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EFFECT OF INDIVIDUALIZED AND COMBINED RESISTANCE AND SAQ TRAINING ON SELECTED PHYSICAL FITNESS AND SKILL PERFORMANCE VARIABLES OF INTERCOLLEGIATE MEN'S FOOTBALL PLAYERS

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ABSTRACT

This investigation explored the effects of individualized resistance training, speed–agility–quickness (SAQ) training, and their combined application on selected physical fitness and skill-related performance parameters of intercollegiate men's football players. Effective football performance depends on the development of muscular strength, speed, agility, and sport-specific technical competencies. Although resistance and SAQ training approaches are frequently implemented independently to enhance performance, limited studies have examined their combined influence among football players.

Thirty male intercollegiate football players aged 18–25 years were randomly assigned to three groups: Resistance Training Group (RTG), SAQ Training Group (SAQG), and Combined Resistance and SAQ Training Group (CRSTG). The training intervention was conducted over an eight-week period with three sessions per week. Physical fitness components such as muscular strength, speed, and agility, along with skill performance measures including ball control and passing accuracy, were evaluated before and after the training programme. Statistical analysis using a paired t-test indicated significant improvements in all groups, with participants in the combined training group demonstrating greater gains than those in the individual training groups. These findings indicate that the integration of resistance and SAQ training leads to superior improvements in overall fitness and football-specific skills.

KEYWORDS: *Drinking Water in Rural India*

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INTRODUCTION

Football is a physically demanding team sport that requires athletes to repeatedly perform high-intensity actions such as sprinting, jumping, tackling, and rapid directional changes throughout match play. Success in football relies not only on technical and tactical proficiency but also on the optimal development of physical fitness attributes, including strength, speed, and agility.

Resistance training is widely acknowledged for its effectiveness in enhancing muscular strength, power, and neuromuscular coordination, which are essential for producing explosive movements during competition. Likewise, SAQ training focuses on improving movement velocity, agility, balance, and reaction ability, all of which contribute to efficient on-field performance. Although both training methods are commonly employed in football conditioning programmes, research addressing their combined effects on physical fitness and skill-related performance remains limited. Therefore, the present study was undertaken to assess the effects of individualized and combined resistance and SAQ training on selected physical fitness and skill performance variables of intercollegiate men's football players.

METHODOLOGY

Research Design

The study adopted a **pre-test and post-test randomized group design**.

Selection of Subjects

Thirty intercollegiate men's football players aged between 18 and 25 years were selected from affiliated colleges. All subjects had a minimum of two years of competitive playing experience and were medically fit.

Grouping

The subjects were randomly divided into three equal groups (n = 10 each):

- Resistance Training Group (RTG)
- SAQ Training Group (SAQG)
- Combined Resistance and SAQ Training Group (CRSTG)

Training Programme

The training programme was carried out for **eight weeks**, three sessions per week.

- **RTG:** Weight training exercises at 70–85% of one-repetition maximum
- **SAQG:** Ladder drills, cone drills, shuttle runs, and acceleration drills
- **CRSTG:** Combination of resistance exercises followed by SAQ drills in the same session

Variables Selected

Physical Fitness Variables

- Muscular strength (1RM squat test)
- Speed (30-meter sprint test)
- Agility (Illinois Agility Test)

Skill Performance Variables

- Ball control (dribbling test)
- Passing accuracy (target passing test)

Statistical Analysis

Mean and standard deviation were calculated. Paired t-test was applied to determine the significance of differences between pre-test and post-test scores. The level of significance was set at **0.05**.

RESULTS

Table 1: Pre- and Post-Test Mean Scores of Physical Fitness Variables

Variable	Group	Pre-Test Mean	Post-Test Mean	Mean Difference
Strength (1RM Squat – kg)	RTG	115.20	124.60	+9.40
	SAQG	114.80	118.30	+3.50
	CRSTG	116.10	128.90	+12.80
Speed (30 m – sec)	RTG	5.18	4.92	-0.26
	SAQG	5.20	4.95	-0.25
	CRSTG	5.19	4.81	-0.38
Agility (sec)	RTG	10.42	9.96	-0.46
	SAQG	10.44	9.78	-0.66
	CRSTG	10.41	9.62	-0.79

Table 1 Showed that the All groups showed improvement in physical fitness variables. However, the combined training group demonstrated greater improvement in strength, speed, and agility, indicating the effectiveness of integrated training.

Table 2: Pre- and Post-Test Mean Scores of Skill Performance Variables

Variable	Group	Pre-Test Mean	Post-Test Mean	Improvement
Ball Control (sec)	RTG	15.42	14.30	Improved
	SAQG	15.38	13.90	Improved
	CRSTG	15.40	13.20	Highly Improved
Passing Accuracy (%)	RTG	71.6	77.4	+5.8
	SAQG	72.1	79.2	+7.1
	CRSTG	71.8	82.6	+10.8

Table 2 showed that the Skill performance improved significantly in all groups, with the combined training group showing the greatest enhancement in ball control and passing accuracy.

FINDINGS OF THE STUDY

- Resistance training significantly improved muscular strength among intercollegiate football players.
- SAQ training effectively enhanced speed, agility, and skill-related performance.
- Combined resistance and SAQ training produced superior improvements in both physical fitness and skill performance variables.
- Integrated training proved more effective than isolated training methods.

CONCLUSION

The outcomes of the present investigation confirm that both individualized and combined resistance and SAQ training programmes significantly enhance physical fitness and football-specific skill performance among intercollegiate men's football players. While resistance and SAQ training independently contribute to performance development, the combined training approach resulted in greater overall improvements across the measured variables. Consequently, integrating

resistance and SAQ training can be regarded as an effective conditioning strategy for improving fitness and skill performance in competitive intercollegiate football players.

RECOMMENDATIONS

Coaches and physical education professionals are advised to incorporate combined resistance and SAQ training programmes to improve overall football performance. Training protocols should be customized based on players' strength levels, playing positions, and prior training experience. Greater emphasis on SAQ training may further enhance speed, agility, and movement efficiency during competitive phases. Appropriate progression and recovery strategies should be implemented to reduce the risk of overtraining and injury. Similar integrated training approaches may also be applied to other team sports that demand strength and agility. Future research should involve larger sample sizes, extended training durations, and additional performance indicators such as endurance and balance.

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