

Concentration Exercises for Volleyball Players: A Systematic Review

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ABSTRACT

Keywords:

Concentration
Exercise
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The purpose of this study is to analyze research on the importance of concentration and concentration training in volleyball players. The research method used is a systematic review of journal articles and proceedings Google Scholar, Scopus, Web Of Science and PubMed databases. Researchers use a framework with inclusion criteria, namely concentration exercises for volleyball players, and exclusion criteria, namely articles published in non-reputable journals in fake journals. The results of this research are volleyball coaches and sports psychologists should encourage players to focus on the target areas that the coach has planned to improve player performance. Good concentration is essential in decision making on the court. In a matter of seconds, a player must evaluate the situation, determine the most appropriate action, and carry it out. This involves quickly processing visual and tactile information, such as the position of opponents and teammates. Players who are able to maintain focus are more likely to make strategic decisions that benefit the team, both in attack and defense. Forms of concentration training for volleyball players based on this study include attention training, drills with visualization and reaction training, mental training and meditation. In addition, adequate rest (sleep) is also an important factor in maintaining player concentration.

INTRODUCTION

Concentration is a critical psychological skill that enables volleyball players to perform at their optimal level. It involves the ability to focus attention on the task at hand while remaining unaffected by both positive and negative internal and external stimuli (Monsma et al., 2017). External distractions may include crowd reactions, background music, unfavorable referee decisions, or unsportsmanlike conduct from opponents (Xu, 2019). In competitive contexts, maintaining concentration is essential for readiness and preparation, as it directly influences technical execution, tactical decisions, and overall game performance (Septiyanto & Suharyana, 2016).

Athletic performance in volleyball depends not only on technical proficiency and physical fitness but also on psychological qualities, particularly concentration and perceptual ability (Al-Rubaie, 2024). The ability to sustain attention is especially crucial during critical phases of a match, such as when the score is tied or when a decisive point is at stake. High concentration enables players to control movements with precision, rapidly interpret game situations, and make accurate decisions under pressure (Martins et al., 2022). Conversely, lapses in concentration increase the likelihood of technical errors, disrupt team rhythm, and negatively affect outcomes (Erianti et al., 2020).

Given the fast-paced nature of volleyball, players must quickly read ball trajectories, anticipate opponents' actions, and respond with appropriate tactical choices (Mahmudin et al., 2025). In critical moments, concentration supports emotional regulation, allows players to adapt to evolving match dynamics, and enhances their ability to perform technical skills consistently (Taheri & Valayi, 2019). A lack of focus, on the other hand, may lead to errors in passing, poor defensive positioning, or misjudged attacks, thereby reducing the team's chances of success (Fauzi et al., 2024).

One effective approach to enhancing concentration is the use of simulated in-game scenarios in training, which replicate the pressure and conditions of real matches (Ramos

et al., 2017). By manipulating competitive constraints—such as practicing under specific score conditions—coaches can prepare players to maintain composure and decision-making accuracy even under heightened pressure. This approach aligns with the concept of co-adaptation in team sports, where athletes develop tactical and mental readiness through exposure to varied and unpredictable competitive contexts.

Concentration training in volleyball can take many forms, including attention control drills, imagery training, decision-making exercises, and mental conditioning programs (Astuti et al., 2024; Ashutosh et al., 2020). Previous studies have shown that structured mental training can improve not only attentional capacity but also other performance-related outcomes such as serving accuracy, defensive coordination, and passing efficiency (Al-Jubouri et al., 2016; Khokhar & Rani, 2020). However, there remains a need for systematic analysis of specific training methods that are most effective in enhancing the concentration of volleyball players, particularly in competitive youth and elite contexts. Therefore, this study aims to analyze and evaluate different training interventions that can improve concentration in volleyball, drawing on findings from previous research as a reference for coaches in designing evidence-based training programs.

RESEARCH METHOD

The research method used is a systematic review of journal articles and proceedings Google Scholar, Scopus, Web Of Science and PubMed databases. The combination of keywords used was volleyball player concentration training and the importance of concentration.

The researcher used a spider framework with inclusion criteria, namely the importance of concentration and concentration training for volleyball players, and exclusion criteria, namely articles published in journals that are not books or book chapters. The researcher determined 10 articles that included these criteria. The next stage is the review and analysis of the entire manuscript, starting with the title, abstract, methods, findings, discussion, and conclusions and recommendations from the researcher regarding the results of his research.

Data analysis using descriptive statistics. The researcher presents the results of the analysis in a table and analyzes each research recommendation with the aim of presenting forms of training to improve the concentration of volleyball players.

RESULTS AND DISCUSSION

The results of the literature review research, in the form of journal articles and proceedings from Google Scholar, Scopus, Web Of Science and PubMed databases with a combination of keywords used, are volleyball player concentration training and the importance of concentration as follows:

Table 1. Table title (this is an example of table 1)

1	Title	The Effect of Life Kinetic Number Training on the Concentration Level of Female Volleyball Athletes Aged 13-15 Years (5)
	Sample	22 female volleyball athletes aged 13-15 years

	Method	Experimental method with a one-group pretest-posttest design
	Results	There is a significant influence between life kinetic number training on the concentration level of female volleyball athletes aged 13-15 years
	Conclusion	Life kinetic number training is an effective training model to improve the concentration of female volleyball athletes aged 13-15 years.
	Recommendation	It is recommended to strive for the application of the Life Kinetic Number training model.
2	Title	Aerobic Exercise Improves Attention and Quality of Sleep Among Professional Volleyball Players (6)
	Sample	21 professional female volleyball players
	Method	The study was a semi-experimental research with pre-test and post-test design.
	Results	The results suggested that both attention tests (speed processing and selective attention) were improved significantly in posttest in experimental group compared to control group ($p \leq 0.05$). In addition, It was shown that, quality of sleep was significantly improved in experimental group ($p = 0.001$; $t = 8.01$).
	Conclusion	Although professional athletes often do athletic activities, the regular aerobic exercise would improve their psychomotor performance and quality of sleep.
	Recommendation	Aerobic exercise can be considered as a noninvasive and effective strategy to counteract cognitive impairment caused by stressful conditions in athletic events.
3	Title	Effectiveness of hand-eye coordination, strength of fingers and concentration on ability passing over a volleyball game (7)
	Sample	60 students selected using a purposive sampling technique from the volleyball extracurricular student population
	Method	The research uses an experimental method with a 2x2x2 factorial design
	Results	The results showed that: (1) there was a significant influence between eye-hand coordination on upper passing ability, (2) there was a significant influence between hand finger strength on upper passing ability, (3) there was a significant influence between concentration level on upper passing ability, and (4) there was a significant interaction between the three variables on the upper passing ability.
	Conclusion	Eye-hand coordination, finger strength, and concentration jointly or partially have a significant influence on the upper passing ability in volleyball games

	Recommendation	The article suggests the importance of integrated exercises that combine coordination, strength, and mental aspects, the need for a systematic and progressive training program, and the importance of periodic evaluation.
4	Title	Cultivation and Exploration of Volleyball Players' Concentration (8)
	Sample	SLR The document does not explicitly detail a specific sample.
	Method	The study proposes methods and means of concentration training for volleyball players
	Results	The document's focus is on outlining the importance of concentration in volleyball and suggesting training methods, rather than presenting specific research results from an experiment. It argues that concentration is crucial for enhancing a team's ability and on-court performance.
	Conclusion	The paper concludes that concentration training is indispensable for volleyball players, and it proposes methods to improve concentration.
	Recommendation	The recommendations are the training methods themselves, which include attention training, thinking ability training, and suggestive adjustment training to improve volleyball players' concentration
5	Title	The effect of the concentration strategy for serious creativity on productive thinking, performance and accuracy of volleyball transmission skill among student (9)
	Sample	70 students from the fourth preparatory grade
	Method	The experimental approach was adopted with pre- and post-tests for experimental and control groups
	Results	The employment of educational exercises for volleyball with the vocabulary of the focus strategy for serious creativity in practical lessons helps in improving the level of volleyball produced, and in improving the performance and accuracy of the transmission skill.
	Conclusion	The application of focus strategy improves volleyball performance and skill accuracy.
	Recommendation	It is necessary when adopting mental measurement, especially the volleyball produced for each student in lessons.
6	Title	Contribution of Explosive Power Muscle Arms and Concentration of Floating Service in Volleyball (10)
	Sample	Students of the Department of Physical Education who take advanced volleyball courses. Sample size is 26 students
	Method	Correlational study. Data collected using Medicine ball put for arm muscle explosive power, questionnaire concentration grid

		exercise for concentration, and servicing ability tests. Data analyzed using product-moment correlation.
	Results	Explosive power of arm muscles has a significant relationship with service capabilities. Concentration does not have a significant relationship. Explosive arm muscles and concentration jointly have a significant relationship
	Conclusion	The explosive power of arm muscles significantly influences serving ability in volleyball.
	Recommendation	Further research is needed to explore other contributing factors to service capabilities in volleyball.
7	Title	
	Sample	
	Method	
	Results	
	Conclusion	
	Recommendation	
8	Title	The Effects Of Attentional Focus On The Performance Of Volleyball Jump Serve In Elite Players (11)
	Sample	12 elite volleyball players
	Method	Participants completed 4 blocks of 8 jump serves under four conditions: Non-Instruction, Internal focus, Near external focus, and Far external focus. Accuracy, effectiveness, and self-perception of performance were measured.
	Results	Far external focus condition resulted in better accuracy, effectiveness, and self-perceived performance compared to near external and internal conditions. Self-perceived performance was better in far external condition than in the non-instructional condition.
	Conclusion	The study confirms the benefits of an external focus of attention, particularly a far external focus, on skilled performance. It also supports the detrimental effects of an internal focus of attention.
	Recommendation	Findings suggest that volleyball coaches and sport psychologists should encourage players to focus on the target area or target players to improve performance.
9	Title	Focus! Keys to Developing Concentration Skills in Open-skill Sports (12)
	Sample	This article is a review of concentration training, not a study with specific participants. It draws on existing research and theory
	Method	This is a review article that synthesizes research and provides practical applications. It doesn't involve a specific

		experimental method but rather presents techniques and activities for coaches.
	Results	The article presents key concepts and activities aimed at improving concentration in athletes. These "results" are in the form of improved understanding and practical tools for enhancing focus
	Conclusion	The authors conclude that understanding and implementing selective attention, attentional focus style, and attentional shifting can develop concentration skills in athletes.
	Recommendation	The primary recommendation is for coaches to integrate concentration training into their practices using the provided activities and strategies.
10	Title	Effects of Mediation Techniques on selected Psychological Variables of Attention and Concentration in Women Volleyball Players (13)
	Sample	20 women intercollegiate volleyball players from Dr. Sivanthi Aditanar College of Physical Education, Tiruchendur
	Method	The players were assigned to an experimental group that underwent meditation training 5 days a week (Monday to Friday) for six weeks, from 6 am to 7 am. The meditation techniques included Trataka, Dhvani Yoga, Ajapa-Jap, attention on charkas. Attention and concentration were measured before and after the six-week training period using an attention board and a mirror drawing apparatus, respectively. The data was analyzed using a dependent t-test.
	Results	The study found a significant improvement in attention and concentration for the women volleyball players after the meditation training.
	Conclusion	The study concluded that meditation techniques are effective in improving attention and concentration in women volleyball players
	Recommendation	The paper implies that incorporating meditation techniques into training regimens can be beneficial for enhancing the psychological variables of attention and concentration in athletes.

Based on the results of the data analysis, various research methods were found to be used, including experimental design, correlational studies, and literature reviews. Many studies have examined methods or factors that influence and potentially improve volleyball performance. The theme related to this study is the attention, concentration, and focus tests of volleyball players and their relationship to performance.

The recommended exercise to improve the concentration of volleyball players is life kinetic number. Concentration plays a central role in volleyball. This sport requires

players to have sharp focus, especially in responding to fast and unpredictable ball movements. The ability to continuously track the position of the ball, predict its direction, and react quickly is the essence of effective play. Players with a trained level of concentration will excel in making accurate touches, be it passing, setting, spiking and blocking.

Good concentration is essential in decision making on the court. In a matter of seconds, a player must evaluate the situation, determine the most appropriate action, and carry it out. This involves quickly processing visual and tactile information, such as the position of opponents and teammates. Players who are able to maintain focus are more likely to make strategic decisions that benefit the team, both in attack and defense (Xu, 2019).

Volleyball matches are often filled with various distractions ranging from crowd noise to competitive pressure. The ability to ignore these external distractions and stay focused on the game is a sign of a player with a strong mentality. Trained concentration allows players to be unaffected by elements outside their control, so they can maintain their best performance throughout the match (Monsma, Perreault & Doan, 2017).

Concentration facilitates better coordination between players. Volleyball is a team sport that requires synchronized movements and shared tactical understanding. Focused players are more aware of their teammates' positions and movements, allowing for a more organized attack and defense. Thus, concentration training not only improves individual skills but also contributes to the overall effectiveness of the team (Fauzi et al., 2024).

Life kinetic number exercise is a type of exercise that combines physical movement, cognitive challenges, and visual perception simultaneously. The goal is to optimize brain function through body movement. There is a significant influence between life kinetic number exercise on the concentration level of female volleyball athletes aged 13–15 years. Life kinetic number exercise is one of the most effective exercise models to improve the concentration of female volleyball athletes aged 13–15 years (Fauzi et al., 2024). It is recommended to try to apply the life kinetic number exercise model.

Meditation techniques are effective in improving attention and concentration in volleyball players. Through meditation practice, players can develop the ability to quickly shift their focus back if they start to lose concentration. Stress and anxiety can be very disruptive to concentration. Meditation has a calming effect on the nervous system, helping to reduce stress and anxiety levels. With a calmer mind, players will be better able to focus and concentrate on the game (Gp, Manjunatha & Ka, 2019).

The recommendations for training to improve concentration are attention training and thinking ability training. Concentration affects the player's accuracy when performing. Player concentration can be affected by the condition of the player, who is well rested (sleeping). Adequate rest will increase concentration because the player is not stressed, and the body is fit (Taheri & Valayi, 2019).

Sports performance at the highest level requires many cognitive functions such as attention or concentration, decision making, and experience to perform optimally in stressful situations (Khokhar & Rani, 2020). Decision making is a fundamental element of all sports. When an athlete experiences stress due to pressure, damage occurs to the mental representation network, and the perceptual-cognitive-motor connection also

becomes dysfunctional. Decision making can be done correctly when someone is really concentrating on performing (Ashutosh, Kumar & Ashok, 2020).

Mental training also contributes to feeling more confident, with full focus and concentration on the game (Jubouri, Kareem & B MTA, 2016). Mental training will help improve concentration, direct actions towards a goal according to plan, and control feelings (emotions and thoughts) and conditions under pressure during the game (Astuti et al., 2024). Coaches and athletes can use the results of applied sports psychology research to learn how to manage player stress, control concentration, increase self-confidence, improve communication skills and team harmony.

CONCLUSION

Many studies explore methods or factors that influence and potentially enhance volleyball performance. A recurring theme across many of the papers is the examination of attention, concentration, and focus in relation to volleyball performance. Volleyball coaches and sports psychologists should encourage players to focus on the target areas that the coach has planned to improve player performance.

Forms of concentration training for volleyball players based on this study include attention training, drills with visualization and reaction training, mental training and meditation. In addition, adequate rest (sleep) is also an important factor in maintaining player concentration.

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