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**PAIS E A PRÁTICA DESPORTIVA DOS SEUS EDUCANDOS NA NATAÇÃO**  
**PARENTS AND THEIR CHILDREN'S INVOLVEMENT IN SWIMMING PRACTICE**  
**LE PARTICIPACIÓN DE LOS PADRES Y SUS HIJOS EN LA PRÁCTICA DE LA NATACIÓN**

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## RESUMO

**Introdução:** A prática da natação promove o desenvolvimento integral das crianças, comportando segurança e independência na piscina. Porém, existe divergência entre o esperado pelos encarregados de educação e os objetivos curriculares estabelecidos.

**Objetivo:** Analisar o contraste entre os objetivos associados ao ensino-aprendizagem na Natação infantil e os estabelecidos pelos encarregados de educação.

**Métodos:** Recorreu-se à versão adaptada do questionário de Prada (2022) para analisar as percepções de 128 participantes de uma escola de Natação de Viseu e, posteriormente, ao software SPSS para realizar as análises descritivas e inferenciais.

**Resultados:** Os principais resultados revelam os motivos que conduzem à inscrição na modalidade: "segurança contra o afogamento", "saber nadar", "necessidade de uma prática desportiva" e "independência na piscina"; as dimensões "troca de professor" e "conjugação com outras modalidades" são as menos valorizadas; a didática dos professores é valorizada como "excelente", assim como os aspetos que se prendem com o equilíbrio de estímulos nas sessões, a aprendizagem e segurança; o menos valorizado aponta ao agrupamento de praticantes de diferentes faixas etárias na mesma sessão.

**Conclusão:** A aprendizagem através de exercícios lúdicos que garantam e aumentem a segurança das crianças no meio aquático é crucial, fundada num processo estruturado e pedagogicamente adequado às suas necessidades.

**Palavras-chave:** crianças; ensino/aprendizagem; natação; pais; professores de natação

## ABSTRACT

**Introduction:** Swimming promotes children's holistic development, also ensuring safety and independence in the aquatic environment. However, there is a discrepancy between parents' expectations and the pre-established curricular objectives.

**Objective:** To analyze the contrast between the objectives associated with teaching and learning in children's swimming and those established by their parents.

**Methods:** An adapted version of Prada's (2022) questionnaire was used to capture and compare the perceptions of 128 participants from a swimming school in Viseu, and SPSS software was used to perform descriptive and inferential analyses.

**Results:** Main results reveal that the reasons for enrolling children in swimming are related to the dimensions of "protection against drowning," "knowing how to swim," "need for physical activity," and "independence in the pool." "Teacher change" and "combination with other sports" were the least valued dimensions. Teachers' didactics are an influencing factor in sessions' effectiveness, being rated as "excellent." The most valued aspects are the stimulus balance presented in practice, learning, and safety, while the least valued aspect is the different age practitioners' grouping in the same session.

**Conclusion:** Learning through playful exercises that ensure and increase children's safety in the aquatic environment is crucial, grounded in a structured and pedagogically suitable process for their needs.

**Keywords:** children; teaching/learning; swimming; parents; swimming instructors

## RESUMEN

**Introducción:** La natación promueve el desarrollo integral de los niños, asegurando también su seguridad e independencia en el entorno acuático. Sin embargo, existe una discrepancia entre las expectativas de los padres y los objetivos curriculares preestablecidos.

**Objetivo:** Analizar el contraste entre los objetivos asociados con la enseñanza y el aprendizaje en la natación infantil y los establecidos por sus padres.

**Métodos:** Se utilizó una versión adaptada del cuestionario de Prada (2022) para capturar y comparar las percepciones de 128 participantes de una escuela de natación en Viseu, y se empleó el software SPSS para realizar análisis descriptivos e inferenciales.

**Resultados:** Las principales razones para inscribir a los niños están relacionadas con las dimensiones de "protección contra el ahogamiento", "saber nadar", "necesidad de actividad física" e "independencia en la piscina". "Cambio de profesor" y "combinación con otros deportes" fueron las dimensiones menos valoradas. La didáctica de los profesores es un factor influyente en la efectividad de las sesiones, siendo calificada como "excelente". Los aspectos más valorados son el equilibrio de estímulos presentados en la práctica, el aprendizaje y la seguridad; el aspecto menos valorado es la agrupación de practicantes de diferentes edades en la misma sesión.

**Conclusión:** El aprendizaje a través de ejercicios lúdicos que aseguren y aumenten la seguridad de los niños en el entorno acuático es crucial, fundamentado en un proceso estructurado y pedagógicamente adecuado a sus necesidades.

**Palabras clave:** niños; enseñanza/aprendizaje; natación; padres; profesores de natación

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## INTRODUCTION

Sports contribute multidisciplinary to the formation and development, through the mastery of their motor and cognitive skills, and especially in promoting and integrating an active lifestyle (Araújo, 2019). Among the vast range of sports, Santos et al. (2019), as well as Melo et al. (2020), highlight swimming as a catalyst for mental health and functional fitness. Swimming, considered by Moura (2019) as the act of movement in water through the combination of upper and lower body gestures, enables autonomous and pleasurable movement in the aquatic environment (Schinkoeth, 2022). Thus, this modality is pointed out as a physical activity performed in pools, seas, or rivers (Farias et al., 2020).

According to Vasconcelos (2019), Swimming's popularity is due to factors that favor and induce its practice, such as favorable weather conditions, natural contexts like areas with rivers and beaches, and even the dissemination of awareness campaigns of this activity's benefits. Indeed, as emphasized by Souza (2021), the importance of studying Swimming includes analyzing the advantages across different age groups, as it enables playful and interactive work that engages participants in pedagogically guided sessions by their respective instructors.

Focusing on younger age groups, Swimming's contribution is related to children and adolescents' overall motor and psychological improvement, as well as behavioral actions (social) such as aggression reduction, in addition to the well-documented improvements in cardiorespiratory capacity, flexibility, general endurance, balance, and posture (Gonçalves et al., 2018; Menguer et al., 2021; Moura et al., 2021; Oliveira & Silva, 2023; Pereira et al., 2019).

Moura et al. (2021) observed that, in the overall development of children aged 5 to 10, this activity contributed significantly to the progression of various motor skills, as well as locomotion and fine motor skills (object control) refinement.

For this evolutionary process to occur in a balanced way, Swimming instruction should take place in stages, through a guided process where advancing to a more advanced stage is determined by the previous stage objectives' successful completion (Barbosa & Queirós, 2004). In this line of thinking, an introductory program to the aquatic environment is justified, which allows the practitioner to become familiar with water and whose assimilation involves distinguishing it from the terrestrial environment, transitioning the body into a horizontal position, along with a set of mechanisms related to breathing and propulsion, which differ from those of daily life (Barbosa & Queirós, 2005).

This methodology, which Barbosa et al. (2015) refer to as aquatic environment adaptation (AEA), aims to equip practitioners with skills that enable them to move autonomously in water without the need for more elaborate techniques (swimming techniques), combining balance, breathing, and propulsion actions. According to the authors, balance is intrinsic to mechanical forces' harmony (thrust and weight) that influences the athlete's stability in both vertical and horizontal positions (ventral and dorsal) or when changing these positions (rotations). Breathing, in turn, refers to the mechanical and physiological mechanisms underlying the acts of inhalation and exhalation, with the airways (in this case, the mouth and nose) either submerged or above water. Finally, propulsion refers to the symbiosis between two mechanical forces (propulsive and drag forces) and how the combination of these forces drives the body's movement.

Teques and Rosa (2021) highlight the importance of understanding and addressing the biological, psychological, and social specificities of children and young people, as each individual matures in a unique and differentiated manner. This underscores the need to identify and determine the necessary resources to develop and provide opportunities to maximize their sporting experiences.

In this regard, Prada (2022) emphasizes the process of AEA in lesson development, based on a safety topic for carrying out activities. It urges educators to respect the different learning paces and, in doing so, build the trust that practitioners need to progress. Similarly, stimulating children's interest is crucial, achieved through playful approaches and, above all, through the creation of enjoyable practice experiences.

Based on the premise that Swimming requires responsibility, when planned in a pedagogical and progressive manner in the offered experiences during practice sessions, the present study aims to analyze parents' and guardians' perceptions regarding the reasons that lead them to enroll their children in this modality.

## 1. METHODS

### 1.1 Participants

The study group consisted of a total of 128 participants (male = 55.7%, female = 44.3%) who enrolled their children in Viseu's Municipal Swimming School. Participants aged between 28 and 46 years ( $32.60 \pm 3.1$ ) were eligible for inclusion. Additional inclusion criteria comprised being a parent or legal guardian of a child enrolled in swimming lessons, with the child having a minimum age of 3 years at the onset of swimming practice and attending the sessions regularly at least once per week. Individuals whose children were younger than 3 years at the beginning of swimming practice, or whose children did not attend swimming lessons on a regular weekly basis, were excluded from the study. Cluster analysis was used, which will be further explained in the results section, to segment the participants based on their perceptions, aiming to identify similar patterns within groups and distinguish them from others, based on the predefined analysis categories of the instrument.

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## 1.2 Instruments

An adapted version of Prada's questionnaire (2022) was used, modified to meet the specific objectives of this research and later subjected to a peer-validation process, consisting of three experts from a nationally recognized university, two of whom also serve as swimming coaches, to increase its intelligibility and understanding. The questionnaire consists of thirty-two Likert scale questions (indicating the degree of agreement with a set of statements on a scale ranging from "strongly disagree" to "strongly agree"), grouped according to four main dimensions: a) enrollment/practice; b) dropout/withdrawal; c) learning factors; d) session functioning. The first two dimensions address the reasons that lead parents and guardians to enroll their children in the modality (a) and, conversely, to cancel their enrollment (b). Meanwhile, dimensions c) and d) focus on the structural aspects of the practice. The first analyzes the most emphasized contents during the sessions, while the second examines the organization and functioning of the sessions.

## 1.3 Procedures

Regarding the methodological aspects leading to data's organization and collection to be subsequently processed, the protocol for applying the instrument included the following steps: a) collection of contact information, gathering the phone number and email address of the study's involved entity; b) initial contact: reached out via phone to explain the study's objectives and obtain the necessary authorization; c) detailed information dispatch, sent to the participants' parents/guardians, outlining the research objectives, potential benefits, and assurance of data anonymity and confidentiality; d) informed consent request, encompassing the informed consent forms' signing, thus authorizing the study's participation; e) questionnaire distribution, personally delivered, ensuring the investigator's absence during the completion period to avoid influencing responses. The questionnaires were administered during classes; f) questionnaire collection, after the distribution period, maintaining a welcoming environment, and concluded with a thank you for participation and responses' honesty. The data was coded and securely stored, accessible only to the research team.

## 1.4 Statistical analysis

According to the predefined objectives, both descriptive and inferential data analyses were performed using the 29th version of IBM Statistical Package for the Social Sciences (SPSS), with a confidence interval set at 95%, thereby establishing the study's significance level (p-value) at 0.05. Descriptive statistics were performed, and the dimensions' means, modes, minimum and maximum values, and standard deviations were recorded.

On its part, the K-Means Clustering algorithm was used to understand how the data was grouped and the characteristics of each cluster. Regarding the inferential analysis process, the use of parametric (T-Test and ANOVA) and nonparametric tests (Mann-Whitney) was due to the variables' scale, the study's objectives, and specifically the compliance with the requirements for parametric tests, namely the distributions' normality (Marôco, 2018). The results reveal, according to the created and above-mentioned scale and dimensions, the respondents' perception of a set of indicators that allow inference about the importance they place on this practice. The starting point was based on the language's critical and dynamic conception and the meaning's interpretation that a respondent attributes to the concepts, also considering the contextual conditions of their producers.

## 2. RESULTS

Regarding the descriptive analysis process, the convergence achieved by the changes in the cluster centers resulted in seven iterations, with the minimum distance between the initial centers being 1.94 (Table 1), leading to the formation of four main clusters according to the previously established analysis dimensions. A total of 21 cases were allocated to the first cluster, 52 cases to the second cluster, 41 cases to the third cluster, and finally, four cases to the last cluster. It is important to note that the K-Means algorithm found a less well-defined grouping in the last cluster, as evidenced by the small number of cases assigned to it.

**Table 1** - Iteration history and group allocation

Iteration	Cluster 1 (21)	Cluster 2 (52)	Cluster 3 (41)	Cluster 4 (4)
1	.689	.764	.923	.668
2	.130	.075	.097	.248
3	.050	.058	.088	.000
4	.000	.025	.027	.000
5	.000	.011	.014	.000
6	.039	.000	.020	.000
7	.000	.000	.000	.000

The dimensions and assigned scores by study participants according to their perceptions are presented in Table 2. Notably, all responses were recorded, with no missing values, and except for the practice and learning dimension, all the scale's degrees were utilized by the study participants. The least valued dimension by respondents includes perceptions related to

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withdrawal/abandonment. Conversely, the most valued dimension is Swimming learning factors, as evidenced by the highest mean and mode values. Lastly, session management stands out as the dimension with the greatest dispersion in responses, indicated by the highest standard deviation value.

**Table 2 - Analysis dimensions and assigned scores**

DIMENSIONS	N		M	Mod	SD	Min	Max
	valid	omitted					
Registration / Practice	124	0	3.37	3.10	.400	2.10	4.00
Withdrawal / Abandonment	124	0	2.88	2.86	.461	1.43	4.00
Learning factors	124	0	3.45	4.00	.432	2.33	4.00
Session management	124	0	3.11	3.14	.488	1.86	4.00

**M** – Mean; **Mod** – Mode; **SD** – Standard deviation; **Min** – Minimum; **Max** – Maximum.

When analyzing the mean values (centers) of the participants' perceptions allocated to the different clusters (Table 3), it is observed that the participants in the first cluster place importance on the practical session's planning and management processes, showing concern about how the instructor conducts the class. The primary focus of the second cluster participants is on the reasons that lead parents or guardians to withdraw their children or on the children's own abandonment of the activity. Participants in the third cluster emphasize the reasons that lead to practice initiation, highlighting the factors that motivate participation in swimming lessons. Finally, participants in the fourth cluster concentrate on the learning factors derived from the sessions and how the progression of content is structured and presented. This group appears to be more focused on the educational aspects and the clarity of the learning process within the swimming program.

**Table 3 - Clusters' centers**

Cluster 1	Cluster 2	Cluster 3	Cluster 4
3.70	3.50	3.57	3.00
2.14	3.57	2.29	1.83
2.00	3.33	3.00	4.00
4.00	2.43	2.10	1.86

Regarding the inferential analysis process, ANOVA tests were conducted to determine whether there were significant differences between the clusters for each variable (dimension) used in the grouping, comparing the intra- and inter-cluster variabilities (Table 4). In other words, the goal was to analyze if the variables used in the clustering process have discriminatory power between the formed clusters. As a result, the significance values for each variable revealed an adequate distinction between the clusters ( $p > .00$ ), indicating that the variables effectively differentiated the clusters, confirming the grouping process validity.

**Table 4 - Clusters' ANOVA tests**

Cluster	Z	Sig.
Registration / Practice	16,478	.000
Withdrawal / Abandonment	29,939	.000
Learning factors	24,634	.000
Session management	28,443	.000

**Z** – Standardized value; **Sig.** – Significance.

Finally, the following results emerged from the variables' inferential analysis (Table 5), using parametric and non-parametric mean comparison tests based on the inclusion criteria defined for the sample:

- There were no significant differences between parents' perceptions of whose children practice one session per week and those who practice two or more sessions per week, in any of the analysis dimensions (sig. 1).
- There were no significant differences between parents' perceptions who enrolled their children at or below 3 years of age and those who enrolled their children at older ages, in any of the analysis dimensions (sig. 2).
- There were significant differences between parents' perceptions regarding the learning factors dimension, as the group in this cluster places significantly more value on this dimension compared to the others (sig. 3).

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**Table 5 - Inferential analysis' results**

Dimension	Sig. 1	Sig. 2	Sig. 3
Registration / Practice	.125	.916	.590
Withdrawal / Abandonment	.118	.400	.518
Learning factors	.848	.697	.000
Session management	.069	.424	.416

Sig. – Significance.

### 3. DISCUSSION

The importance of parental involvement in the active lives of their children has been widely recognized, as the literature highlights the family environment's significant influence on the athletes' skills development (Encarnação et al., 2019; Lally & Kerr, 2008).

This recognition is not recent, as Côté (1999) already emphasized the parents' importance in this context, noting that they tend to include their children in various structured sports environments, as they are often the initial participants' motivators and recruiters.

The present study focused on analyzing the parents' perceptions regarding their children's participation in practical sessions, in relation to their expectations of physical, psychological, and social benefits. These perceptions were framed within the dimensions previously outlined and explored through the relationships between parents and children, other athletes, coaches, and the aquatic environment. The findings underscore the importance of understanding parental perspectives to better support children's development in sports, particularly in Swimming.

Indeed, regarding the reasons that lead to children's enrollment in swimming sessions, it is natural to infer that exposure to the aquatic environment is the primary cause. With increased access to beaches, pools, and lakes, there is also a heightened exposure to the dangers that the aquatic environment poses (Encarnação et al., 2019).

Quan and Cummings (2003) reported that as children's age increases, the supervision level decreases, which can result in the risk of drowning when swimming. Morrongiolo et al. (2013) corroborate this view, indicating that drowning is the leading cause of death in children, especially up to the age of 15 (Peden & McGee, 2003).

Data analysis from the Brazilian Society of Aquatic Rescue (2025) reveals that 59% of deaths occur in children up to 9 years of age, primarily in residential pools. The same organization also reported that drowning was the second leading cause of death in children between 1 and 4 years old in Brazil. In this context, motor skills' development significantly contributes to mastering safety, acting as a preventive measure against drowning. As such, learning to swim is, according to Brenner et al. (2009), an effective risk-reduction strategy.

On the other hand, the wide range of benefits, both physical and psychological, that arise from participating in sports, and specifically swimming, is another key reason why parents enroll their children in swimming programs. This is well recognized and supported by the literature.

Aerobic tasks, such as swimming, are widely recognized and recommended for maintaining an active and healthy life (Conti, 2015; Dormehl et al., 2017; Powers & Howley, 2014).

In terms of functional fitness, the agility level is enhanced by swimming due to its ability to constantly alter the body's position as well as its movement direction (Powers & Howley, 2014). Khodaei et al. (2017) also emphasize this skill, alongside the hypertrophy of both the upper and lower limbs, due to the plyometric nature of the exercises performed in this modality. Improvements in abdominal endurance and flexibility are also reported by Silva et al. (2019), especially in children and young people, in a training process structured with a frequency of two sessions per week.

The mental component, which has gained significant importance in the current concept of "health," is highlighted by Menguer et al. (2021) in a conducted study with swimmers over eight weeks. Their practice revealed a significant increase in cognitive and social plasticity, as well as in athletes' concentration levels. Ludyga et al. (2017) state that a moderate-intensity aerobic session, lasting approximately 20 minutes, positively influences the cognitive mechanisms of young individuals, while also improving their self-esteem and pleasure and well-being feelings (Bois et al., 2005; Delevatti et al., 2018). In this regard, Yu et al. (2013) report that moderate-intensity aerobic exercise, conducted three times a week for a minimum duration of six months, reduces depression levels through the body's increased endorphins production, which, in turn, affects the nervous system (Mikkelsen et al., 2017; Roelands et al., 2015).

When comparing the participants in our study regarding the potential reasons that would lead them to withdraw their children from practice, they pointed out that it is their children who dictate the decision, either due to a lack of enjoyment in swimming or because they are unable to meet the set tasks' objectives. Financial constraints may also be a barrier, to the point of leading to withdrawal, but this is viewed as a factor that does not depend directly on their desires.

In this regard, Prada's (2022) study indicated that the decision comes from the parents, not the athletes themselves, as 77% of participants stated they "never considered" removing their children from swimming. The group seems to value sport in general

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and this modality specifically, with 33% mentioning they would like their children to practice swimming "for the rest of their lives." Pestana (2021) argues that the practical sessions' lack of understanding may lead to dropout, stemming from not comprehending the planning done by teachers/coaches. Santos et al. (2020) mention that identifying the sessions' general and specific objectives is crucial for increasing athletes' motivation levels, while allowing parents to understand the learning pace and the subsequent degree of their children's progress, thus feeling involved in the process.

In fact, learning factors correspond to the third dimension of analysis in this study, and their importance refers to the methodological decisions made by the teacher/coach in the sessions' planning and structuring. According to Di Paola (2019), these decisions serve as starting points for the students/athletes' learning success.

In the past, the emphasis was placed on the four classical swimming styles' technical teaching (Canossa et al., 2007; Fiori et al., 2019). However, today, the focus is primarily on water competence, which involves developing a range of basic and specific aquatic skills, without neglecting the safety's central topic (Castro et al., 2016; Fiori et al., 2019; Langendorfer, 2011; Quan et al., 2015; Wizer et al., 2021).

Scheuer et al.'s (2019) study helped infer that the "task" refers to the practitioner's requested action so that, based on his execution, the practitioner's motor and/or mental skills can be assessed. For example, Newell (2020) highlights the need to propose various tasks to assess the ability to float. It is therefore important to clarify the constructs, meaning the criteria for success, as well as the critical components of the task to be performed, to ensure the assessment instruments' reliability and the modality's pedagogical process, thus avoiding contextual and conceptual inaccuracies.

Learning factors are closely intertwined with the session's functioning, the fourth and final dimension of analysis, which refers to the water activities' development. The session's functioning is highly valued by our study's participants due to the commitment and involvement in their children's sessions and the need to understand the parameters in which the lessons unfold, thus assigning responsibility to the instructors.

From this dimension, the instructors' supervision method during the session stands out. Most instructors work with more than one athlete simultaneously, as corroborated in Prada's (2022) study. However, Barbosa (2007) emphasizes the need to consider an appropriate number of athletes that does not compromise the coach's ability to assist, which, in turn, affects the session itself, especially when dealing with beginner students. Individual supervision can facilitate the techniques' development, adaptation, and initiation in a more suitable manner due to the closer teacher-student relationship and teacher-student ratio (Freudenheim et al., 2003). However, it may reduce the session's dynamics since waiting times tend to increase proportionally with the number of students in the session.

In the study conducted by Prada (2022), respondents expressed a preference for dividing athletes into levels based on their specific learning stages and inherent needs. Alternatively, when the context allowed, they also favored presenting tasks with varying degrees of complexity. Nunes (2019) supports the advantage of this latter methodology, noting that it is more suitable for execution in a safe and dynamic environment.

In our study, respondents similarly value the materials provided during the sessions, considering them an integral and crucial part of the learning process. These materials serve as development aids and enable skills acquisition, as exemplified by the use of diving platforms. The importance of utilizing support materials, especially for younger age groups, is evident, as they contribute to safety and the development of a range of aquatic environment competencies. When used as playful tools, these materials also provide new and varied experiences, which, in turn, help foster active environments and increase motivation.

However, Dias (2021) warns against auxiliary materials over-reliance, as this could hinder the athletes' learning. Materials should be available to instructors, rather than being the teaching approach's primary focus.

As such, our respondents align with Prada's findings (2022), regarding the session's structure methodology. They perceive that the sessions promote the development of their children's skills (such as breathing, floating, and locomotion in the aquatic environment), are appropriate for their fitness levels, and focus on tracking their progress effectively.

Nonetheless, the study presents limitations that must be acknowledged. First, the sample was confined to a specific region, which may affect the results' generalizability to other areas or cultural contexts. Additionally, the research reflects the parents and guardians' perceptions, which may not fully capture children's actual experiences or other professionals' opinions in the field.

For future research, broader approaches with more diverse samples are recommended, including the perspectives of swimming instructors and athletes themselves. Exploring the relationship between the reasons for enrolling children in swimming and their actual performance in aquatic activities, as well as the long-term impact of this practice on child development, could be both interesting and relevant for improving pedagogical practices. Finally, investigating the influence of socioeconomic and cultural variables on parents and guardians in swimming involvement (and sports in general) could provide valuable insights for public policies' formulation, aimed at promoting physical activity in children and young people.

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## CONCLUSION

Swimming is highly beneficial for children, supporting their physical and motor development and contributing to overall health and well-being. Beyond these developmental benefits, swimming provides opportunities for social interaction, helping to build self-confidence and teamwork skills. Encouraging children to engage in swimming from an early age can foster lifelong healthy habits, improve social competence, and create a positive foundation for physical activity throughout childhood and adolescence. Additionally, regular participation may offer a safe, structured environment that encourages discipline, goal setting, and perseverance. These practical implications highlight swimming not only as a recreational activity but also as a powerful tool for holistic child development.

In this context, parents and guardians play a central role in recognizing the value of these experiences, which go beyond simple recreational activity and extend to the child's physical, motor, cognitive, and socio-emotional development. Understanding the motivations behind enrollment decisions can provide valuable insights for instructors, program coordinators, and policymakers, helping to design swimming programs that effectively meet families' expectations, foster engagement, and maximize developmental benefits for children. Moreover, examining these perceptions can highlight broader societal and cultural factors that influence participation in organized physical activities, offering practical guidance for the promotion of lifelong healthy habits through structured, enjoyable, and purposeful swimming experiences.

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## AUTHORS' CONTRIBUTION

Conceptualization, R.T., P.E. and A.A.; data curation, R.T. and A.A.; formal analysis, P.E. and A.A.; funding acquisition, P.E. and A.A.; investigation, R.T., P.E. and A.A.; methodology, R.T., P.E. and A.A.; project administration, R.T., P.E. and A.A.; resources, R.T., P.E. and A.A.; software, R.T., P.E. and A.A.; supervision, P.E. and A.A.; validation, R.T., P.E. and A.A.; visualization, R.T., P.E. and A.A.; writing – original draft, R.T., P.E. and A.A.; writing – review & editing, R.T., P.E. and A.A.

## CONFLICT OF INTERESTS

The authors declare no conflict of interests.

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