

The Relationship Between Concentration and Top Serve Accuracy in Volleyball

Refalda Herista
Universitas Pendidikan Indonesia

Introduction

Name Affiliation

Volleyball is one of the most popular team sports that requires the integration of technical, physical, tactical, and psychological abilities. Among the fundamental skills, the top serve plays a crucial role because it initiates the rally and can directly generate points or put pressure on the opposing team. To execute an accurate top serve, athletes need not only proper technique but also strong psychological readiness, particularly concentration. Concentration enables athletes to maintain focus, coordinate body movements, regulate striking force, and direct the ball accurately toward the intended target while minimizing the influence of distractions.

Introduction

Name Affiliation

Previous studies have demonstrated that concentration contributes to sports performance, including volleyball serving skills. However, most research has focused on serving performance in general, while studies specifically examining the relationship between concentration and top serve accuracy, particularly among high school volleyball athletes, remain limited. Therefore, this study aims to examine the relationship between concentration and top serve accuracy among male volleyball extracurricular athletes at SMAN 10 Bandung. The findings are expected to provide evidence supporting the integration of psychological training, especially concentration exercises, into regular volleyball training programs.

Methods

Affiliation

Research Design: Quantitative, Descriptive Correlational

Sampling: Purposive sampling, 15 Male Volleyball Athletes SMAN 10 Bandung.

Instrument: Grid Concentration Test (GCT) AAHPER Volleyball Serving Accuracy Test

Data Analysis: Descriptive Statistics, Shapiro–Wilk Test Pearson Correlation Coefficient of Determination (R^2)

Result

Test		Top Service
Concentration	Pearson Correlation	.480
	Sig.	.070

The Pearson Product Moment analysis revealed a moderate positive correlation between concentration and top serve accuracy ($r = 0.480$). Furthermore, the coefficient of determination ($R^2 = 0.231$) indicated that concentration explained 23.1% of the variance in top serve accuracy, while the remaining 76.9% was influenced by other factors not examined in this study, such as technical skills, physical fitness, coordination, and psychological readiness.

Discussion

The findings revealed a moderate positive relationship between concentration and top serve accuracy ($r = 0.480$), indicating that athletes with higher concentration tend to perform more accurate top serves. Concentration contributed 23.1% to top serve accuracy, suggesting that psychological factors play an important role in volleyball performance. However, the remaining 76.9% was influenced by other factors, such as technical skills, physical fitness, coordination, and self-confidence. These findings are consistent with previous studies by Maulana et al. (2017) and Kurniawan et al. (2021), which reported that concentration positively affects volleyball serving performance. Therefore, improving concentration through psychological skills training, combined with technical practice, may enhance top serve accuracy and overall performance.



ConcluSSION

This study found a moderate positive relationship between concentration and top serve accuracy among male volleyball extracurricular athletes at SMAN 10 Bandung ($r = 0.480$). Concentration contributed 23.1% to top serve accuracy, indicating that athletes with better concentration tend to perform more accurate serves. However, top serve performance is also influenced by other factors, including technical skills, physical fitness, coordination, and psychological readiness. Therefore, volleyball training programs should integrate concentration training with technical and physical training to improve top serve performance.

- ❖ Aidan Moran, J. T. (2012). A Critical Introduction to Sport Psychology. <https://www.routledge.com/A-Critical-Introduction-to-Sport-Psychology/Moran-Toner/p/book/9781032012018?utm>.
- ❖ Alhossin Alali, A., Farhan, A., & Shakir, H. (2013). The Effects of External and Internal Focus of Attention on Upper Volleyball Serve. *International Journal of Advanced Sport Sciences*, 1(2), 155–163.
- ❖ Gabriel Alexandru, P. (2021). Understanding the importance of service in the beach volleyball game. *GEOSPORT FOR SOCIETY*, 14, 12–20. <https://doi.org/10.30892/gss.1402-068>
- ❖ Kurniawan, A., Rusmiati, P., & Chan, A. S. (2021). Hubungan Tingkat Konsentrasi Dengan Ketepatan Servis Bola Voli.
- ❖ Maulana, M. I., Ugelta, S., Pendidikan, F., Indonesia, U. P., Setiabudhi, J., & Bandung, N. (2017). HUBUNGAN KONSENTRASI DENGAN HASIL KETEPATAN SERVIS ATAS PADA CABANG OLAHRAGA BOLA VOLI. 01, 16–22.
- ❖ Moran, A., & Toner, J. (2018). Attentional Processes in Sport and Performance. In F. C. Worrell (Ed.), *Oxford Research Encyclopedia of Psychology*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190236557.013.156>.
- ❖ Narti, W. (2025). *PERAN KONSENTRASI SEBAGAI FONDASI UTAMA DALAM PROSES PEMBELAJARAN YANG EFEKTIF*. 5(1), 48–61.
- ❖ Novi Lidya Isdarianti, Masri, Karimuddin, Nurhadi Santoso, A. W. (2024). *ANALISA KONSENTRASITERHADAP PERFORMA SHOOTINGATLET PETANQUEBINAAN KONI ACEH*. 5, 181–187.