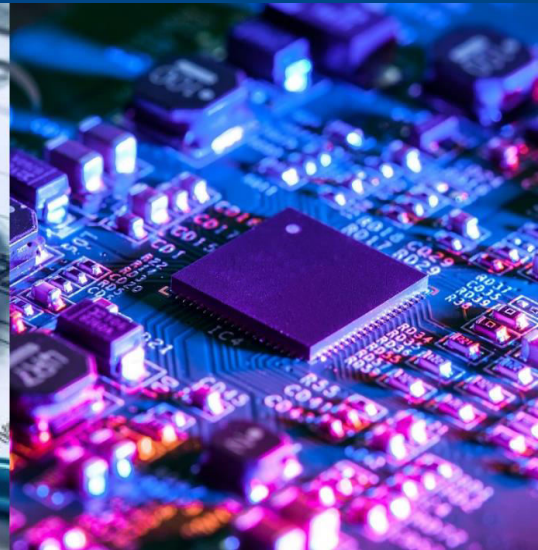
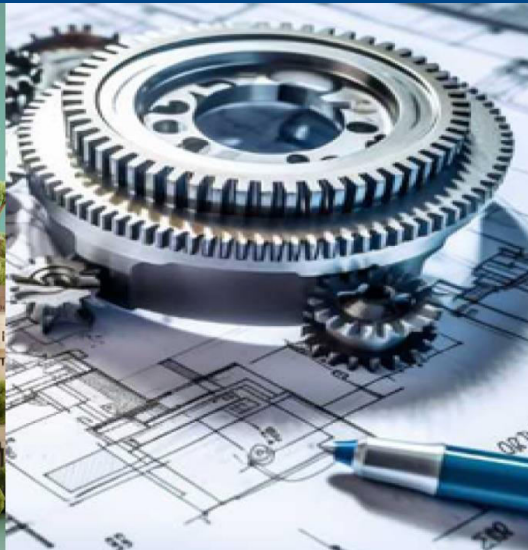
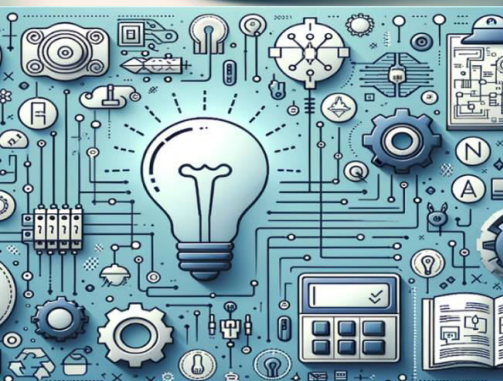




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Relationship between Self-Confidence and Serving Accuracy among Volleyball Players

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ABSTRACT: Self-confidence is one of the most important psychological attributes influencing sports performance. In volleyball, serving is the first offensive skill that directly affects the outcome of a rally. Players with greater self-confidence are expected to perform serves with greater precision and consistency. The present study aims to investigate the relationship between self-confidence and serving accuracy among volleyball players. A descriptive correlational research design was adopted. A total of 30 male club level volleyball players aged 14-18 years were selected through purposive sampling. Self-confidence was assessed using the Trait Sport Confidence Inventory (TSCI), while serving accuracy was measured using the AAHPER Volleyball Serving Accuracy Test. Descriptive statistics and Pearson's Product Moment Correlation were employed for data analysis. The findings revealed a significant positive relationship between self-confidence and serving accuracy, suggesting that psychological confidence contributes to improved volleyball performance. The study emphasizes the importance of incorporating psychological skills training into volleyball coaching programmes.

KEYWORDS: Self-confidence, Serving Accuracy, Volleyball, Sports Psychology, Performance, University Athletes

I. INTRODUCTION

Volleyball is one of the most popular and dynamic team sports played worldwide, requiring athletes to integrate physical fitness, technical proficiency, tactical intelligence, and psychological preparedness to achieve optimal performance. Success in volleyball depends not only on an athlete's physical abilities such as strength, speed, agility, endurance, and coordination but also on mental attributes that enable players to perform consistently under competitive pressure. As the level of competition increases, psychological factors become increasingly important in distinguishing successful athletes from their counterparts. Consequently, sports psychologists, coaches, and researchers have devoted considerable attention to understanding the role of psychological variables in enhancing athletic performance.

Among the various psychological characteristics associated with sports performance, **self-confidence** has been identified as one of the most influential determinants of athletic success. Self-confidence refers to an athlete's belief in their ability to successfully perform a specific task or achieve desired performance outcomes. It enables players to remain composed under pressure, maintain concentration, make sound decisions, and execute sport-specific skills with precision and consistency. According to Bandura's Self-Efficacy Theory (1997), individuals who possess stronger beliefs in their capabilities are more likely to demonstrate greater persistence, invest more effort, overcome setbacks, and perform effectively during challenging situations. Similarly, Vealey's Sport Confidence Model emphasizes that confidence is a multidimensional construct that significantly influences motivation, emotional regulation, performance expectations, and competitive behaviour among athletes.



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In volleyball, technical skills such as serving, passing, setting, attacking, blocking, and defensive play collectively determine match performance. Among these, **serving** occupies a unique and strategic position because it is the only skill that is completely under the control of the player. Every rally begins with a serve, making it the first offensive action capable of placing immediate pressure on the opposing team. A well-executed serve can disrupt the opponent's offensive system, force poor receptions, create scoring opportunities, and sometimes result in direct points through service aces. Consequently, serving accuracy has become one of the most critical performance indicators in modern volleyball.

Serving accuracy refers to the player's ability to direct the ball consistently toward predetermined target areas with precision while maintaining appropriate speed, trajectory, and tactical intent. Modern volleyball emphasizes tactical serving strategies designed to exploit opponents' weaknesses by targeting specific players or court zones. Players who consistently demonstrate high serving accuracy contribute significantly to their team's offensive advantage, whereas inaccurate serves frequently result in service errors, lost points, and reduced competitive effectiveness. Therefore, serving accuracy is regarded as a fundamental technical skill that substantially influences match outcomes.

Despite possessing excellent technical abilities, many volleyball players experience fluctuations in serving performance due to psychological factors. Competitive situations often expose athletes to stress, anxiety, fear of failure, crowd pressure, expectations from coaches and teammates, and the importance of match outcomes. These psychological demands may negatively affect concentration, coordination, decision-making, and motor control, ultimately reducing serving accuracy. In contrast, athletes with higher levels of self-confidence generally exhibit greater emotional stability, enhanced concentration, quicker recovery from mistakes, and greater willingness to execute technically demanding serves under pressure. Their confidence enables them to maintain consistency even during high-pressure moments of competition. Research in sports psychology consistently indicates that self-confidence contributes positively to various aspects of athletic performance, including motor skill execution, decision-making, persistence, resilience, motivation, and emotional regulation. Confident athletes are more likely to approach challenging situations with optimism, interpret pressure as an opportunity rather than a threat, and maintain effective performance despite distractions or setbacks. In volleyball, these characteristics are particularly important during serving because each serve requires precise coordination, timing, focus, and confidence to achieve the intended tactical objective. Several researchers have reported significant associations between psychological variables and sports performance; however, relatively few studies have specifically examined the relationship between self-confidence and serving accuracy in volleyball players. Much of the existing literature has focused on competitive anxiety, motivation, mental toughness, or general performance outcomes, leaving a gap in understanding how confidence directly influences one of volleyball's most critical technical skills. Furthermore, with the increasing emphasis on evidence-based coaching and psychological skills training, there is a growing need to investigate psychological determinants of specific performance indicators such as serving accuracy. Understanding the relationship between self-confidence and serving accuracy has important practical implications for coaches, physical educators, sports psychologists, and athletes. If a positive relationship exists, psychological interventions such as goal setting, positive self-talk, imagery, relaxation techniques, mindfulness training, and confidence-building programmes can be systematically incorporated into regular volleyball training to improve technical performance. Such interventions may enhance athletes' confidence, reduce performance anxiety, improve concentration, and ultimately increase serving effectiveness during competition.

Therefore, the present study aims to investigate the **relationship between self-confidence and serving accuracy among volleyball players**. By examining how psychological confidence relates to technical serving performance, the study seeks to contribute to the growing body of knowledge in sports psychology and volleyball performance analysis. The findings are expected to provide valuable insights for researchers, coaches, and practitioners in designing comprehensive training programmes that integrate both psychological preparation and technical skill development to maximise competitive performance.

II. OBJECTIVES OF THE STUDY

- To assess the level of self-confidence among volleyball players.
- To measure serving accuracy among volleyball players.
- To determine the relationship between self-confidence and serving accuracy.



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III. RESEARCH DESIGN

The present study employed a descriptive correlational research design to examine the relationship between self-confidence and serving accuracy among volleyball players. This design was considered appropriate because it enables the researcher to determine the nature and strength of the relationship between two variables without manipulating them. In this study, self-confidence served as the independent variable, while serving accuracy was the dependent variable. Self-confidence was assessed using the Trait Sport Confidence Inventory (TSCI) developed by Vealey (1986), and serving accuracy was measured using the Russell-Lange Volleyball Serving Test Battery. The collected data were analysed using descriptive statistics, including the mean and standard deviation, followed by the Pearson Product-Moment Correlation Coefficient (r) to determine the relationship between the two variables. This research design provided an objective and systematic approach to understanding whether higher levels of self-confidence are associated with better serving accuracy among volleyball players.

The population for the present study comprised club-level male volleyball players. A total of 30 male volleyball players, aged 14–18 years, were selected as the sample. The participants were chosen using the purposive sampling technique, ensuring that only players who met the predefined inclusion criteria and were actively participating in club-level volleyball were included in the study.

IV. TOOLS WERE USED FOR THIS STUDY.

Sl. No.	Variable	Tool
A	Self-confidence	Trait Sport Confidence Inventory (TSCI)
B	Serving Accuracy	AAHPER Volleyball Test

A. Self-Confidence

Trait Sport Confidence Inventory (TSCI) developed by Vealey (1986).

- Number of Items: 13
- Scale: 9-point Likert Scale
- Reliability: Above 0.85

B. Serving Accuracy

AAHPER Volleyball Serving Accuracy Test

The participant performs ten serves towards designated target zones.

Scoring

- Target Zone = 5 Points
- Adjacent Zone = 3 Points
- Legal Serve = 1 Point
- Fault = 0 Point

Maximum Score = 50

V. PROCEDURE

The procedure of the study will involve obtaining permission from the concerned club before commencing data collection. The researcher had explained the purpose and objectives of the study to the participants and obtain their informed consent. The participants then completed the Trait Sport Confidence Inventory to assess their level of self-confidence. After the questionnaire, a standardized warm-up session will be conducted to prepare the participants for the skill test. Subsequently, the AAHPER Serving Accuracy was administered following the standard testing protocol. Each participant's serving accuracy score was carefully recorded, and all collected were compiled systematically for statistical analysis to examine the relationship between self-confidence and serving accuracy among volleyball players.

12. Statistical Analysis

- Correlation



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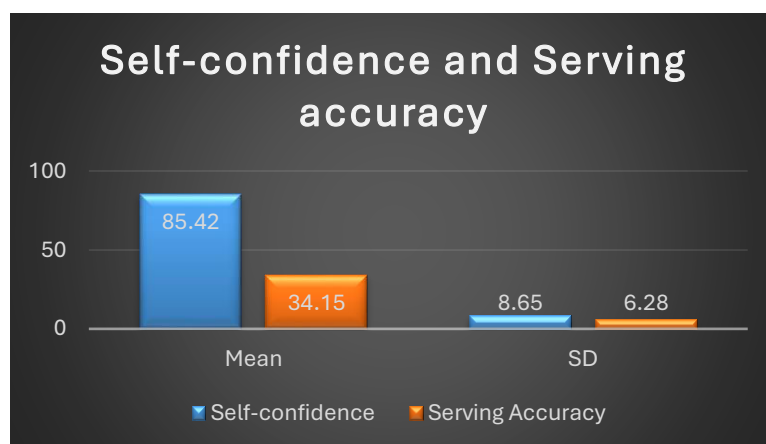
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Table No. 1
Mean and S.D. of self-confidence and serving accuracy

Variable	Mean	SD
Self-confidence	85.42	8.65
Serving Accuracy	34.15	6.28

Table No. 1 the mean score of self-confidence was 85.42, with a standard deviation of 8.65. This indicates that, on average, the participants had a relatively high level of self-confidence. The standard deviation suggests a moderate variation in self-confidence scores among the participants, meaning that while most participants scored close to the mean, some showed higher or lower levels of self-confidence. The mean score of serving accuracy was 34.15, with a standard deviation of 6.28. This indicates that the participants achieved an average serving accuracy score of 34.15. The standard deviation shows moderate variability in serving performance, suggesting that most participants' scores were clustered around the mean, with only a few performing substantially better or worse than the average.

Graph No. 1



Graph No.1: Graphical representation of self-confidence and serving accuracy

Table no. 2
Relationship between Self-confidence & Serving Accuracy

Variables	r-value	p-value
Self-confidence & Serving Accuracy	0.61	<0.001

Table no. 2: The table presents the results of the Pearson product-moment correlation analysis between self-confidence and serving accuracy. The obtained correlation coefficient ($r = 0.61$) indicates a moderately strong positive relationship between self-confidence and serving accuracy. This means that participants with higher levels of self-confidence tended to achieve higher serving accuracy scores. Conversely, participants with lower self-confidence generally demonstrated lower serving accuracy. The p-value (<0.001) indicates that the relationship is highly statistically significant. Since the p-value is much lower than the conventional significance level of 0.05.

VI. INTERPRETATION

The Pearson correlation coefficient ($r = 0.61$) indicates a **moderately strong positive relationship** between self-confidence and serving accuracy. Since the p-value is less than 0.05, the null hypothesis is rejected. Therefore, volleyball players with higher self-confidence tend to exhibit better serving accuracy.



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VII. DISCUSSION

The findings suggest that self-confidence significantly influences serving accuracy in volleyball. Athletes with higher confidence are more likely to execute serves effectively under competitive pressure, maintain concentration, and recover quickly from errors. These results support Bandura's Self-Efficacy Theory, which emphasizes that confidence enhances task performance through increased motivation and persistence. The results are also consistent with the findings of Vealey (1986), Feltz (2007), and Moran (2012), who reported that confidence is a major determinant of athletic success. Coaches should therefore integrate psychological skills training—such as goal setting, visualization, self-talk, and relaxation techniques—alongside technical training to improve serving performance.

VIII. CONCLUSION

The study concludes that self-confidence has a significant positive relationship with serving accuracy among volleyball players. Athletes possessing higher confidence demonstrate greater consistency and precision in serving. Psychological preparation should be considered an integral component of volleyball training programmes to maximize performance.

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