The creation and application of the volleyball referee gesture exercise

James Williams^{1, a, *},

¹University of Windsor,401 Sunset Avenue Windsor, Ontario, N9B 3P4, Canada a.williams j 414751@icloud.com

Abstract: This article, in combination with the characteristics of the referee's work in volleyball competitions and with reference to numerous examples of gesture exercise choreography, has created a set of 20 volleyball referee gestures exercises in accordance with the principles and patterns of radio calisthenics arrangement. The exercises have been promoted and applied in the volleyball specialized and general courses of nearly 30 classes across 10 grades at the School of Physical Education, Xinjiang Normal University, and have been improved based on feedback. Practice has proven that this set of volleyball referee gesture exercises is easy to learn, well-designed, interesting, and easy to promote. It has a positive effect and good results in helping students master the basic gestures of volleyball referees, the coordination of gestures and whistle sounds, and on-the-spot refereeing.

Keywords: Volleyball referee, Gesture exercise, Creation, Application

1. Introduction

Volleyball referees have limited movement during matches and primarily use gestures to indicate the nature and content of their decisions. These gestures are simple and clear, which aligns with the basic elements of radio calisthenics. By referring to the principles and patterns of radio calisthenics and combining my years of experience as a referee, I have created this set of 20 referee gestures exercises. These exercises cover the vast majority of gestures used in on-site refereeing. They have been promoted and applied in nearly 30 volley ball specialized and general classes across 10 grades at the School of Physical Education, Xinjiang Normal University, and have been improved based on feedback. Practice has shown that these exercises are easy to learn, well-designed, interesting, and easy to promote. They play a very positive role in helping students learn and master the rules of refereeing and on-site refereeing.

2. Main content of the creation

2.1. Preparatory movement

Stand at attention with head up and chest out. The command rhythm is preferably two beats per movement, which can be changed to one beat per movement once the action is mastered.

2.2. Section one: Indicating the serving team $(4 \times 8 \text{ beats})$

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with fingers together and palm facing forward; on beats 3 and 4, return the left arm to the side of the body. Beats 5 to 8 are the same as beats 1 to 4 but in the opposite direction.

The second, third, and fourth eight beats are the same as the first eight beats.

^{*}Corresponding Author

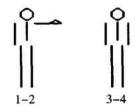


Figure 1: Indicating the Serving Team

2.3. Section Two: Permitting the Serve (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with fingers together and palm facing forward; on beat 3, bend the left arm to the right and bring it to the front of the chest with the palm facing inward; on beat 4, return the left arm to the side of the body. Beats 5 to 8 are the same as beats 1 to 4 but in the opposite direction.

The second, third, and fourth eight beats are the same as the first eight beats.

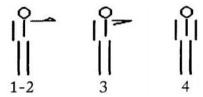


Figure 2: Permitting the Serve

2.4. Section three: In bounds (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beats 3 and 4, return the left arm to the side of the body; on beats 5 and 6, point the right arm downward to the right at a 45-degree angle; on beats 7 and 8, return the right arm to the side of the body.

The second eight beats are the same as the first eight beats but in the opposite direction.

The third and fourth eight beats are the same as the first and second eight beats.

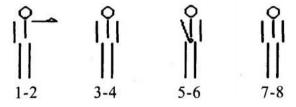


Figure 3: In Bounds

2.5. Section four: Out of bounds (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beat 3, directly raise the left arm from the side position by bending the elbow upward, while simultaneously raising the right arm with the elbow bent. Both arms should be symmetrical, shoulder-width apart, with the palms facing inward and the forearms forming a 90-degree angle with the upper arms. On beat 4, return both arms to the sides of the body. Beats 5 to 8 are the same as beats 1 to 4 but in the opposite direction.

The second, third, and fourth eight beats are the same as the first eight beats.

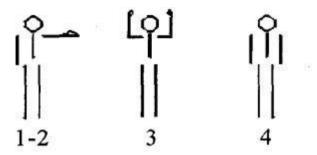


Figure 4: Out of Bounds

2.6. Section five: Touch out of bounds (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beat 3, bend the right arm upward to the side and raise it to the upper front of the forehead with the palm facing inward and fingers together, while simultaneously sliding the lefthand palm along the righthand fingertips. On beat 4, return both arms to the sides of the body. Beats 5 to 8 are the same as beats 1 to 4 but in the opposite direction.

The second, third, and fourth eight beats are the same as the first eight beats.

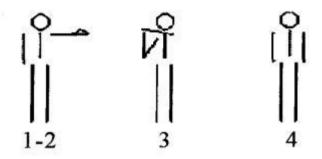


Figure 5: Touch Out of Bounds

2.7. Section Six: Net touch foul (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beats 3 and 4, return the left arm to the side of the body; on beats 5 and 6, bend the right forearm and place it in the center of the chest with the palm facing left and fingers together; on beats 7 and 8, return the right arm to the side of the body.

The second eight beats are the same as the first eight beats but in the opposite direction.

The third and fourth eight beats are the same as the first and second eight beats.

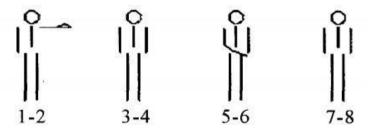


Figure 6: Net Touch Foul

2.8. Section Seven: Crossing the center line foul (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beats 3 and 4, return the left arm to the side of the body; on beats 5 and 6,

point the right index finger towards the center line of the court; on beats 7 and 8, return the right arm to the side of the body.

The second eight beats are the same as the first eight beats but in the opposite direction.

The second and fourth eight beats are the same as the first and second eight beats.

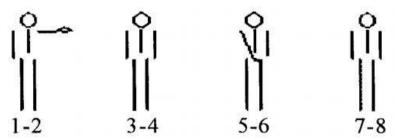


Figure 7: Crossing the Center Line Foul

2.9. Section Eight: Over-the-Net playing fault (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beats 3 and 4, return the left arm to the side of the body; on beats 5 and 6, bend the right arm at the elbow and place it in front of the chest with the upper arm and forearm forming a 90-degree angle and the palm facing downward; on beats 7 and 8, return the right arm to the side of the body.

The second eight beats are the same as the first eight beats but in the opposite direction.

The second and fourth eight beats are the same as the first and second eight beats.

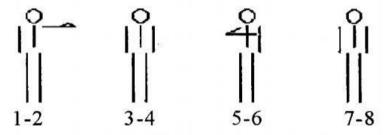


Figure 8: Over-the-Net Playing Fault

2.10. Section Nine: Offensive playing fault (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beats 3 and 4, return the left arm to the side of the body; on beats 5 and 6, raise the right arm upward and swing the forearm downward with the palm facing downward; on beats 7 and 8, return the right arm to the side of the body.

The second eight beats are the same as the first eight beats but in the opposite direction.

The third and fourth eight beats are the same as the first and second eight beats.

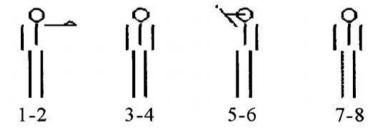


Figure 9: Offensive Playing Fault

2.11. Section Ten: Serving screen or blocking foul (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beat 3, raise both arms upward with the palms facing forward and fingers together; on beat 4, return both arms to the sides of the body. Beats 5 to 8 are the same as beats 1 to 4 but in the opposite direction.

The second, third, and fourth eight beats are the same as the first eight beats.

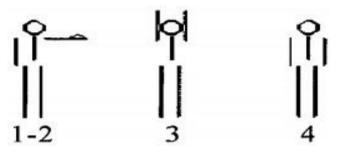


Figure 10: Serving Screen or Blocking Foul

2.12. Section Eleven: Position or rotation error (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beats 3 and 4, return the left arm to the side of the body; on beats 5 and 6, circle the right index finger outward in front of the body; on beats 7 and 8, return the right arm to the side of the body.

The second eight beats are the same as the first eight beats but in the opposite direction.

The second and fourth eight beats are the same as the first and second eight beats.

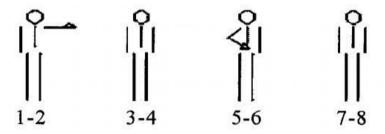


Figure 11: Position or Rotation Error

2.13. Section Twelve: Serving foot fault (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beats 3 and 4, return the left arm to the side of the body; on beats 5 and 6, point the right index finger horizontally from a 45-degree angle in front of the body; on beats 7 and 8, return the right arm to the side of the body.

The second eight beats are the same as the first eight beats but in the opposite direction.

The third and fourth eight beats are the same as the first and second eight beats.

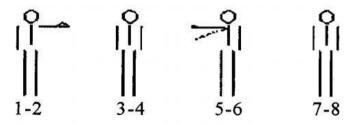


Figure 12: Serving Foot Fault

2.14. Section Thirteen: Holding the ball (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beats 3 and 4, return the left arm to the side of the body; on beats 5 and 6, slowly raise the right forearm with the elbow bent and the palm facing upward; on beats 7 and 8, return the right arm to the side of the body.

The second eight beats are the same as the first eight beats but in the opposite direction.

The second and fourth eight beats are the same as the first and second eight beats.

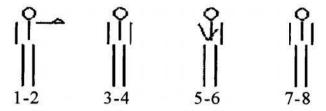


Figure 13: Holding the Ball

2.15. Section Fourteen: Double contact (4×8 beats)

First eight beats: On beats 1 and 2,extend the left arm horizontally to the left with the palm facing forward and fingers together; on beats 3 and 4,return the left arm to the side of the body; on beats 5 and 6,bend the right arm to the side with the upper arm and forearm forming a 90-degree angle, raise two fingers and separate them, with the palm facing forward; on beats 7 and 8,return the right arm to the side of the body.

The second eight beats are the same as the first eight beats but in the opposite direction.

The third and fourth eight beats are the same as the first and second eight beats.

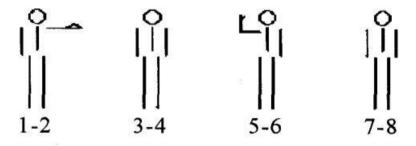


Figure 14: Double Contact

2.16. Section Fifteen: Four hits (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beats 3 and 4, return the left arm to the side of the body; on beats 5 and 6, bend the right arm to the side with the upper arm and forearm forming a 90-degree angle, raise four fingers and separate them, with the palm facing forward; on beats 7 and 8, return the right arm to the side of the body.

The second eight beats are the same as the first eight beats but in the opposite direction.

The third and fourth eight beats are the same as the first and second eight beats.

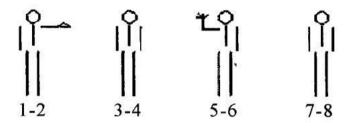


Figure 15: Four Hits

2.17. Section Sixteen: Delay of service (4×8 beats)

First eight beats: On beats 1 and 2, extend the left arm horizontally to the left with the palm facing forward and fingers together; on beat 3, raise both arms with eight fingers spread and palms facing forward; on beat 4, return both arms to the sides of the body. Beats 5 to 8 are the same as beats 1 to 4 but in the opposite direction.

The second, third, and fourth eight beats are the same as the first eight beats.

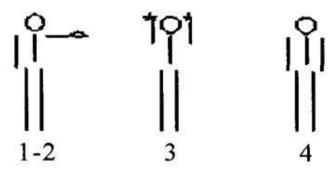


Figure 16: Delay of Service

2.18. Section Seventeen: Time-Out (4×8 beats)

First eight beats: On beats 1 and 2, raise the left arm with the elbow bent and fingers pointing upward, while placing the right palm on the fingertips of the left hand with the palm facing downward; on beats 3 and 4, return both arms to the sides of the body. Beats 5 to 8 are the same as beats 1 to 4 but in the opposite direction.

The second, third, and fourth eight beats are the same as the first eight beats.

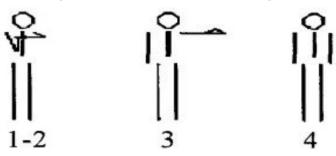


Figure 17: Time-Out

2.19. Section Eighteen: Substitution (4×8 beats)

First eight beats: On beats 1 and 2, rotate both arms with elbows bent in front of the chest; on beat 3, extend the left arm horizontally to the left with the palm facing upward and fingers together, pointing towards the side requesting the substitution; on beat 4, return both arms to the sides of the body. Beats 5 to 8 are the same as beats 1 to 4 but in the opposite direction.

The second, third, and fourth eight beats are the same as the first eight beats.



Figure 18: Substitution

2.20. Section Nineteen: Court change (4×8 beats)

First eight beats: On beats 1 and 2, cross both arms in front of the body; on beats 3 and 4, separate the arms with the fingers of the left and right hands pointing to the two end lines respectively. On beats 5 and 6, make fists with both hands, rotate the right hand in front of the body and the left hand behind the body; on beats 7 and 8, return to the preparatory position.

The second, third, and fourth eight beats are the same as the first eight beats.

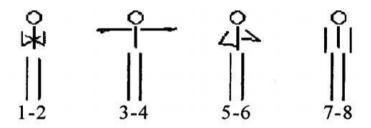


Figure 19: Court Change

2.21. Section Twenty: End of the match (4×8 beats)

First eight beats: On beats 1 and 2, cross both arms in front of the chest; on beats 3 and 4, extend both arms horizontally to the sides with the palms facing downward; on beats 5 and 6, clasp hands in front of the body; on beats 7 and 8, return both arms to the sides of the body.

The second, third, and fourth eight beats are the same as the first eight beats.

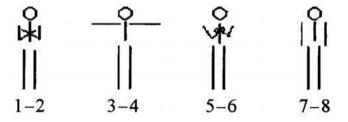


Figure 20: End of the Global Match

3. Practical application

Since the creation of the gesture exercise, it has been applied in the teaching of volleyball skills. Starting with the 2006 volleyball specialization class, it has been experimentally promoted in volleyball specialization courses across 10 grades and general volleyball courses in 40 physical education majors, with a practical history of ten years. After going through the process of theory—practice—theoretical refinement—further practice, the gesture exercise has now matured. In teaching, there are differences among ethnic language students in terms of language expression and comprehension. Simply using verbal explanations does not yield ideal learning and mastery outcomes. However, by compiling gestures into an

exercise, students can vividly and intuitively combine the foul calls in the rules with the referee's gestures, facilitating memorization and practice. Practice has proven that combining the gesture exercise with whistle sounds not only standardizes the whistle sounds and gestures but also teaches refereeing knowledge and enhances the referees' ability to officiate.

Through the study of the referee exercise, the standardization, regularization, and unification of students' referee gestures have been accelerated and improved. In the volleyball skills assessment section, an examination method of question-and-answer is adopted to combine the actions of the gesture exercise with the nature of the referee's role, and the learning effect has been found to be satisfactory. In the first and second-level volleyball referee training classes in Xinjiang, the gesture exercise method has been tried for learning referee gestures, and the feedback from trainees has been positive. Similarly, this kind of teaching innovation and reform practice can also be carried out in similar sports such as beach volleyball and soft volleyball to enhance students' interest and effectiveness in learning.

4. Conclusion

The creation and application of the volleyball referee gesture exercise have proven to be highly effective in enhancing the teaching and learning of volleyball refereeing skills. This innovative approach, which integrates physical movement with the essential gestures used in volleyball officiating, has not only standardized and unified the gestures but also significantly improved students' ability to understand and apply these gestures in real match scenarios. The practical application of this gesture exercise over a decade has demonstrated its value in simplifying complex rules and making them more accessible to students, particularly those with language barriers. By combining the gesture exercise with whistle techniques, students are better equipped with the necessary skills for effective refereeing. The positive feedback from students and trainees in various volleyball-related courses and workshops confirms the effectiveness of this method. Looking forward, this approach holds great potential for further application in similar sports, such as beach volleyball and soft volleyball, to continue enhancing the learning experience and effectiveness of students in sports officiating.

5. References

- [1] Xu Hu. Preliminary Exploration of Using Referee Gesture Exercises in Volleyball Teaching Classes[J]. Journal of Xi'an Physical Education University, 1988, 5(3):59-71.
- [2] Alimu jiang Yimiti Tuerkhen, Li Qian. Survey and Research on the Current Status of Beach Volleyball Referee Teams in Xinjiang[J]. Professional Space and Time,2013,9(1):215-217.
- [3] Wang Lijun. Preliminary Exploration of Teaching Methods and Means in Volleyball Referee Courses in General Universities[J]. Liaoning Sports Science and Technology,2007,29(1):89,92.