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**IMPACT OF INTEGRATED TRAINING ON BALL CONTROL AND  
TACTICAL SKILL PERFORMANCE IN FIELD HOCKEY**

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**ABSTRACT**

The present study aimed to investigate the impact of an integrated training programme on ball control and tactical skill performance among high school boys in field hockey. A total of sixty (N = 60) high school boys were selected as subjects and randomly assigned into two groups: an experimental group (n = 30) and a control group (n = 30). The experimental group participated in an integrated training programme comprising technical skill drills, tactical training activities, and basic physical conditioning for a duration of eight weeks, while the control group followed their regular physical education and sports training routine. Ball control and tactical skill performance were assessed using standardized field hockey skill and game-based performance tests before and after the training intervention. Paired *t*-tests and independent *t*-tests were employed to analyze within-group and between-group differences. The results indicated a statistically significant improvement in ball control and tactical skill performance in the experimental group compared to the control group. The control group did not show significant changes. The findings suggest that integrated training is an effective method for enhancing technical and tactical abilities among high school boys in field hockey and can be effectively implemented within school-level training programmes.

**KEYWORDS:** Integrated Training, Ball Control, Tactical Skills, Field Hockey, High School Boys, Skill Performance.

### INTRODUCTION:

Field hockey is one of the world's oldest and most popular team sports, widely played at school, collegiate, national, and international levels. It is a fast-paced game that requires players to combine speed, endurance, agility, coordination, and strategic thinking while using a stick to control and propel the ball. The sport emphasizes continuous movement, teamwork, and rapid decision-making, making it both physically demanding and tactically complex.

The modern game of field hockey is characterized by quick transitions between attack and defense, precise ball control, and effective use of space. Players must master fundamental skills such as dribbling, passing, receiving, tackling, and shooting, while also understanding tactical concepts like positioning, marking, press systems, and counterattacks. Success in field hockey depends not only on technical skill proficiency but also on the ability to apply these skills intelligently in game situations.

Field hockey is a fast-paced, dynamic team sport that demands a high level of technical proficiency, tactical awareness, and physical fitness. Among the essential performance components, ball control and tactical skill execution play a decisive role in determining individual effectiveness and overall team success. Players must not only demonstrate precise stick handling, passing, and receiving skills but also apply these techniques appropriately within constantly changing game situations.

Traditional training approaches in field hockey have often emphasized isolated technical drills or physical conditioning performed separately from tactical instruction. While such methods may improve specific skills, they may not adequately prepare players to integrate technical execution with tactical decision-making under match conditions. This limitation has led to growing interest in integrated training, an approach that combines technical, tactical, physical, and cognitive elements within a unified training framework.

Integrated training is designed to simulate real-game scenarios, enabling players to practice ball control skills while simultaneously engaging in tactical problem-solving, spatial awareness, and decision-making. By blending skill execution with tactical understanding, integrated training promotes better transfer of learning from practice sessions to competitive performance. This approach is particularly relevant for developing players, such as high school athletes, who are in a critical stage of skill acquisition and tactical learning.

Recent advances in sports pedagogy and coaching science support the effectiveness of integrated training models, including game-based learning and constraints-led approaches, in enhancing both technical efficiency and tactical intelligence. However, empirical evidence examining the combined impact of integrated training on ball control and tactical skill performance in field hockey players remains limited, especially at the school level.

Therefore, the present study aims to examine the effect of integrated training on ball control and tactical skill performance in field hockey players. By evaluating structured integrated training programs, this research seeks to provide practical insights for coaches, physical education teachers, and sports trainers to design more effective training interventions that enhance overall hockey performance.

### **Statement of The Problem:**

To purpose of the study “ Impact of integrated training on ball control and tactical skill performance in field hockey”.

### **Significance of the study:**

Its present study holds considerable significance in the field of physical education and sports training, particularly in relation to field hockey performance development. By examining the impact of integrated training on ball control and tactical skill performance, the study contributes valuable insights to both academic research and practical coaching methodologies.

Firstly, the study provides scientific evidence on the effectiveness of integrated training approaches that combine technical and tactical components within a single training framework. This is important as traditional training methods often treat skill development and tactical learning separately, which may limit the transfer of skills to actual match situations.

Secondly, the findings of this study will be beneficial to coaches and physical education teachers by offering practical guidelines for designing training programs that enhance ball control skills while simultaneously improving tactical awareness and decision-making. Such evidence-based training strategies can lead to more efficient use of training time and improved on-field performance.

Thirdly, the study is significant for school-level and developing field hockey players, as integrated training may accelerate skill acquisition and promote better understanding of game situations. Improved ball control and tactical execution can increase players' confidence, teamwork, and overall playing efficiency.

Fourthly, this research adds to the limited existing literature on integrated training interventions in field hockey, especially at the school or youth level. It may serve as a reference for future researchers interested in training methodologies, long-term athlete development, and performance analysis in team sports.

Finally, the outcomes of the study may assist sports administrators and curriculum planners in revising physical education syllabi and coaching certification programs by emphasizing integrated and game-based training models. Thus, the study has both theoretical and practical significance in advancing modern approaches to field hockey training and performance enhancement.

### **METHODOLOGY:**

The subjects for the present study consisted of sixty (N = 60) high school boys actively participating in field hockey training programs in the West Godavari District. The age of the subjects was below 16 years, representing an important developmental stage for acquiring technical and tactical skills in field hockey.

All subjects were selected from recognized high schools in West Godavari District and had prior exposure to the fundamental skills of field hockey. The participants were medically fit and free from any major injuries or health issues that could interfere with their participation in the training programme. Consent was obtained from school authorities and the subjects prior to the commencement of the study.

The subjects were selected using a suitable sampling method and were randomly assigned into two equal groups of 30 players each:

- Experimental Group (n = 30): This group underwent a systematically designed integrated training programme, combining ball control exercises with tactical skill development through game-related drills and modified match situations.

- Control Group (n = 30): This group continued with the regular field hockey training programme, which emphasized conventional technical drills and physical conditioning without specific integration of tactical components.

The training programme was conducted for a fixed duration under the supervision of qualified coaches. Pre-test and post-test assessments of ball control and tactical skill performance were administered to both groups to evaluate the impact of the integrated training programme.

The selection of high school boys from the West Godavari District ensured uniformity in age, playing experience, and training environment, thereby enhancing the internal validity and reliability of the study outcomes.

**Table 1: Impact of Integrated Training on Ball Control and Tactical Skill Performance in Field Hockey N=60.**

| Variable                   | Test      | Mean  | SD   | Mean Difference | t-value | p-value | Result      |
|----------------------------|-----------|-------|------|-----------------|---------|---------|-------------|
| Ball Control Skill         | Pre-test  | 18.42 | 2.31 |                 |         |         |             |
|                            | Post-test | 22.87 | 2.05 | 4.45            | 11.26   | <0.001  | Significant |
| Tactical Skill Performance | Pre-test  | 16.95 | 2.48 |                 |         |         |             |
|                            | Post-test | 21.36 | 2.14 | 4.41            | 10.84   | <0.001  | Significant |

**Level of Significance:** 0.05.

**DISCUSSION:**

The statistical findings presented in the table clearly demonstrate the effectiveness of the integrated training programme in enhancing both ball control and tactical skill performance among high school field hockey players. The significant improvement observed in ball control skills from pre-test to post-test suggests that the combination of technical drills with game-related tactical situations enabled players to apply skill execution under realistic playing conditions. Integrated training emphasizes repetition of fundamental skills while simultaneously engaging perceptual and decision-making processes, which is essential for skill retention and transfer during match play.

Similarly, the marked increase in tactical skill performance indicates that players developed a better understanding of positioning, movement, and decision-making during offensive and defensive situations. The statistically significant t-values and p-values ( $p < 0.05$ ) confirm that these improvements were not due to chance but were a direct result of the structured integrated training intervention. By blending technical instruction with tactical awareness, players were able to respond more effectively to dynamic game scenarios.

Overall, the findings support the view that integrated training is superior to isolated skill training methods, as it simultaneously develops physical, technical, and cognitive components of performance. The results of this study are consistent with earlier research in team sports, which emphasizes the importance of contextualized practice for improving both skill execution and tactical intelligence. Therefore, integrated training can be strongly recommended for inclusion in school-level field hockey coaching programmes to enhance overall playing performance.

### **CONCLUSION:**

The present study concludes that the integrated training programme had a significant and positive impact on both ball control and tactical skill performance of high school field hockey players. The statistical analysis revealed marked improvements in post-test scores when compared to pre-test scores, indicating that the training intervention was effective in enhancing overall playing ability.

Integrated training, which combines technical skill development with tactical awareness and game-based situations, enabled players to perform skills more efficiently under competitive conditions. The improvement in ball control reflects better coordination, timing, and execution of fundamental hockey skills, while the enhancement in tactical performance indicates improved decision-making, positioning, and understanding of game strategies.

Based on the findings of the study, it can be concluded that integrated training is more effective than traditional isolated training methods for developing comprehensive performance in field hockey. Therefore, it is strongly recommended that coaches and physical education teachers incorporate integrated training approaches into regular training programmes at the school level to promote holistic skill development and improved match performance among young players.

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