# **Effective Strategies for Physical Training in Volleyball Instruction**

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**Abstract:** In the context of quality education, the optimization of physical training in volleyball instruction focuses on strengthening students' physical qualities such as jumping ability, limb coordination, flexibility, and explosive power. Long-term physical training plans are formulated based on individual differences among students, while scientific and innovative methods for enriching physical training are employed. Additionally, the intensity and frequency of physical training are reasonably arranged to promote the coordinated development of students' physical and mental fitness, thereby significantly enhancing the effectiveness of physical training implementation. In this regard, the following analysis and discussion will center on the effective strategies for physical training in volleyball instruction.

Keywords: Volleyball instruction; Physical training; Effective strategies

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The primary pathways through which physical training enhances students' volleyball skills encompass various aspects such as physical quality, technical intelligence, tactical acumen, and mental resilience. It serves as the indispensable foundation for students to coordinate and apply skills like serving, digging, passing, and spiking. Furthermore, it is crucial for students to improve their physical attributes, including endurance, explosive power, speed, and flexibility. However, traditional volleyball instruction in physical training has placed undue emphasis on technical aspects while neglecting the diverse needs of individual students and the innovation of training methods. Consequently, the effectiveness of physical training activities has been less than satisfactory and clearly fails to meet the objective demands for optimizing physical training in volleyball instruction at this stage. In response, the author will objectively present personal insights on the implementation of physical training in volleyball instruction for the reference of relevant educators.

## 1. Characteristics of Physical Training Needs in Volleyball Instruction

Firstly, physical training in volleyball instruction is characterized by the need for strength. Technical actions such as spiking, serving, and blocking in volleyball require significant upper body strength to ensure that hits are both powerful and fast. Additionally, movements such as shifting positions, jumping, and running during volleyball matches necessitate robust core and lower body strength to support sudden bursts of power and the execution of various volleyball skills. Secondly, endurance is another key characteristic. Volleyball matches can last for several tens of minutes or even hours, requiring students to continuously engage in high-intensity activities such as running, jumping, and hitting. This places considerable demands on students' endurance. Targeted physical training aimed at developing students' endurance can better prepare them for high-intensity matches and competitions, reducing the impact of fatigue on their technical performance. Thirdly, about the speed characteristic. Here, speed refers to reaction speed, movement speed, and the speed of executing volleyball skills. It ensures that students can accurately and promptly judge and respond to incoming balls in different scenarios during volleyball matches,

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enabling effective offense and defense. Movement speed directly determines the strength of students' execution capabilities in terms of offense, defense, and tactical coordination in volleyball activities. What's more, students should possess good agility and flexibility. Good agility allows students to quickly adjust their body posture in complex and changing volleyball situations, effectively changing direction and executing high-quality actions with precision. Flexibility significantly enhances the range of motion of students' joints, reducing the risk of injuries during volleyball activities and improving the coordination, quality, and naturalness of their movements. In conclusion, physical training in volleyball instruction is characterized by the need for speed, strength, coordination, flexibility, and endurance. These aspects should be given attention and emphasis by sports educators.

# 2. Effective Strategies for Physical Training in Volleyball Instruction

# (1) Respecting students' differences and developing personalized physical training plans

Given the varying development levels among students in terms of strength, speed, endurance, explosive power, agility, flexibility, and psychological qualities, their needs for physical training activities organized by teachers differ. <sup>[2]</sup> Additionally, according to advanced educational ideas such as student-centered education and quality education, teachers should fully respect students' differentiated needs for physical training and scientifically optimize the design and application of physical training plans to promote sustainable implementation of physical training activities. Therefore, teachers should first classify students reasonably based on their physical development and athletic foundation, and design personalized training plans tailored to different levels of students to plan subsequent physical training activities. Furthermore, teachers should establish an overall goal for volleyball physical training and set specific training objectives closely linked to individual students, helping them coordinate their participation in physical training at the basic training stage, intensive training stage, and consolidation and enhancement stage, and move towards the set physical training goals. This will steadily improve students' volleyball physical qand enhance the feasibility and scientificity of implementing physical training plans, empowering the implementation of physical training in volleyball.

### (2) Diversifying training methods to enhance training efficiency

To further improve the efficiency of volleyball physical training instruction, teachers need to employ diverse training methods so that students at different levels can choose suitable training measures and participate in physical training activities efficiently, striving for greater development and improvement. For instance, teachers can use the training method of repetition for weightlifting exercises in strength training to strengthen students' lower limb strength and consolidate the shaping of technical movements, while avoiding muscle strain caused by excessive repetition. Additionally, teachers can incorporate interval training between two exercises, focusing on enhancing students' short-distance sprints during the return runs in volleyball games. Multiple sets of exercises can improve students' anaerobic endurance, enabling them to develop stronger anaerobic endurance and cardiorespiratory capacity. [3] At the same time, teachers can also adopt the training method of circuit, requiring students to establish corresponding practice items based on the physical strength, flexibility, coordination, and other quality requirements corresponding to technical movements such as spiking, digging, and setting. This allows students to participate in specific training items in a regular and scientific order, comprehensively and coordinately developing and enhancing their overall volleyball skills. Furthermore, teachers should implement the training method of game and competition, aiming to enhance the form and fun of physical training activities, help students maintain enthusiasm for training participation, and adapt to different competitive environments and atmospheres, thereby improving their practical application ability of comprehensive skills.

#### (3) Flexible training with reasonable arrangement of training frequency

The setting of a reasonable frequency and intensity for physical training is particularly important, as it directly

correlates with the effectiveness of the training. First of all, teachers need to determine an appropriate training intensity. They can consider factors such as students' age, physical condition, and training stage, combined with students' training development needs, to comprehensively determine the specific training intensity. For beginners or students with weaker physical quality, teachers can set relatively low-intensity basic training programs and appropriately extend the interval time to avoid excessive fatigue and injury. As students' physical fitness improves, the training intensity can be adjusted accordingly. Secondly, teachers need to reasonably arrange the frequency of training and flexibly adjust the number of weekly physical training sessions. Specifically, the training frequency set by teachers should be moderate and scientifically reasonable, ensuring that students have enough time to recover while also guaranteeing continuous development of their physical fitness during the training process. For example, when arranging physical training for beginners, teachers can maintain a weekly training frequency of 3 to 4 times and dynamically adjust and optimize it based on students' participation and performance, as well as their physical fitness levels and adaptability improvements. However, the final frequency should not exceed 5 to 6 times per week.

### (4) Innovating Training Dimensions with a Focus on Psychological Training

Addressing the neglect of psychological training in traditional volleyball physical training, teachers can focus on two aspects: cultivating willpower and enhancing psychological adjustment abilities. On the one hand, teachers can design challenging training tasks based on scenarios such as being behind in score or facing a powerful opponent in volleyball competitions. These tasks aim to cultivate students' perseverance and resilience from daily training, fostering a spirit of never giving up. When students feel like giving up during high-intensity endurance or strength training, teachers can use verbal encouragement, role model inspiration, and imitation guidance to stimulate students' competitiveness and cultivate their enterprising spirit. This helps students face the difficulties and obstacles in the training process with courage. On the other hand, teachers can organize activities such as relaxation training and concentration training to help students effectively alleviate and eliminate tension based on the actual situation of competitions and training. These activities improve students' focus on volleyball participation, enabling them to remain calm and composed regardless of the competition situation. By maintaining a good mental state during competitions, students can accurately complete specific volleyball skills and fully demonstrate their technical abilities, thereby achieving better participation outcomes in physical training and achieving higher levels of improvement and development.

#### 3. Conclusion

In summary, the optimized implementation of physical training in volleyball teaching not only enhances students' mastery of volleyball skills and comprehensive ability in volleyball-specific techniques, but also aligns with students' physical and mental training needs. By flexibly designing training plans, employing differentiated training methods, and reasonably arranging training frequency and intensity, we can guide students to engage in scientific psychological training. This helps us establish a multidimensional volleyball physical training teaching system that adapts to students' current volleyball training participation demands. Ultimately, the goal to construct a high-quality volleyball physical training system can be achieved.

#### References

- [1] Xie Xingchao. Methods of Physical Training for Students in Volleyball Teaching [J]. Journal of Chifeng University (Natural Science Edition), 2014, 000(007): 178-179.
- [2] Yiderigong. Exploration and Practice of the Effectiveness of Physical Training in Volleyball Sports [J]. Modern Sports, 2023(12): 0183-0185.
- [3] Wang Feifei, Li Xiaolong. Application Research of Physical Training in College Volleyball Teaching [J]. Sports-Leisure, 2021, 000(018): P.1-2.