



TRAINING PROTOCOL FOR INTEGRATING LOOP BANDS INTO SKILL BASED PERFORMANCE DRILLS IN KABADDI

Dr. V. Vallimurugan¹, D. Prabakaran

¹Assistant Professor, Department of Physical Education, Bharathiar University, Coimbatore, Tamilnadu.

²PhD Research Scholar, Department of Physical Education, Bharathiar University, Coimbatore, Tamilnadu.

ABSTRACT

Kabaddi is a physically demanding sport that requires a combination of speed, strength, agility, and tactical skill. Traditional training methods often focus on skill development but may not adequately address the physical conditioning needed for elite performance. This thematic paper explores a structured training protocol that integrates loop resistance bands into kabaddi-specific drills to enhance motor fitness and game performance. The protocol includes resisted raiding, defensive techniques, and agility drills designed to simulate match conditions. By combining functional resistance with sport-specific movement, the training aims to improve strength, power output, neuromuscular coordination, and injury prevention. The proposed protocol is suitable for athletes at various levels and offers a practical, low-cost, and effective model for performance enhancement in kabaddi.

KEYWORDS: Kabaddi Training, Resistance Bands, Skill-Specific Drills, Motor Fitness, Athletic Performance and Functional Training.

INTRODUCTION

Kabaddi, a high-intensity contact sport, requires athletes to exhibit a unique combination of speed, strength, power, and agility. Traditional skill-based training in kabaddi such as raiding drills, defensive formations, and agility runs forms the foundation of performance development. However, modern athletic training principles emphasize the value of integrating loop elements to simulate match conditions, improve neuromuscular coordination, and enhance functional strength.

One such loop tool that has gained prominence is the loop band. These elastic bands provide variable loop, engage stabilizer muscles, and allow for functional sport-specific movement. When combined with skill-specific drills, loop bands offer a practical and effective way to elevate the quality of kabaddi training. This paper presents a thematic exploration of a training protocol that integrates loop bands into kabaddi drills, emphasizing both theoretical rationale and practical application.

The Demands of Kabaddi and the Need for Functional Loop

Kabaddi players must accelerate quickly, perform lateral movements, change direction explosively, and apply force during tackles and holds. These physical actions involve complex motor patterns that require strength, control, and speed under dynamic conditions. Traditional gym-based strength training often falls short in replicating the movement patterns of the game. Loop bands bridge this gap by adding load during actual movement patterns such as raids, toe touches, dives, and defensive stances.

Research Insight: Studies have shown that functional loop improves neuromuscular efficiency and joint stability during sport-specific movements (Page et al., 2010; Wilson et al., 1993).

The Role of Loop Bands in Skill-Specific Drills

Loop bands provide progressive loop and can be used in drills that mimic the biomechanical demands of kabaddi. When

placed around the thighs, ankles, or upper body, bands increase muscle engagement in key areas such as the glutes, hip flexors, and shoulder stabilizers. For example:

- **Raid drills** with loop bands around the waist improve core control and acceleration.
- **Defensive crouching and lunges** with bands enhance leg and hip strength.
- **Banded agility drills** increase stride efficiency and directional speed.

These applications allow athletes to train movement patterns under loop, improving muscle memory and game-time execution.

Training Protocol Design

A structured 8-week protocol was developed for male kabaddi players aged 17–21. The players were divided into two groups:

- **Group A:** Skill drills + Loop band loop
- **Group B:** Skill drills only

Each training session included a warm-up, band activation, skill-specific drills (e.g., raiding, tackling, footwork), and a cool-down. Loop was gradually increased over the weeks by progressing from light to medium bands and increasing complexity.

Sample Weekly Focus

Day	Focus Area	Example Drill
Mon	Raid Strength & Acceleration	Banded running hand touch drills
Tue	Defensive Holds & Core Stability	Banded lunges with tackle simulation
Thu	Agility & Directional Speed	Banded cone zig-zag sprints
Fri	Game Simulation	Small-sided kabaddi matches with band use



Expected Outcomes and Benefits

The integrated loop band protocol is designed to target motor fitness variables such as strength, agility, speed, and endurance while improving on-field performance metrics like raid success rate and defensive efficiency.

Key Benefits

- **Strength Enhancement:** Continuous loop activates muscle groups under tension (Andersen et al., 2008).
- **Improved Agility:** Banded drills refine movement control and change of direction (Makaruk et al., 2011).
- **Raid Explosiveness:** Increased leg drive during resisted movements improves raid entry and escape.
- **Injury Prevention:** Stabilizer muscle training reduces risk of joint-related injuries (Faigenbaum et al., 2009).

Application in Coaching and Grassroots Development

This protocol is highly applicable for school, collegiate and professional kabaddi training programs. Coaches can adapt band intensity and drill complexity based on athlete age and skill level. Since loop bands are affordable and portable, this model is especially suitable for resource-limited settings, helping bridge the gap between traditional training and modern performance enhancement.

CONCLUSION

Integrating loop bands into kabaddi-specific training drills presents a valuable strategy to enhance motor fitness and game-specific performance. The thematic approach to protocol design ensures that the physical and tactical demands of kabaddi are addressed in a scientifically supported, practically feasible manner. By combining movement specificity with loop overload, this training model supports a holistic, game-ready athletic development pathway for kabaddi players.

REFERENCES

1. Page, P., et al. (2010). *Assessment and Treatment of Muscle Imbalance*. Human Kinetics.
2. Wilson, G.J., et al. (1993). *The optimal training load for the development of dynamic athletic performance*. *Med Sci Sports Exerc*, 25(11), 1279–1286.
3. Andersen, L.L., et al. (2008). *Muscle activation and strength gains in the shoulder following loop band training*. *J Strength Cond Res*, 22(2), 582–589.
4. Makaruk, H., et al. (2011). *The effects of resisted sprint training on sprint performance and explosive strength*. *J Strength Cond Res*, 25(6), 1592–1598.
5. Faigenbaum, A.D., et al. (2009). *Youth loop training: updated position statement paper*. *J Strength Cond Res*, 23(Supplement 5), S60–S79.
6. Kraemer, W.J., & Ratamess, N.A. (2004). *Fundamentals of Loop Training*. NSCA.
7. Hughes, C.J., et al. (2018). *Loop band vs traditional weight training on lower-body strength*. *J Sports Sci Med*, 17(1), 120–126.
8. Jayavel, R., & Rajkumar, R. (2017). *Impact of loop training on physical fitness variables in kabaddi players*. *Int J Phys Educ Sports Health*, 4(4), 53–56.
9. Behm, D.G., & Sale, D.G. (1993). *Velocity-specific training response*. *J Appl Physiol*, 74(1), 359–368.

10. Lesinski, M., et al. (2016). *Effects of loop training on strength and performance in young athletes*. *Scand J Med Sci Sports*, 26(5), 485–500.
11. Bompa, T.O., & Haff, G.G. (2009). *Periodization: Theory and Methodology of Training*. Human Kinetics.
12. Lopez, P., et al. (2021). *Elastic loop training improves mobility and strength: a systematic review*. *Sports Health*, 13(3), 273–283.
13. Singh, S., & Rathi, A. (2020). *Effect of loop training on motor fitness in contact sports*. *IJPEFS*, 10(1), 45–51.
14. Preatoni, E., et al. (2013). *Neuromuscular adaptations to resisted sprint training*. *Eur J Appl Physiol*, 113(3), 705–715.
15. Lopes, T.J., et al. (2019). *Effects of elastic loop training: a systematic review*. *Sports Medicine*, 49(4), 489–505.