

## Developing a Strategic Plan for Children's Swimming in Iraq Using the SWOT Model

### Abstract

**Purpose:** The purpose of this study was to formulate and prioritize development strategies for children's swimming in Iraq through a comprehensive SWOT analysis. Given the country's young age structure, the role of swimming in health, motor development and drowning prevention, and the absence of a dedicated strategy in this field, a comprehensive roadmap was required.

**Methods:** The study was applied and descriptive-analytical, using a mixed-methods design. In the quantitative phase, 196 of roughly 400 key stakeholders in children's swimming (federation members, ministerial experts, coaches and center managers) were selected by simple random sampling and completed a researcher-designed 35-item (9 items assessing strengths, 10 items assessing weaknesses, 8 items assessing opportunities, and 8 items assessing threats) SWOT questionnaire on a five-point Likert scale. Face and content validity were confirmed by 10 experts and reliability was supported with a Cronbach's alpha of 0.73. Data were analyzed using descriptive statistics and the Friedman test in SPSS, followed by internal and external factor evaluation matrices and a Delphi panel (senior officials from the Iraqi Swimming Federation (n=4), experienced children's swimming coaches (n=5), ministerial experts from Youth and Sports and Education (n=4), and university professors in sport management (n=2)) to derive and rank strategies.

**Results:** Results indicated good status in management and human resources, coaching, education and talent identification; moderate status in facilities, refereeing and cultural promotion; and weak to unacceptable status in finance, research, information technology and especially marketing. Overall, the SWOT analysis showed that, despite important strengths, substantial structural and financial weaknesses and several environmental threats persist.

**Conclusion:** The study concludes that phased, realistic planning is needed to strengthen infrastructure, diversify funding and expand school-based aquatic literacy. It recommends development of a National Children's Swimming Program in collaboration with relevant ministries and empirical evaluation of

the proposed strategies in different provinces. The study proposes 10 prioritized strategies, notably a national talent identification system and enhanced marketing management, operationalized into 20 programs to advance infrastructure and aquatic literacy.

**Keywords:** Children's Swimming, SWOT Analysis, Strategic Planning, Iraq, Aquatic Literacy

## **Introduction**

Over recent decades, strategic management has become one of the main tools for governing organizations operating in complex and rapidly changing environments. In sport organizations, the use of strategic management gradually started at the level of international and national federations and has now become a core requirement for good governance in sport. In a study conducted in Iran's Ministry of Sport and Youth, Hemati Afif and Kolahi (2021) showed that the more systematically the stages of strategy formulation, implementation, and evaluation are followed, the higher the levels of organizational accountability and transparency become, and the more decision-making tends to be evidence-based (Hemati Afif & Kolahi, 2021).

Building on this approach, several studies in Iranian and regional sport have applied analytical tools such as SWOT and the Quantitative Strategic Planning Matrix (QSPM) to assess the current situation and design development strategies. For example, Rahim and colleagues, in a study entitled "Strategic planning for physical education and school sport in Iran using the QSPM matrix," demonstrated that combining SWOT analysis with QSPM helps to identify strengths, weaknesses, opportunities, and threats more precisely and then to prioritize strategies based on the relative weight of each factor, leading to the selection of strategies that best fit higher-level policy documents and resource constraints (Rahim, Hamidi, & Rasekh, 2021).

The usefulness of this approach for sport federations and organizations has also been clearly documented. In a study on the Iran Lifesaving and Diving Federation, Rahimizadeh and colleagues used internal and external factor evaluation matrices together with SWOT analysis to show that the marketing position of the federation lay in a defensive (WT) zone, and they formulated 13 concrete strategies to improve its competitive position and enhance stakeholder satisfaction (Rahimizadeh, Rezaei, & Adibpour, 2023). Their results indicate that even in disciplines directly linked to aquatic safety and saving lives, a strategic approach can prevent fragmented efforts and provide a clearer pathway for development.

Other studies in sport management have similarly emphasized that a coherent analysis of internal and external factors is a necessary condition

for realistic planning in sport organizations. For instance, Abbasi and colleagues, in their strategic planning for the Kermanshah Department of Sport and Youth in the domain of elite sport, reported using SWOT and QSPM that without careful prioritization of strategies, many regional capacities for talent identification and infrastructure development remain underused and scarce human and financial resources are spent in a fragmented and uncoordinated way (Abbasi, Khanmoradi, Eydi, & Rasekh, 2016). Likewise, Saminia and colleagues, in a strategic pathology study of “sport for all” in Iran, showed that neglecting stakeholder participation, weak information systems, and lack of coordination between institutions are among the main barriers to effective implementation of strategic programs (Saminia, Peymanizad, & Javadipour, 2013).

At the provincial level, evaluations of strategic management practices in departments of sport and youth suggest that many regional units, despite having qualified human resources, still lack systematic processes for analyzing internal and external environments and formulating medium- and long-term strategies. Yadollahzadeh and colleagues, in a study of sport and youth departments in West Azerbaijan Province, showed that weaknesses in the stages of strategic evaluation and feedback reduce program effectiveness and prevent timely updating of strategies in line with environmental changes (Yadollahzadeh, Kashef, & Mohammadzadeh, 2014). These findings underline the need to strengthen a culture of strategic management at all levels of sport organizations.

Alongside these experiences, important steps have recently been taken in Iraq to apply strategic approaches to sport development. Alfahham and Asefi, in a study entitled “Identification and analysis of key drivers of sport for all development in Iraq,” used cross-impact analysis and showed that factors such as relative security, government support for mass sport programs, and the presence of academic structures in physical education act as key drivers of sport for all, while barriers such as lack of stable funding and weak culture of regular physical activity threaten the development process (Alfahham & Asefi, 2024). This study suggests that a strategic perspective on sport in Iraq is emerging, although it is still at an early stage.

Other research has focused more specifically on different components of Iraq's sport system. AlZaidawi and colleagues, by proposing a model for the development of university sport in Iraq, emphasized that the absence of integrated planning among the Ministry of Higher Education, universities, and student sport federations has prevented many human and infrastructural capacities on campuses from being fully utilized (AlZaidawi, Mirzaei, & Javadipour, 2025). Similarly, Al-Zubaidi, in a futures study on "Scenarios for school sport in Iraq by 2033," showed that without scenario-based strategic planning, the Iraqi school sport system, under pressures such as shortages of specialist teachers, financial constraints, and demographic change, may drift toward undesirable futures such as reduced participation or excessive focus on competitive results (Al-Zubaidi et al., 2025).

In the domain of professional sport, Al-Hayali and colleagues developed a model for sustainable development of professional sport in Iraq and showed that integrating economic, social, and environmental considerations into sport policy is a precondition for moving from short-term, result-oriented management toward long-term, accountable governance (Al-Hayali, Eghbali, & Ibrahim, 2024). Together with the work of Alshiblawi and colleagues who formulated a strategic plan for Iraqi futsal based on the SWOT and QSPM models and highlighted the importance of detailed environmental analysis for designing league and national-team development strategies these findings indicate that the use of strategic tools across different sport disciplines in Iraq is expanding (Rezaee et al., 2020). While strategic management tools have proven effective across various sport domains, their application to youth and children's sport subsystems requires particular attention to age-specific developmental needs, public health imperatives, and long-term talent pathways.

Internationally, SWOT analysis has been widely applied in aquatic sport governance and youth development. For instance, Champion et al. (2014) utilized SWOT to formulate strategic plans for community swimming programs in Australia, emphasizing infrastructure and drowning prevention alignment. Similarly, in the United States, a strategic framework by the USA Swimming Foundation (2017) integrated SWOT

with stakeholder analysis to expand learn-to-swim initiatives, highlighting marketing and partnership diversification as key SO strategies. Despite these advances, a large proportion of Iraq's population consists of children and adolescents with specific sport and educational needs. According to UNICEF reports, around half of Iraq's population is aged 18 years or younger, and this very young age structure places considerable pressure on education, health, and social services systems, including physical education and school sport (UNICEF, 2014). Under such conditions, strategic planning for children's sport especially in fundamental disciplines directly linked to their health and safety becomes particularly important. Among these fundamental disciplines, swimming occupies a unique position due to its multifaceted contributions to motor development, psychological well-being, and drowning prevention—making it an essential target for evidence-based strategic planning in youth sport governance.

Swimming, as one of the fundamental sports, holds a special place in the literature on motor development, health, and child safety. In a systematic review of methods for teaching swimming to children aged 5–12 years, Minkels and colleagues showed that applying motor learning principles such as gradual practice, targeted feedback, and variation in practice can accelerate the acquisition of basic swimming skills and increase confidence in aquatic environments (Minkels et al., 2025). In another study, Sinclair and colleagues reported that children who participate in regular swimming instruction not only improve technique in the four competitive strokes but also outperform control groups in fundamental motor skills such as balance, jumping, and throwing, indicating the transfer role of swimming in developing overall movement competence (Sinclair et al., 2023).

Health-related research has also highlighted the psychological benefits of water-based physical activity for children. Tang and colleagues, in a systematic review and meta-analysis of aquatic exercise, found that participation in water-based sport programs can reduce symptoms of anxiety and depression in children and adolescents and improve health-related quality of life (Tang et al., 2022). Jackson and colleagues, in a scoping review, reported that aquatic environments provide a safe and

motivating space for many children particularly those with limitations in land-based activities to experience successful movement, and that such experiences of success strengthen intrinsic motivation for regular physical activity (Jackson et al., 2022).

In addition to these benefits, swimming and aquatic literacy play a crucial role in preventing drowning. Global reviews show that drowning is one of the leading causes of unintentional sudden death in children, especially in low- and middle-income countries (Rahman, Peden, & Ivers, 2021). Tan and colleagues, in an analysis of global trends in unintentional drowning from 1990 to 2019, reported that although the overall burden of this injury has decreased in many regions, drowning rates in some countries and areas, including the Eastern Mediterranean region, remain worryingly high (Tan et al., 2023). Peden, Işın, and Işık, in a study of drowning in Eastern Mediterranean countries, showed that a combination of factors such as uncontrolled access to open water, weak swimming education, and limited community-based prevention programs contributes to high drowning rates among children in some countries in the region (Peden, Işın, & Işık, 2024). In Iraq, the presence of major rivers such as the Tigris and Euphrates, extensive irrigation canals and reservoirs, and very hot summers naturally draw children toward aquatic environments. Jawad, in a study of drowning-related mortality in Iraqi rivers, reported that a substantial proportion of victims are children and adolescents who entered the water without adequate swimming skills and without proper supervision (Jawad, 2021). These findings indicate that swimming is not only a sport but also a vital life skill for the safety of Iraqi children. At a more micro level, Brenner and colleagues, in a classic case-control study in the United States, found that children who had completed formal swimming lessons had a lower risk of drowning than those without such training, although they emphasized that swimming instruction does not replace parental supervision and other safety measures (Brenner et al., 2009).

Despite the importance of swimming for health, motor development, and safety, research evidence on the status of swimming instruction and children's swimming sport in Iraq remains limited. Hussain and colleagues, in a study of Iraqi school students, showed that using specific training exercises in physical education classes can significantly improve

children's technical swimming skills, while also noting the constraints imposed by inadequate school aquatic infrastructure and shortages of specialist instructors (Hussain, Khudhair, & Jawad, 2022). This study mainly addresses instructional aspects at the class level and illustrates the potential for developing children's swimming skills within schools, but it does not examine strategic planning for children's swimming at the national level.

Existing strategic studies in Iraq have mostly focused on areas such as professional sport, university sport, educational sport, and sport for all, and children's swimming as a specific discipline or subsystem has not been treated as a primary focus in these works. Consequently, despite growing recognition of the importance of physical activity and sport in Iraq's development policies, there is still no strategic framework that explicitly addresses the development of children's swimming while jointly considering health, safety, education, and infrastructure. This represents a critical gap in the Iraqi sport management literature, as no prior study has applied SWOT analysis integrated with IE matrix and Delphi consensus to formulate prioritized strategies specifically for children's swimming—a domain linking sport development, public health promotion, and drowning prevention.

Experiences from neighboring countries suggest that using the SWOT model to analyze sport in specific population groups can lead to the formulation of operational and implementable strategies. For example, Baruti and colleagues in Iran used this model to propose a comprehensive framework for the development of sport for persons with disabilities and showed that accurate identification of internal strengths and weaknesses, combined with external opportunities and threats, can form a solid basis for designing diverse strategies in areas such as infrastructure, coach education, and financial support (Baruti, Askari, & Moshkelgosha, 2024). A similar approach can be applied to specific disciplines and sensitive age groups such as children.

Given Iraq's very young age structure, the extensive presence of natural and man-made water resources, the substantial burden of childhood drowning in the region, and the scientific evidence on the role of swimming in improving health and safety, the need for a comprehensive

strategic plan for the development of children's swimming in Iraq is clear. The absence of a clear vision, measurable medium-term goals, and strategies based on a realistic situational analysis can lead to fragmented initiatives, waste of resources, and persistence of inequities in children's access to swimming and aquatic literacy. This study aims to develop and prioritize evidence-based strategies for children's swimming development in Iraq using SWOT analysis, IE matrix positioning, and Delphi expert consensus. The novelty of this research lies in the fact that, for the first time in the sport management literature on Iraq, children's swimming is treated as a distinct strategic domain, and the links between sport development goals, public health promotion, and drowning prevention are framed within a coherent strategic program. The findings of this study are expected to provide a scientific foundation for policymakers, sport federations, and the ministries of education and sport, as well as other stakeholders, to design more effective operational programs for infrastructure development, coach education, curriculum design, and equitable access of Iraqi children to safe and high-quality swimming opportunities.

### **Materials and methods**

This study adopted an applied, descriptive-analytical design utilizing a mixed-methods approach. The research progressed sequentially in two distinct phases: a quantitative phase involving survey data collection and statistical analysis (SWOT questionnaire, Friedman test, IFE/EFE matrices) to identify and weight internal and external factors; followed by a qualitative phase employing document analysis, brainstorming, and Delphi expert consensus to derive, refine, and prioritize development strategies. The methodology of this research was designed as applied and descriptive-analytical. In the quantitative section, a survey method was used to identify and weight the internal and external factors related to children's swimming in Iraq. In the qualitative section, document analysis, brainstorming sessions, and expert consensus through the Delphi method were used to extract and finalize the strategies. The study population included all stakeholders and direct managers of children's swimming in Iraq, specifically members of the board and managers of the Iraqi

Swimming Federation, experts and employees related to children's sports in the Ministry of Youth and Sports and the Ministry of Education, children's swimming coaches, and officials of clubs and centers active in this field across the country. The initial list of the population was prepared through correspondence with the Iraqi Swimming Federation, Provincial Sports Departments, and Physical Education Departments of the Ministry of Education. Based on this list, the population was estimated to be about 400 individuals. Sample size was calculated as 196 using the Krejcie and Morgan (1970) table for a finite population of approximately 400 stakeholders. Simple random sampling was employed to ensure equal representation of diverse stakeholder groups (federation officials, ministerial experts, coaches, and club managers), thereby enhancing generalizability of SWOT factor evaluations within the Iraqi children's swimming governance subsystem. The inclusion criterion for the study was having at least three years of professional experience in children's swimming in one of the managerial, expert, or coaching roles and willingness to participate in the research. After coordination with the relevant institutions, the questionnaire was distributed in person and electronically. Complete and error-free questionnaires were considered for analysis.

The main data collection tool was a researcher-made SWOT analysis questionnaire for children's swimming in Iraq, which was designed based on a literature review, examination of documents and reports from the Swimming Federation, exploratory interviews with experts, and the results of brainstorming sessions. The questionnaire consisted of two sections: the first section addressed demographic information of the respondents such as age, gender, organizational role, experience in children's swimming, education level, and the province of activity. The second section comprised 35 items distributed across the four SWOT dimensions: 9 items assessing strengths, 10 items assessing weaknesses, 8 items assessing opportunities, and 8 items assessing threats. Each item was rated on a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree". The items were designed using a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree," and each item measured a specific aspect of the internal or external status of children's swimming. The process of

item formulation was iterative; initially, a list of potential factors was extracted from documents and exploratory interviews and group discussions, and then these factors were converted into clear and unambiguous items. After several rounds of revision, the preliminary version of the questionnaire was formed.

To assess the content and face validity, the preliminary version of the questionnaire was sent to 10 professors and specialists in sports management, sports policy, and competitive swimming. They were asked to evaluate the clarity, relevance, ambiguity, and cultural adaptation of each item with respect to children's swimming in Iraq and to provide their suggestions for improvement. Based on the feedback from these experts, some items were rewritten, several were merged or removed, and the final version of the questionnaire was prepared for the field study. Internal consistency was assessed via Cronbach's alpha in a pilot study ( $n=30$ ). The overall alpha for the 35-item questionnaire was 0.73. Subscale alphas were: Strengths (9 items)  $\alpha=0.78$ ; Weaknesses (10 items)  $\alpha=0.81$ ; Opportunities (8 items)  $\alpha=0.76$ ; Threats (8 items)  $\alpha=0.74$ . These values indicate acceptable to good reliability for each SWOT dimension, supporting the instrument's suitability for strategic factor evaluation.

In addition to the quantitative section, qualitative data were also used to extract and refine the strategies. An expert panel was initially formed, consisting of managers and members of the Swimming Federation, experienced children's swimming coaches, experts from the Ministry of Youth and Sports and the Ministry of Education, and several university professors in the field of sports management. In brainstorming sessions, based on the initial results from the questionnaire and documentary information, the preliminary list of strengths, weaknesses, opportunities, and threats, as well as initial proposals for strategies to develop children's swimming, was extracted. Subsequently, to reach a consensus on the final strategies, a multi-stage Delphi method was applied. In the first round of Delphi, the initial list of strategies, along with a brief explanation of each, was sent to the experts, and they were asked to assess the importance and feasibility of each strategy based on a five-point scale and provide their corrective feedback. The expert panel consisted of 15 specialists (4 senior managers from the Iraqi Swimming Federation, 5 experienced children's

swimming coaches, 4 experts from the Ministries of Youth and Sports and Education, and 2 university professors in sport management) selected based on a minimum of 5 years of relevant professional experience. The Delphi process was conducted in exactly two rounds: the first round for initial evaluation of the importance and feasibility of strategies, and the second round to achieve consensus based on statistical feedback (mean and standard deviation) and qualitative comments from the first round. The predefined consensus threshold was at least 75% expert agreement accompanied by a mean score  $\geq 4.0$  on the five-point importance and feasibility scale for each strategy, which aligns with accepted standards in strategic sport management studies (Diamond et al., 2014; Keeney et al., 2011). The strategies that reached an acceptable level of consensus at the end of the Delphi process were accepted as the final strategies and entered the stage of operational program development.

To analyze the quantitative data obtained from the questionnaire, descriptive statistics such as mean, standard deviation, frequency, and percentage frequency were used to describe the demographic characteristics of the respondents and the status of each item and each SWOT category. Then, to rank the items in each of the four lists of strengths, weaknesses, opportunities, and threats and determine their relative importance, the non-parametric Friedman test was applied. The significance of the Friedman test indicated a meaningful difference between the mean ranks of the items in each list, and based on the mean rank value, the priority of each item within each category was determined. All quantitative statistical analyses were conducted using SPSS version 26. Next, for strategic analysis, both the internal and external evaluation matrices were used. Based on the results of the Friedman test and expert judgment, the most important internal (strengths and weaknesses) and external (opportunities and threats) factors were selected. For each factor, a numerical weight was assigned on a scale from zero to one based on its relative importance, ensuring that the sum of weights in each matrix was equal to one. Then, for each factor, a score ranging from 1 to 4 was independently assigned; in the internal factors matrix, scores of 1 and 2 indicated weakness, while scores of 3 and 4 indicated strength, and in the external factors matrix, scores of 1 and 2 indicated threats, while scores of

3 and 4 indicated opportunities. The product of the weight and score formed the final score for each factor, and the sum of the scores determined the overall internal and external evaluation scores for children's swimming in Iraq.

For determining the strategic position of children's swimming, the internal and external matrix was used. In this stage, the final score of internal factors was placed on the horizontal axis and the final score of external factors on the vertical axis of the matrix. The cell where the combination of these two scores intersected showed the strategic position of the children's swimming system. Based on this position and combining it with the findings from the SWOT analysis, suitable strategies were extracted in four main categories: strength-opportunity, strength-threat, weakness-opportunity, and weakness-threat. Finally, the strategies obtained were refined and prioritized using the results of the Delphi process, and based on these, operational programs for the development of children's swimming in Iraq were developed. This methodological sequence enabled the transition from describing the current situation to designing specific and actionable strategies and ensured the integration of both quantitative data and expert judgment in the strategic planning process for children's swimming. Ethical considerations were addressed throughout the study. Informed consent was obtained from all questionnaire respondents and Delphi panel members prior to participation, with clear explanation of the study purpose, voluntary nature, and right to withdraw. Respondent confidentiality was ensured through anonymized data collection and storage. The research protocol received ethical approval from the Institutional Review Board of the Iraqi Swimming Federation and aligned with the ethical guidelines of the Ministry of Youth and Sports.

## **Results**

According to surveys and interviews with presidents of the Iraqi Swimming Federation, managers, and experts in children's sports, the overall condition of the Federation across examined domains shows significant variation. In terms of management and human resources, coaches, education and talent-identification, the evaluation on a five-point scale rated these areas as "good." Meanwhile, infrastructure and

equipment, referees, and cultural development were assessed as “average.” In contrast, the financial affairs, research activities, and information-technology capabilities of the Federation received a “weak” rating. The marketing function was evaluated as “unacceptable.”

Although the management and human-resource dimension was rated “good,” it is noteworthy that all active members of the Swimming Federation operate on a voluntary basis. This highlights both the strength and the limitations of the current governance structure. Without further support and institutional development, the existing human resources may struggle to undertake comprehensive future objectives.

From a financial perspective, the Federation’s income distribution was reported as follows: about 40% from the Ministry of Youth and Sports, roughly 30% from the Federation itself, 20% from sponsors, 5% from pool rentals, and 5% from other sources. Given this composition, the overall revenue level was judged insufficient.

Regarding infrastructure and equipment, the Federation owns a few pools which are sometimes leased to other bodies. However, most activities related to children’s swimming take place in pools managed by the Ministry of Youth and Sports or the Ministry of Education. Overall, the available sports infrastructure is rated as “average,” indicating that expansion and improvement are required.

The evaluation of referees in terms of number, certification levels, and quality is “average,” suggesting that significant attention is needed to raise standards. The coaches’ situation, in contrast, was rated “good” with respect to quantity, quality, and certification level. Nevertheless, many holding coaching certificates remain inactive, mainly due to lack of sufficient capacity and resources to focus on children’s swimming.

In the domain of research, no dedicated studies on children’s swimming in Iraq have been conducted so far; likewise, there is no meaningful collaboration with relevant academic or research institutions. Although federation officials expressed a positive attitude toward initiating research, the overall status of research activities was rated as “weak.”

Finally, talent-identification programs for children's swimming are currently underway in some Iraqi provinces, and the overall evaluation of the Federation's talent-scouting efforts was "good." Even so, further support and development are deemed essential to expand these programs nationwide.

**Table 1.** Results of Friedman analysis test in each of the SWOT lists

| Statistical Index             | Chi-square $\chi^2$ | Df | Sig.  | Significance Level (p)              |
|-------------------------------|---------------------|----|-------|-------------------------------------|
| <b>Strength's list (S)</b>    | 61.17               | 20 | <0.05 | Significant differences among items |
| <b>Weaknesses list (W)</b>    | 42.76               | 20 | <0.05 | Significant differences among items |
| <b>Opportunities list (O)</b> | 22.96               | 20 | <0.05 | Significant differences among items |
| <b>Threats list (T)</b>       | 77.19               | 20 | <0.05 | Significant differences among items |

The Friedman test revealed statistically significant differences in mean ranks for items within each SWOT dimension (strengths:  $\chi^2 = 61.17$ ,  $p < 0.001$ ; weaknesses:  $\chi^2 = 42.76$ ,  $p < 0.001$ ; opportunities:  $\chi^2 = 22.96$ ,  $p < 0.001$ ; threats:  $\chi^2 = 77.19$ ,  $p < 0.001$ ). In addition, in order to rank each item according to its level of importance, the corresponding mean rank value was taken into account. Tables 2 to 4 present the ranking of the items in each of the lists of strengths, weaknesses, opportunities, and threats from first to third place.

**Table 2.** Results of ranking the strengths of swimming for Iraqi children

| Strength title                                                                                                                                        | Mean Rank |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>Quality-improvement of school physical education by developing and publishing PE textbooks for grades 1–6 (elementary) and 1–3 (middle school)</b> | 3.21      |
| <b>Presence of specialized physical-education teachers in various sport disciplines</b>                                                               | 3.99      |
| <b>Children's interest in the subject of children's swimming</b>                                                                                      | 3.21      |

**Table 3.** Results of ranking the weaknesses of swimming for children in Iraq

| Weakness title                                                                    | Mean Rank |
|-----------------------------------------------------------------------------------|-----------|
| <b>Lack of active children's swimming associations</b>                            | 3.95      |
| <b>Current budget does not match the volume of children's swimming activities</b> | 3.95      |

**Table 4.** Ranking results of swimming opportunities for children in Iraq

| Opportunity title                                                                                                            | Mean Rank |
|------------------------------------------------------------------------------------------------------------------------------|-----------|
| Positive attitude of some senior Iraqi officials and managers toward the growth and promotion of children's swimming         | 3.19      |
| Availability of sport-swimming pools under the supervision of the Ministry of Education across districts and regions of Iraq | 3.10      |
| Improvement in families' attitudes toward children's swimming                                                                | 3.99      |

What is the strategic position of children's swimming sport in Iraq? To determine this position, three tools were used: the Internal Factors Evaluation (IFE) matrix, the External Factors Evaluation (EFE) matrix, and the combined Internal–External (IE) matrix. The results showed that the total score for internal factors was less than 2.5 (2.195), indicating that children's swimming in Iraq is relatively weak in terms of its internal environment. In order to analyse internal and external factors simultaneously and to select appropriate strategies, a four-cell internal–external matrix was applied. The Internal Factors Evaluation matrix yielded a total weighted score of 2.195 (<2.5), indicating predominant internal weaknesses. The External Factors Evaluation matrix score was 2.192 (<2.5), signifying greater external threats than opportunities. Plotting these coordinates on the Internal-External matrix positioned children's swimming in Iraq in the weak-threat cell, typically associated with defensive strategies focused on minimizing weaknesses and avoiding threats.

On the basis of the selected model, a set of strategic analyses was carried out for children's swimming in Iraq. The key strategic components identified included the mission statement, vision statement, core values, long-term objectives, strategic position, strategies and programmes. Strategies were prioritized using Delphi panel mean scores on importance and feasibility (five-point scale). Consensus required mean  $\geq 4.0$  and  $\geq 75\%$  agreement. The top three prioritized strategies were: (1) establishing and expanding a specialized national talent identification system for children's swimming (mean score 4.62); (2) developing marketing management to enhance visibility and sponsorship (mean score 4.55); (3) strengthening national and international partnerships for resource mobilization (mean score 4.48) These strategies included: establishing and expanding a

specialised national talent identification system for children's swimming across Iraq; strengthening Iraq's presence in children's swimming at the regional level; enhancing the public image and social visibility of children's swimming; reinforcing national and international partnerships and networks; and developing marketing management in children's swimming in Iraq.

## **Discussion**

In this study, a SWOT-based approach and the participation of key stakeholders were used to build a comprehensive picture of the internal and external situation of children's swimming in Iraq and to propose appropriate development strategies. The findings showed that this system benefits from several important strengths, such as the existence of a formal physical education curriculum, the presence of qualified teachers and a high level of interest among children. At the same time, it faces structural, financial and organizational weaknesses, as well as serious environmental threats. In what follows, each group of findings is discussed in turn and then compared with previous research in order to clarify areas of convergence and divergence.

Identified internal strengths—formal physical education curriculum, qualified aquatic specialists, high child interest in water activities, and intersectoral cooperation between the Swimming Federation and ministries—represent foundational human and institutional capital in Iraqi children's swimming governance. These assets align with Ibrahim (2018), who highlighted enthusiast base and specialist presence as primary enablers in Iraqi swimming development, yet remain underleveraged due to fragmented coordination in a post-conflict sport system. This pattern contrasts with more integrated youth aquatic programs in neighboring contexts (Alfahham & Asefi, 2024), where stakeholder alignment accelerates health and safety outcomes.

This pattern of strengths is consistent with findings in the broader strategic sport management literature. Strengths are generally defined as activities in which an organisation performs relatively well or resources that it controls effectively, which is in line with the definition provided by Voort

and Eeslik (2004). The emphasis in the present study on specialist human capital is consistent with findings by Sharbati Zadeh et al. (2022) in the context of elite sport in Iran, where coaches and expert sport managers were identified as key contributors to Olympic success. Similarly, the importance of educational structures and the link between federations and educational authorities echoes the results of Hemati Afif and Kolahi (2021), who highlighted the role of a well-established strategic management process within the Ministry of Sport and Youth in improving accountability and decision making. Analyses by Ibrahim (2018) of swimming in Iraq also pointed to a broad base of enthusiasts and the presence of sports specialists as primary strengths. Overall, identifying human resources, educational structures and stakeholder interest as central strengths in this study aligns well with the existing body of scientific work in sport management at both national and regional levels (Voelt & Eeslik, 2004; Sharbati Zadeh et al., 2022; Hemati Afif & Kolahi, 2021; Ibrahim, 2018).

Prevalent weaknesses—including absent specialized children's associations, budgetary inadequacy, facility shortages, weak marketing, and limited research-academic linkages—reflect systemic fragility in resource allocation and innovation within Iraqi sport governance. These constraints mirror Rahimizadeh et al. (2023) findings on marketing deficits and government funding reliance in Iranian aquatic federations, exacerbated here by uneven provincial infrastructure distribution and policy emphasis on elite disciplines. Consequently, human capacities (e.g., certified coaches) remain underutilized, perpetuating inequities in access—a common barrier in resource-constrained Middle Eastern sport systems (Sohrabi et al., 2015).

This pattern is similar to what has been reported for other sport sectors in the region. Weaknesses are often described as activities where an organisation performs poorly or resources that it should possess but does not, which matches the framework offered by Sohrabi et al. (2015). Sohrabi Pour and Ghorbanizadeh Ghahfarokhi (2021) identified shortages of facilities and budgetary mismatch as major barriers to the development of mass sport in Hormozgan Province and stressed the need for

conservative strategies and gradual structural reform. A strategic review of the Iranian Lifesaving and Diving Federation by Rahimizadeh et al. (2023) revealed similar weaknesses in marketing, branding and over-reliance on government funds and highlighted the importance of diversifying revenue sources and strengthening ties with sponsors. Ibrahim (2018) also emphasised the shortage of facilities, infrastructural limitations and security concerns as key constraints on the development of swimming in Iraq. These convergent findings suggest that the pattern of weaknesses observed in children's swimming in the present study is consistent with previous work in Iran and Iraq and with research on other sport domains in the region (Safdari Nahad et al., 2015; Sohrabi Pour & Ghorbanizadeh Ghahfarokhi, 2021; Rahimizadeh et al., 2023; Ibrahim, 2018).

External opportunities—supportive senior officials, existing ministerial pools, improving parental attitudes toward aquatic safety, regional swimming growth, and university programs—offer leverage points for scaling children's swimming initiatives. These align with Alfahham and Asefi (2024) identification of government support and academic structures as drivers for mass sport in Iraq, while echoing Peden et al. (2022) emphasis on school-based programs for drowning prevention in the Eastern Mediterranean. Realization depends on strategic mobilization, contrasting untapped potentials in similar low-resource settings where policy windows remain unexploited.

This configuration of opportunities fits well within existing theoretical and empirical work in sport management. Opportunities are often defined as situations with clear potential benefits that can be realised through appropriate action, which corresponds to the perspective proposed by Shahnazi and Panahi (2024) in their analysis of strategic opportunities in sport. In a study of the Iranian Table Tennis Federation, Alizadeh et al. (2019) reported that international interactions, attention to research and the use of university capacities are key opportunities for moving out of a defensive position. In Iraq, Alfahham and Asefi (2024) showed that relative security, government support and the presence of academic structures in physical education act as important drivers of sport for all, which is consistent with the opportunities identified in the present study.

From a public health perspective, Peden et al. (2024) highlighted the role of national policies, school-based programmes and community engagement in reducing drowning risk in Eastern Mediterranean countries, which supports the focus here on educational and family environments as strategic spaces for intervention. On this basis, the opportunities identified in this study for the development of children's swimming in Iraq appear to be in line with evidence from the literature on sport management, health promotion and drowning prevention (Shahnazi & Panahi, 2024; Alizadeh et al., 2019; Alfahham & Asefi, 2024; Peden et al., 2024).

The fourth group of findings concerns environmental threats facing children's swimming in Iraq. The absence of a national master plan for children's swimming, the lack of a regular system for allocating sport funds to schools, the uneven distribution of facilities and infrastructure among provinces and regions, and the policy priority given to sports such as football collectively create a fragmented context for growth and increase the likelihood of unequal access. Declining interest from the private sector in investing in grassroots sport and children's swimming, limited pool time allocated to instructional programmes in public facilities and low standards in some existing venues reduce the capacity of planners to design and sustain large-scale interventions. The broader decline in physical activity among children and adolescents and the spread of sedentary lifestyles also represent cultural threats that undermine both recruitment into and retention within basic swimming programmes.

In strategic management, a threat is usually defined as a situation with potentially harmful consequences that calls for early and active response, which is consistent with the analysis of environmental forces presented by Mousavi et al. (2023). In the context of swimming in Iraq, Alipour and Shekari (2021) stressed the importance of political, economic and cultural threats and showed how sudden changes in macro policy and economic instability can destabilise the operating environment of sport federations. In elite sport, Sharbatzadeh et al. (2022) interpreted the dominance of threats and weaknesses as an indication of a WT position and argued for defensive strategies and structural reform. At a global level, Tan et al. (2023) noted the persistence of high drowning rates in several regions, including the Eastern Mediterranean, and linked this pattern to weak

preventive policies and unequal access to water safety programmes. These analyses support the present study's conclusion that children's swimming in Iraq is exposed to significant structural, financial and cultural pressures and that this system can only move forward if such threats are recognised and addressed through deliberate policy and management responses (Mousavi et al., 2023; Alipour & Shekari, 2021; Sharbatzadeh et al., 2022; Tan et al., 2023).

The fifth finding concerns the overall strategic position of children's swimming in Iraq. The IFE matrix total score of 2.195 ( $<2.5$ ) confirms internal weaknesses predominate over strengths, while the EFE score of 2.192 ( $<2.5$ ) indicates external threats outweigh opportunities. Placement in the WT cell of the IE matrix signals a defensive strategic posture. Accordingly, prioritized strategies should emphasize weakness minimization (e.g., infrastructure development, financial diversification) and threat avoidance (e.g., resource protection, gradual structural reform), rather than aggressive growth. Conservative approaches—such as phased implementation, stakeholder protection, and incremental capacity building—are recommended until internal and external scores improve sufficiently to shift toward competitive or growth-oriented cells.

This interpretation partly agrees with, and partly differs from, findings in the strategic sport planning literature. Alizadeh et al. (2018, 2019) argued that moving from weaker positions towards aggressive ones should be seen as a long-term organisational goal and emphasised that reaching an SO strategy set requires prior investment in reducing weaknesses. Jafari et al. (2019) proposed growth strategies for some aquatic disciplines in situations where the weight of strengths and opportunities had already increased and conditions for an offensive position were emerging. In the case of the Iranian Table Tennis Federation, Alizadeh et al. (2018) reported a defensive position and recommended the use of competitive and defensive strategies to escape that situation. For Iraqi futsal, Al-Zubaidi et al. (2022) found relatively higher internal and external scores and concluded that the system was better placed to adopt aggressive strategies. Compared with these cases, the present study indicates that children's swimming in Iraq is still in a transitional phase, moving from a weakness–threat context towards a more opportunity-oriented one. At this stage,

broad adoption of aggressive strategies does not yet appear feasible, and the priority lies in reinforcing infrastructure, improving governance and incrementally increasing the weight of strengths and opportunities (Alizadeh et al., 2018, 2019; Jafari et al., 2019; Al-Zubaidi et al., 2022).

## **Conclusion**

This study establishes children's swimming in Iraq as a distinct strategic subsystem within youth sport governance, positioned in the WT cell of the IE matrix requiring defensive strategies. Prioritized actions emphasize infrastructure reinforcement, funding diversification, and school-based aquatic literacy to mitigate drowning risks and promote equitable development.

As the first SWOT-based strategic plan dedicated to children's swimming in Iraq—integrating health promotion, drowning prevention, and talent pathways—this research fills a critical void in Iraqi sport management literature, where prior studies focused on professional sport, university sport, or sport for all (e.g., Al-Hayali et al., 2024; AlZaidawi et al., 2025; Alfahham & Asefi, 2024). Unlike regional applications emphasizing elite or mass participation, this framework prioritizes age-specific safety and developmental imperatives.

Two prioritized actions emerge for policy implementation. Short-term: Design and endorse a national children's swimming program through inter-ministerial collaboration (Ministry of Youth and Sports, Education, Health, Swimming Federation) to integrate structured water safety education into schools with teacher training and monitoring standards. Medium- to long-term: Establish a provincial network of dedicated children's swimming hubs utilizing existing public pools, supported by local sponsorships and municipalities, to ensure sustainable, equitable access.

This study has several limitations. First, reliance on expert opinion through the SWOT questionnaire and Delphi process introduces potential subjectivity, despite consensus mechanisms and stakeholder diversity. Second, findings are contextualized within Iraq's unique post-conflict sport governance environment, including security, economic, and infrastructural constraints, which may limit direct transferability to other

nations. Third, while simple random sampling from a national stakeholder population supports internal generalizability within Iraqi children's swimming, external generalizability to other disciplines or age groups remains constrained. Future research should employ longitudinal designs or comparative analyses across Middle Eastern sport systems to address these limitations.

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