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Causes of Aquaphobia in Swimming Beginners Aged 6 to 12 and Related Strategies in Swimming Instruction

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Abstract: The ages of 6 to 12 represent an ideal period for learning to swim; however, aquaphobia often poses a significant barrier to children's swimming education. This study employs field investigations, interviews, and observational methods to examine the causes of aquaphobia among swimming beginners aged 6 to 12 and to propose effective strategies for overcoming this issue. The research indicates that aquaphobia is influenced by a combination of psychological factors (such as mental resilience, understanding of swimming, poor body coordination, and competitive anxiety) and external environmental factors (including social and sports environment changes, alterations in breathing techniques, and inappropriate teaching methods by coaches). To mitigate aquaphobia, the study suggests two primary approaches: firstly, enhancing children's awareness of swimming safety, mastering proper breathing techniques, emphasizing comfort with water, establishing confidence in learning, and creating a positive learning environment; secondly, shifting learners' focus through imaginative visualization and gradual desensitization, ensuring a safe teaching environment, and progressively applying professional teaching methodologies. This research aims to provide strategies to address aquaphobia in young swimming novices, facilitating their mastery of swimming skills and promoting their physical development and the long-term advancement of swimming instruction.

Keywords: Children's Swimming; Aquaphobia; Strategies; Swimming Instruction; Beginners.

1. Research Subjects and Methods

1.1. Survey Subjects

This study focuses on the causes of aquaphobia and corresponding strategies among swimming beginners aged 6 to 12. The subjects are 80 swimmers from a swimming pool in Fuyang, Anhui, and 180 from a swimming pool in Hefei, Anhui, totaling 260 young swimmers.

1.2. Research Methods

1.2.1. Field Investigation

Field investigations were conducted with all 260 swimming beginners from the aforementioned locations in Fuyang and Hefei, Anhui.

1.2.2. Interviews

Extensive interviews were conducted with the 260 swimming beginners, their coaches, and parents. These discussions allowed for a comprehensive, multi-layered understanding of the origins of aquaphobia among the swimmers, encompassing both subjective and objective reasons as well as potential solutions and strategies.

1.2.3. Observation

On one hand, direct teaching methods were employed by the researcher to personally instruct and monitor the beginners, gaining a thorough insight into the causes of their aquaphobia and exploring possible solutions. On the other hand, observations were also made of other swimming coaches and their classes to understand the reasons behind the development of aquaphobia and the effectiveness of various strategies.

2. Analysis of the Causes of Aquaphobia in Swimming Beginners

2.1. Subjective Causes

2.1.1. Insufficient Psychological Resilience

A lack of psychological resilience can lead to a fear of water, manifesting in various forms:

- Low Self-Esteem: Individuals with low self-esteem may doubt their ability to handle new or challenging situations, such as swimming. This can lead to a fear of swimming lessons as they feel incompetent in acquiring swimming skills, which fosters the development of aquaphobia.
- Anxiety: Those with high levels of anxiety may be more susceptible to developing a fear of water.
- Traumatic Experiences: Past traumatic incidents involving water, such as accidental submersion, near-drowning, or choking, can increase the likelihood of developing a fear of water.
- Low Confidence: Individuals with a negative psychological outlook and low confidence, especially those who focus more on their weaknesses than their strengths, may be more prone to developing a fear or anxiety related to swimming or water.
- It is also notable that even proficient swimmers can experience aquaphobia, potentially stemming from an innate fear of water.

2.1.2. Lack of Understanding of Swimming

A lack of knowledge about swimming can cause beginners to fear water. If individuals are unfamiliar with the basic principles of swimming, they may feel uncomfortable or unsafe in the water, leading to anxiety or fear. This is particularly true for those who are not confident in their ability to stay afloat or navigate the water.

Moreover, first-time swimmers may feel vulnerable or

helpless in the water, which can trigger fear or panic, even in shallow water, especially in children whose psychological and physiological development is not yet complete.

2.1.3. Inadequate Physical Condition and Coordination

Poor physical condition or lack of coordination can also lead to fear of water in beginner swimmers. If individuals feel that their bodies are not strong or coordinated enough, such as being too short or overweight to swim or float effectively, they may experience anxiety or fear in the water. This can be more pronounced in children who have had little physical activity or exercise experience, as they may struggle to control their movements while learning to swim, which can significantly undermine their confidence and foster a fear of swimming.

Additionally, existing physical injuries, such as sprained ankles or unrecovered dislocated joints, can make swimming more challenging and lead to fear or anxiety.

2.1.4. Competitive Psychology

Even among children, a sense of competition can exist. In swimming classes, due to varying learning abilities and conditions, some students may learn faster and perform better, while others may lag behind. However, students with a strong competitive spirit may find it difficult to accept their slower learning pace compared to others, leading to feelings of inferiority and fear of attending classes, which in turn can contribute to aquaphobia.

2.2. Objective Causes

2.2.1. Social Influence

According to incomplete statistics from the National Health Commission and the Ministry of Public Security, approximately 57,000 people drown annually in China, with children accounting for 56% of these cases, equivalent to an average of 88 children per day. Heightened safety awareness promoted by society, schools, and families, coupled with extensive media coverage of drowning incidents, has led swimming beginners to view swimming with great fear, likening it to a severe threat. Additionally, family and societal transmission of folklore about water spirits or monsters has implanted a mysterious and fearful image of water in children's minds. As a result, due to their immature cognitive development and poor judgment, young swimming beginners develop significant aquaphobia and resistance to swimming lessons.

2.2.2. Changes in the Sporting Environment

Swimming, being an aquatic sport, differs significantly from terrestrial activities. The distinct medium can cause substantial sensory stimulation for beginners:

- Temperature Perception: Water has a higher specific heat capacity than air, making the perceived temperature much lower, which can lead to discomfort.
- Buoyancy: Water's buoyancy is much greater than that of air, potentially causing beginners to lose balance and experience fear.
- Pressure: The higher density of water means that individuals feel significant pressure from all directions, creating a sense of psychological oppression in addition to physical pressure. The quieter underwater environment, due to poorer sound conduction, can also contribute to a feeling of oppression.

2.2.3. Changes in Breathing Techniques

For beginners, the act of breathing during swimming can be challenging and unfamiliar, and the sensation of being unable to breathe normally can induce anxiety or panic. Particularly for children who are unfamiliar with swimming breathing techniques, coordinating breathing with physical movements can be difficult, leading to discomfort or a sense of insecurity in the water. Additionally, the shift from primarily nasal breathing on land to mouth and nose breathing in water can be jarring. For children, especially those new to swimming and already nervous, inhaling water through the nose or mouth can lead to choking, further unsettling the child and intensifying their fear of water.

2.2.4. Problems with Teaching Methods

Issues with swimming teaching methods can cause beginners to fear water. If swimming instructors lack skill or experience in teaching beginners, they may inadvertently create a negative or uncomfortable learning environment, leading to fear or anxiety. For example, if a coach is overly critical or impatient with beginners, this can lead to a sense of inadequacy or insecurity in the water. Similarly, if instructors do not provide clear and concise guidance, beginners may feel confused or uncertain about what they should do, which can lead to anxiety and a lack of confidence in learning to swim. Additionally, if instructors fail to consider the individual needs or capabilities of beginners, this can create a learning environment that is too challenging or overwhelming, also leading to fear or anxiety. Therefore, it is crucial to choose a swimming instructor with experience in teaching young beginners who can create a positive, supportive learning environment. Instructors should offer clear and concise guidance while maintaining patience and encouraging beginners.

3. Strategies to Address Aquaphobia in Swimming Beginners

3.1. Methods to Overcome Aquaphobia in Child Beginners

3.1.1. Establishing Safety Awareness in Child Swimmers and Emphasizing Safety Education

Before starting swimming lessons, it is crucial to educate young beginners about water safety, explaining the precautions in detail and with patience:

- Health Check: Ensure to check the physical condition of the students before starting the course. Those with underlying health conditions (such as cardiovascular diseases, respiratory diseases, or skin diseases) should be advised against participating in swimming lessons.
- Immediate Reporting: During the swimming process, if students experience dizziness, breathing difficulties, or any physical discomfort, they must promptly report these to the instructor.
- Pool Conduct: Running, chasing, playing rough, and diving are not permitted in the pool area.
- Instructor Approval: All actions and needs must be reported to and approved by the instructor before proceeding.
- Underwater Activities: Diving or removing swimming gear without the instructor's permission is not allowed.

By educating children on these safety measures, we significantly enhance their awareness of safety during swimming, greatly reducing the risk of accidents. Moreover, detailed safety education by the instructors can help build a

responsible and reliable image in the minds of students and parents, enhancing the students' trust and sense of security towards the instructor, which can greatly reduce their fear of water.

3.1.2. Mastering Proper Breathing Techniques

Field investigations reveal that a significant portion of students' aquaphobia during swimming lessons stems from a fear of choking. The primary cause of choking is not mastering the correct breathing techniques. Normally, swimmers are taught to inhale with their head up and mouth open (above water) and exhale with their head down through the nose (underwater). Mixing up this sequence can lead to inhaling through the nose underwater and thus choking. Therefore, teaching students the correct breathing techniques early in their swimming lessons is crucial. This not only helps them master basic swimming techniques but also significantly reduces their fear of choking and overall aquaphobia.

3.1.3. Emphasizing Comfort with Water

Familiarization with water involves getting the body used to the resistance, pressure, and buoyancy of the water, which is crucial for overcoming aquaphobia. This includes activities such as walking in water, breathing underwater, floating, and gliding. A well-conducted water familiarization course helps child beginners get accustomed to performing various actions in water, laying the foundation for learning swimming techniques. Mastering these activities builds confidence in beginner swimmers and cultivates an interest in swimming, significantly reducing their fear of water.

3.1.4. Creating a Pleasant Environment

Creating a pleasant swimming teaching environment helps overcome the fear of water for several reasons:

- Reducing Anxiety: A pleasant teaching environment can help lower the anxiety levels of beginners. The more comfortable and relaxed beginners feel in the water, the less likely they are to feel fear or panic.
- Building Confidence: A positive and supportive teaching environment helps beginners build confidence in water activities. When beginners feel supported and encouraged by their instructor, they are more likely to try new skills, which helps build their confidence in the water.
- Enhancing Learning: A pleasant teaching environment enhances the learning experience for beginners. When they feel relaxed and comfortable, they are more receptive to new information and instructions, which helps them learn new skills more effectively.
- Fostering Love for Swimming: A pleasant teaching environment can help beginners develop a love for swimming and aquatic activities. Cultivating interest can also reduce the fear of water.

3.2. Training Methods for Children Beginners with Aquaphobia

3.2.1. Developing Good Water Comfort

For children with a fear of water, preparations should begin early in the swimming course. Training to develop comfort in water includes basic swimming movements such as walking in water, breathing in water, floating while standing, and gliding. These simple swimming basics are very friendly and easy for children to learn, and they play a significant role in building children's confidence in swimming, overcoming aquaphobia, and reducing the incidence of choking during swimming. Additionally, these activities help children acquire certain swimming skills. For instance, walking in water allows children to initially perceive the resistance, pressure, and temperature of the water; breathing in water helps children gradually get used to the frequency and depth of breathing underwater, starting with bubble blowing which, due to its fun nature, can cultivate an interest in swimming during the process; standing while floating in water is a key step in overcoming aquaphobia as maintaining balance while floating can cause panic, thus patient and progressive teaching is particularly important at this stage. Mastering the skill of floating has a significant impact on overcoming children's fear of water; gliding in water is an important step in building children's confidence and interest in swimming. Gliding simulates the simplest form of swimming movement, and because it is easy to perform and similar to swimming movements, it can help students adapt to the fear associated with swimming. Moreover, because it is easy to practice, mastering gliding in water can greatly reduce students' fear of swimming and boost their confidence in learning to swim.

3.2.2. Appropriately Shifting the Focus of Attention

During the swimming process, some children may focus heavily on their fear of water, which not only makes them particularly resistant to water but also significantly reduces the efficiency and increases the difficulty of learning to swim. Therefore, it is particularly necessary to appropriately shift the attention of children who fear water. The following methods can be used to divert the attention of children who are afraid of water:

- Using Toys and Games: One way to shift the attention of children who are afraid of water is to use toys and games. Utilizing floating toys or simple games that involve splashing and playing in the water can help divert their attention from the water and make the experience more enjoyable.
- Focusing on Skills: Another method of shifting attention is to focus on developing skills. You can work with children to develop basic skills, such as kicking, floating, and blowing bubbles. By focusing on these skills, children can feel a sense of achievement and progress, which can help build their confidence.
- Setting Achievable Goals: Setting achievable goals can help keep children motivated and focused on their progress. Set small goals, such as putting their face in the water or floating on their back, and celebrate when they achieve them. This can help build children's confidence and reduce their anxiety.

3.2.3. Imagery and Gradual Desensitization

- Using Imagery: For younger students, imagery can be a powerful tool. By imagining themselves swimming gracefully like a fish in water, children can build confidence and reduce anxiety. This technique taps into the child's imagination to create positive associations with swimming.
- Gradual Desensitization: For children with extreme fear of water, gradual desensitization can help them slowly adapt to their fear. This method might start with looking at pictures of water, watching videos of people swimming, and gradually progressing to being in water themselves. This approach helps children become less sensitive to water-related stimuli and reduces their fear.

3.2.4. Ensuring the Safety of the Training Environment

The fear of water in many children and adults stems from a deep-seated belief that water environments are unsafe. Therefore, ensuring the safety of the training environment can alleviate most people's fear of water. To ensure a safe aquatic environment:

- Location Selection: It's crucial to choose swimming facilities that are legally accredited.
- Lifeguard Presence: There should be at least three professional swimming lifeguards on duty during swimming lessons.
- Water Quality Testing: Before classes, test the water for bacteria and virus levels, ensure disinfectant levels are within standards, and check that the water temperature is appropriate.

A safe swimming environment provides a strong psychological reassurance to beginners that they are safe, allowing them to enter the water more relaxed, focus more on learning swimming skills during the lesson, and divert their attention from the fear of water.

3.2.5. Progressive Training Using Professional Teaching Methods

For beginners, learning swimming through professional teaching methods can greatly enhance the efficiency of learning to swim. For children with aquaphobia, professional swimming instruction can reduce their fear of water. For instance:

On-site Methodology: Start in a shallow water teaching area to learn basic swimming skills. After spending time in the "desensitization phase" in shallow water, move to deeper areas, allowing aquaphobic children to gradually accept and become less fearful of the water environment.

Teaching Progression: Start with dry land exercises, then progress to partial water exercises, exercises with fixed support in the water, and finally to exercises without fixed support in the water (hands-free practice). This step-by-step teaching method makes it easier for children to accept swimming skills learning, reduces learning anxiety, and gradually adapts them to water stimuli, overcoming their fear of water.

Thus, choosing professional instructors and using a gradual, professional teaching approach are the best strategies for helping children overcome aquaphobia and learn swimming skills effectively.

4. Conclusion

the development and implementation of targeted strategies to mitigate aquaphobia in children aged 6 to 12 are essential for fostering a positive swimming learning environment. Our analysis underscores the importance of a comprehensive approach that integrates psychological interventions, such as the use of imagery and gradual desensitization, with practical measures including the establishment of water familiarity and ensuring a safe training environment. The deployment of engaging and distraction techniques, such as games and skill-focused activities, further aids in shifting children's focus away from their fears. Moreover, adopting a structured, progressive teaching methodology tailored to the individual needs of each child enhances the learning process, significantly reducing anxiety and fear associated with water. Ultimately, these strategies are not only pivotal in overcoming initial water-related fears but also crucial in promoting long-term comfort and enjoyment in aquatic environments, thereby contributing to the holistic development of swimming proficiency among young beginners. This comprehensive approach aligns with current educational paradigms that emphasize safety, confidence-building, and adaptability in teaching practices, which are key to nurturing competent and confident swimmers.

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