sports should be seen not as a charitable act but as a human right and developmental necessity, ensuring that every child, regardless of ability, can experience the empowerment and joy of participation.

Authors' Contributions

Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethics Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

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