

Exploration of Initial Training for Junior Table Tennis Players

Weizhu Luo^{1,*}

¹*Shanghai Changning Youth Amateur Sports School, Shanghai, China*

^{*}*Corresponding author: 332096829@qq.com*

Keywords: Juvenile sports; table tennis; initial training; sports enlightenment

Abstract: Childhood represents a critical phase for human growth and development, serving also as a formative period for early sports engagement. Early scientific training in table tennis during this stage establishes a robust foundation for nurturing children's learning interests, physical awareness, and fundamental skills. This study undertakes a preliminary investigation into the impact of early table tennis training on children's athletic talent, learning interests, and training environment. The objective is to offer insights that may inform practices related to children's table tennis initiation and talent identification.

1. Introduction

The Chinese idiom "one's manhood can be foreseen at the age of three and the agedness at the age of seven" suggests that the behaviors exhibited by children during early childhood are indicative of their future personality traits. This developmental stage aligns with the early childhood period delineated by movement development expert Seefeldt (1980) in the "Fundamental Movement Skill Development Sequences Model," which focuses on children aged 3 to 7. During this phase, often referred to as the pre-school age, children experience significant advancements in motor skills and coordination, as well as the acquisition of initial movement perception abilities.

2. The Role of Talent in the Initiation of Table Tennis Training for Children

In the instinct theory, the renowned American psychologist John Watson proposed that human behavior is acquired through learning and influenced entirely by external environmental factors. He believed that any healthy child could be nurtured to become an expert in any field (e.g., lawyer, doctor, or engineer) [1]. In contrast, Wiggam put forth a completely opposite theory in 1923, suggesting that differences between individuals are determined by genetic factors rather than postnatal environment. Studies on athlete development especially emphasize the interplay between environment and genetics, showing how people's athletic performance is influenced by both [2]. For instance, if talented athletes pass down their genes to their offspring, such families may create an environment that encourages sports participation from a young age. Additionally, Bloom studied exceptional swimmers with similar training experiences and found that while diligent training can lead to outstanding performance, some individuals do not attain excellence despite similar efforts, highlighting the role of genetics or talent in individual differences [3]. Therefore, in the early

training of young table tennis players, it is essential to identify those with natural talent, provide tailored instruction, and focus on their development.

3. The Role of Interest in the Initiation of Table Tennis Training for Children

Interest has been identified as a powerful driver of learning. Based on the theory of interest-based motivation, interest is seen as a psychological state that emerges when individuals interact with their environment. It involves attention, persistence, and emotional engagement, aiding learners in completing tasks and improving academic performance [4]. In the process of children's learning and training, when children develop an interest in the training, they tend to engage actively in sustained learning behaviors [5]. Interested students exhibit higher levels of engagement in the learning process and learning environments. They demonstrate more frequent and active self-reflection, problem-solving, and ultimately achieve better outcomes compared to their peers [6]. The table tennis is a competitive sport that requires high technical skills and comprehensive training over an extended period to reach a certain proficiency level. In the early stages of table tennis enlightenment training for children, simple, repetitive, singular, and lengthy training sessions are required. Therefore, cultivating children's interest in table tennis training becomes crucial. The higher the interest children have in learning table tennis, the longer they will participate in training and the faster they will progress [7]. Hence, during the early stages of table tennis enlightenment for children, it is important to use various engaging educational processes to actively guide children into learning, exploring, and self-reflection. By helping children develop a liking for table tennis, they voluntarily engage in the training process, applying the knowledge and skills learned to resolve real playing issues. This approach helps children maintain physical fitness, acquire knowledge, and attain higher technical proficiency levels through the process of learning table tennis. During enlightenment training, coaches can employ the ARCS motivation strategy for teaching, focusing on getting students interested and maintaining their enthusiasm for table tennis training through attention, relevance, confidence, and satisfaction. Coaches not only teach table tennis skills in easy-to-understand language but also work on enhancing children's motivation and interest in learning table tennis, ultimately aiming for continuous learning and lifelong sports participation.

4. The Role of Training Environment in the Initiation of Table Tennis Training for Children

4.1. Basic Technique Training

As table tennis continues to evolve and the level of play improves, the demands placed on athletes are correspondingly increasing. Achieving excellent results in competitive events necessitates not only innate talent but also a commitment to long-term scientific training. The quality of early training during childhood will impact an athlete's future development in technical proficiency. Consequently, enlightenment training is becoming an increasingly pivotal aspect of the pedagogical process in table tennis. During the initial perceptual stage, coaches elucidate the characteristics of table tennis in straightforward terms and exemplify actions such as the correct grip, fundamental stance, footwork, and movement. This facilitates the stimulation of students' interest in learning. In the training process, effective grouping can be employed, with group members facing each other to practice hand swings without a racket and work on fixed preparatory postures.

4.1.1. Multi-Ball Training

In the training process of table tennis, multi-ball training is mainly divided into two methods: single-ball training and multi-ball training. Single-ball training focuses on addressing specific issues

that table tennis learners encounter during technical and tactical gameplay, with the ultimate goal of problem-solving. During the early enlightenment training for children, multi-ball training is often an effective approach. It helps save training time, reduce ball retrieval frequency, refine specific technical actions, correct incorrect movements, and enhance coordination between movements and footwork, thus improving overall body coordination. During the enlightenment stage, one can begin with fixed-point multi-ball training for forehand and backhand positions to solidify the basic movements. Once learners can accurately hit specific locations from these positions, they can progress to two-point multi-ball training for forehand and backhand shots. This method combines forehand and backhand movements with footwork coordination to enhance the stability of motions and increase shot accuracy.

4.1.2. Single-Ball Training

Single-ball training is typically a form of practice that simulates a match and often involves one-on-one training sessions. In the early enlightenment training of young table tennis players, achieving stable single-ball practice usually requires some groundwork in multi-ball training. Once the stability of the multi-ball training improves, enabling players to consistently hit the ball back to designated positions, they can move on to single-ball training. Single-ball rallies involve varied ball placements, requiring players to not only have stable striking actions but also adjust their footwork and control the placement of their shots. Therefore, during the training in the enlightenment stage, it is common to start with fixed-point forehand and backhand practice. Coaches can set specific targets for the number of successful returns, creating training pressure for players while stimulating their ability to explore independently and collaborate cohesively during practice sessions.

4.2. Physical Fitness Training

During childhood, which is a crucial period for growth and development, engaging in proper physical fitness training can enhance children's physical abilities and lay a solid foundation for their future development. Scientific and reasonable physical fitness training can improve various aspects of children's physical qualities, such as physical fitness, intellectual development, and psychological well-being [8]. Table tennis is a skill-dominated sport characterized by high speed, strong spin, and multiple variations. Players need to quickly observe the incoming ball's direction, speed, spin, and landing point, and swiftly adjust their footwork, body position, and hitting technique within a short span of time. Players require good agility, speed, strength, and endurance to effectively respond to the diverse variations in incoming balls. For physical fitness training in early table tennis enlightenment for children, it is essential to balance physical fitness exercises while considering children's curiosity and competitive nature. Physical fitness training can be incorporated using game-based activities towards the end of each training session. Exercises such as sprints, frog jumps, jump rope skipping, squats, and planks can be included to enhance children's physical fitness while making the training more enjoyable. Additionally, specific footwork training can be integrated, incorporating activities like dodging drills to improve agile footwork and relay races to enhance speed and strength. Activities such as one-minute single-leg jump rope skipping and shuttle runs can improve children's speed and endurance, while frog jumps and standing long jumps can develop their strength. After completing physical fitness training, stretching exercises can be performed to improve children's flexibility [9].

5. Table tennis initial training for children can cultivate their personality traits

For children's table tennis enlightenment training, it is not only about teaching athletes technical

skills and applying them in future competitions but also more importantly about instilling the correct life values and cultivating their resilient character traits through table tennis training. Firstly, table tennis is a competitive sport that requires strong mental resilience and perseverance during matches. In enlightenment training, it is essential to gradually guide and cultivate children to face challenges positively. This can be initiated through physical training and competitions to develop their strong-willed character, which holds significant importance for future competitions and facing various challenges in life. Secondly, table tennis tactics are diverse, demanding high cognitive abilities from athletes. During enlightenment training, fostering habits of being industrious and creative will help children tackle difficulties by thinking critically and adapting to changes in future matches. Lastly, in children's table tennis enlightenment training, it is crucial to nurture virtues such as respecting teachers and traditions. During matches, this translates to respecting opponents, referees, and coaches; during training, it means respecting teammates and collaborating harmoniously. Through training, the focus is not solely on improving individual tactical skills but also on enhancing children's interpersonal skills and fostering a spirit of teamwork.

6. Conclusion

Table tennis is a sport that combines competitiveness with fitness and entertainment. For children's table tennis enlightenment training, it is not only about learning skills and strengthening the body, but more importantly about the tempering of the mind, cultivation of excellent qualities, and continuously enhancing children's resilience, confidence, initiative, and competitive spirit. Additionally, in order to motivate children to persist in training, it is necessary to stimulate their intrinsic motivation through different teaching methods, cultivate their interests, identify each child's individual characteristics, formulate personalized training plans based on these differences, conduct various training sessions, gradually establish playing styles that suit the athlete's personality and basic technical features, and comprehensively prepare them from psychological, physical, and technical aspects. Moreover, in children's table tennis enlightenment training, it is important to continually improve the accuracy of shots, enhance the power, quality, and consistency of returns, and solidify basic skills training. In modern times, scientific children's table tennis enlightenment training should be carried out to gradually improve the children's table tennis training system and create a scientific, reasonable, enjoyable, interesting, and high-quality children's table tennis enlightenment training program.

References

- [1] Watson, J.B. *Behaviorism* [M]. Chicago: University of Chicago Press. 1930:171.
- [2] BAKER, J., HORTON, S. A review of primary and secondary influences on sport expertise [J]. *High ability studies*, 2004, 15(2), 211-228.
- [3] BLOOM, Benjamin. *Developing talent in young people*. BoD—Books on Demand, 1985.
- [4] SHEN, B. *Modeling the interrelations among knowledge, interests, and learning strategies in physical education* [M]. City: University of Maryland, College Park, 2004.
- [5] MURAYAMA, K., Fitzgibbon, L., Sakaki, M. *Process Account of Curiosity and Interest: A Reward-Learning Perspective* [J]. *Educational Psychology Review*, 2019, 31(7):875-895.
- [6] ROTGANS, I.J., SCHMIDT, G.H. *Situational interest and academic achievement in the active-learning classroom* [J]. *Learning and Instruction*, 2009, 21(1):58-67.
- [7] WEI, L.H. *Research on Enlightenment Training Points of Children Table Tennis Players*[J]. *Science & Technology of Stationery & Sporting Goods*, 2021, 5(12):2.
- [8] ZHANG, Z. *The importance and training methods research on children's physical fitness training*[J]. *Youth Sport*, 2022, (05):55-56.
- [9] SUN, S.X. *Discussion on the training content of children's table tennis players in the enlightenment stage*[J]. *Ability and Wisdom*, 2016, (20): 1.