



EFFECTS OF SKILL SPECIFIC TRAINING ON SELECTED RAIDING SKILLS AMONG KABADDI PLAYERS

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Abstract: Kabaddi is a high-intensity contact sport requiring a combination of strength, agility, and tactical skill. Among the key offensive techniques in Kabaddi are toe touches and running hand touches, crucial for successful raids. This study aimed to evaluate the effects of a structured, skill-specific training program on improving these two raiding skills among Kabaddi players. A sample of 30 male players aged 20–23 years was divided into an experimental group (n=15) receiving skill-specific training and a control group (n=15) following regular training. The training lasted for 8 weeks. Results showed a statistically significant improvement in both toe touches and running hand touches in the experimental group compared to the control group ($p < 0.01$). These findings highlight the efficacy of focused training protocols in enhancing specific raiding techniques in Kabaddi.

Index Terms – *Footwork Drills, Running Hand Touch, Toe Touch, Kabaddi Players*

1. INTRODUCTION

Kabaddi, an indigenous sport of India, has gained global recognition and popularity due to its inclusion in international games and leagues such as the Pro Kabaddi League (PKL). The game is characterized by its high tempo, tactical depth, and physical demands. Raiding, a core component of Kabaddi, involves players entering the opponent's half and scoring points through legal touches before returning safely.

Two of the most effective raiding techniques are the toe touch and running hand touch. While the toe touch demands flexibility, core strength, and running hand touch, the running hand touch relies on speed, timing, and upper body coordination.

Despite their importance, limited scientific literature is available evaluating the impact of skill-specific training on these techniques. This study aims to address that gap by measuring the effect of a structured, skill-based training regimen on the raiding abilities of Kabaddi players, specifically focusing on toe touches and running hand touches.

Kabaddi is a traditional South Asian sport that has evolved into a globally recognized and professionally played contact team game. Known for its dynamic movements, high physical demand, and tactical complexity, Kabaddi has gained immense popularity with the advent of national and international competitions like the Asian Games and the Pro Kabaddi League (PKL). It is a game that combines agility, strength, flexibility, speed, and mental alertness, making it one of the most physically intense sports.

In Kabaddi, the match revolves around the raider and defenders, where the raider crosses into the opponent's territory with the aim of touching one or more defenders and returning safely to their half within a limited time—typically 30 seconds. The performance of a raider plays a critical role in the success of the team, and the effectiveness of raiding is determined by the execution of specific skills. Two such essential offensive techniques are the toe touch and the running hand touch. The toe touch is a deceptive move where the raider bends down to extend a leg and tries to touch the defender with the foot, often targeting the corner

or cover defenders. This skill demands balance, core strength, flexibility, and strategic timing. The running hand touch is a swift, forward motion where the raider uses his hand to tap the defender and quickly returns, typically used against vulnerable or off-position defenders. This skill requires high levels of speed, anticipation, and upper-body coordination. Despite their critical role in scoring, these skills are often undertrained in favor of general fitness and conditioning. While strength and endurance form the foundation of performance, the mastery of technical skills like toe touch and hand touch determines a player's effectiveness in real-game scenarios. Studies suggest that integrating skill-specific training—where drills mimic game-like situations—can significantly improve performance outcomes in team sports (Bompa & Haff, 2009; Hohmann et al., 2018). In light of this, the current study seeks to bridge the gap in literature by examining the effects of skill-specific training on selected raiding skills (toe touches and running hand touches) among Kabaddi players. It investigates whether a focused intervention program can significantly enhance these skills and, by extension, the raiding success of athletes.

2. METHODS

2.1 Subjects and Procedures

Twenty four male kabaddi players were voluntarily participated from participated from Manonamian Sundaranar University College, Puliangudi, Tirunelveli, Tamilnadu, India. A total of 24 active male kabaddi players aged 21.16 ± 1.52 years and having a BMI of 22.57 ± 1.54 were assigned to one of the two groups as footwork drills programme (Intervention group) and control (Control group). The training period continued for three alternative days a week for eight weeks period. The initial and the final toe touch and running hand touch was measured by toe touch test and running hand touch test and its unit of measurement in numbers. The intervention groups met three alternative days per week for eight weeks of training programme and control group maintained their usual day to day activity during the course of this study. The data was collected during the year of 2024-25.

2.2 Training Protocol for Intervention Group

The intervention group underwent skill specific programme under the strict supervision of the investigator, prior to every training session the intervention group done proper warming-up exercises, which included jogging and stretching. The intervention treatment namely experimental group underwent **skill-specific training** five days a week for 8 weeks. The program focused on:

- **Toe Touch Drills:** Shadow practice, wall toe touches, partner defense simulation
 - **Running Hand Touch Drills:** Cone drills, fast approach simulation, hand-eye coordination tasks
- Each session lasted 60 minutes and included warm-up, main training drills, and cooldown.

2.4 Statistical Tools

For analyzing the collected data, the researcher gone through paired sample-‘t’ test to find out the significant improvement of mean score between pre and post-test of the selected groups. And the researcher chose analysis of covariance (ANCOVA) to find out the significance difference between both groups at the 0.05 level of confidence was fixed to test the level of significance difference.

3. RESULT AND FINDINGS

The effect of skill specific drills on toe touch and running hand touch were analyzed and presented in the below table,

Table II. Computation of ‘t’ - ratio between Pre and Post-Test Means of Intervention and Control Groups on Toe touch and running hand touch (seconds)

Criterion Variables	Test	Intervention Group		Control Group	
		Mean	SD	Mean	SD
Toe touch	Pre test	7.13	1.35	7.06	1.64
	Post test	10.56	1.26	7.14	1.37
	‘t’ test	9.22*		1.54	
Running hand touch	Pre test	6.86	1.14	6.93	1.22
	Post test	9.46	1.19	7.11	1.21
	‘t’ test	9.83*		0.74	

*Significant at 0.05 level. (Table value required for significance at .05 level for ‘t’-test with df 11 is 2.20)

The table II shows that the pre-test mean values on toe touch and running hand touch among intervention and control groups were 7.13 & 7.06 and 6.86 & 6.93 respectively and post-test mean values are 10.56 & 7.14 and 9.46 & 7.11 respectively. The obtained dependent t-ratio values between pre and post-test means of intervention and control groups are 9.22 & 1.54 and 9.83 & 0.74 respectively. The table value required for significant difference with df 11 at 0.05 level is 2.20. Since, the obtained-‘t’ ratio value of intervention group was greater than the required table value, it was concluded that intervention group had significantly improved on toe touch and running hand touch due to the effect of footwork drill programme. However, the control group has not improved significantly. The obtained ‘t’ value is less than the table value, as they were not subjected to any specific training.

Table III. Analysis of Covariance on Toe touch and running hand touch of Intervention and Control Groups

Test	Intervention Group	Control Group	SOV	SS	Df	MS	F-ratio
Adjusted Post-Test Mean							
Toe Touch	10.87	7.22	B.M	43.48	1	43.48	21.76*
			W.G	17.64	21	0.84	
Running Hand Touch	10.11	7.13	B.M	70.24	1	70.24	36.45*
			W.G	89.67	21	4.27	

* Significant at 0.05 level. Table value for df 1, 21 was 4.32.

From the table III shows that the adjusted post-test mean values on toe touch and running hand touch. The obtained f-ratio for selected dependent variables was 21.76 and 36.45 and the required table value of df 1 and 17 was 4.32. It shows that the obtained f ratio values were greater than the required table value at 0.05 level of confidence. The result of the study indicated that there was significant mean difference existed between the intervention and control groups on toe touch and running hand touch.

4. DISCUSSION ON FINDINGS

The results indicate that skill-specific training significantly enhances raiding performance in Kabaddi, particularly for toe touches and running hand touches. The experimental group showed nearly 45–47% improvement in both skill sets, emphasizing the benefits of targeted drills over general training routines. The improvement in toe touches can be attributed to the increased flexibility, muscle memory, and confidence developed through focused practice. Similarly, the enhanced running hand touch performance may result from improved speed, coordination, and accuracy developed through repeated execution in controlled settings. These findings align with earlier research highlighting the effectiveness of sport-specific training in performance development (Bompa & Haff, 2009; Prabhakar & Kalidasan, 2018).

5. CONCLUSIONS

Specific skill drills programme has positive effects on toe touch and running hand touch. After eight weeks of specific skill drills training, the toe touch and running hand touch of male kabaddi players has enhanced their performance at peak level. These data suggest that our specific skill drills programme has caused the positive changes in the selected variables among male kabaddi players. These observations may point to potential changes, so the coaches are encouraged to use more footwork drill training with male kabaddi players.

1. There was significant improvement on toe touch due to the effect of eight weeks of specific skill drills among kabaddi players.
2. There was significant improvement on running hand touch due to the effect of eight weeks of specific skill drills among kabaddi players.
3. There was a significant difference between intervention and control groups on toe touch and running hand touch due to the effect of eight weeks of specific skill drills among kabaddi players.
4. However the control group had not shown any significant improvement on any of the selected variables.

6. REFERENCES

- [1]. Bompa, T.O., & Haff, G.G. (2009). *Periodization: Theory and Methodology of Training*. Human Kinetics.
- [2]. Prabhakar, R., & Kalidasan, R. (2018). Impact of Specific Drills on Selected Skill Performance Variables of Kabaddi Players. *International Journal of Physical Education, Sports and Health*, 5(3), 105–108.
- [3]. Singh, R. & Verma, J. (2017). Effects of Technical Training on Raiding Skills of Kabaddi Players. *Journal of Sports Sciences*, 35(7), 523–528.
- [4]. Jayakumar, S. (2020). Skill-Based Training vs General Fitness Training in Team Sports: A Comparative Study. *International Journal of Physiology, Nutrition and Physical Education*, 5(1), 110–113.
- [5]. Hohmann, A., Lames, M., & Letzelter, M. (2018). *Introduction to Training Science in Team Sports*. Meyer & Meyer Sport.
- [6]. Singh, R. (2015). Effect of Technical Training on Selected Kabaddi Skills. *International Journal of Applied Research*, 1(4), 177–179.
- [7]. Kumar, A., & Chauhan, M. (2020). Impact of Sport-Specific Training on Physical and Skill Performance of Kabaddi Players. *International Journal of Physiology, Nutrition and Physical Education*, 5(2), 89–93.
- [8]. Sharma, S. & Patel, R. (2019). Analysis of Offensive and Defensive Skills in Elite Kabaddi Players. *Journal of Sports Analytics*, 3(2), 112–117.
- [9]. Arjun, K. & Das, B. (2021). Importance of Sport-Specific Skill Acquisition in Team Sports: A Case Study of Kabaddi. *Journal of Physical Education and Sports Management*, 8(1), 56–61.

