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Effect of resistance with SAQ training on leg strength and speed among college men kabaddi players

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Abstract

This study was designed to find out the effect of Resistance with Speed, Agility, and Quickness (SAQ) training on leg strength and speed among college men Kabaddi players. To achieve the purpose of this study (N-30) intercollegiate men Kabaddi players were randomly selected from Bharathiar University. The selected (n-30) subjects were divided into experimental group (n-15) and control group (n-15). Experimental group was treated with resistance and SAQ training 3 days per week for a period of 12 weeks. The control group did not given any sort of training except their routine work. The data collected from the subjects were statistically analyzed with paired 't-test to find out the significant difference if any at 0.05 level of confidence. The results speculated that the Leg strength and Speed of college men Kabaddi players improved significantly due to the influence of Resistance with Speed, Agility, and Quickness (SAQ) training.

Keywords: Resistance with speed, agility, quickness (SAQ) training, Leg strength and speed

Introduction

Kabaddi, a captivating and ancient sport deeply rooted in the cultural fabric of the Indian subcontinent, embodies a unique blend of physical prowess, strategy, and tradition. With origins that trace back thousands of years, Kabaddi has evolved from a rustic pastime into a globally recognized and competitive game. At its essence, Kabaddi is a team and body contact sport that epitomizes the spirit of camaraderie and competition. It involves two teams, each fielding seven players, who engage in a spirited battle on a designated court. The core objective is for a "raider" to venture into the opponent's territory, touch as many defenders as possible, and return to their own half while chanting "Kabaddi" without breaking their breath. In response, defenders strive to thwart the raider's mission through skilful tackles and strategic positioning. Kabaddi's allure lies not only in its physical demands but also in the intricate tactics employed by players. The game demands split-second decision-making, agility, and teamwork as raiders seek to outwit defenders, and defenders collaborate to halt raiders in their tracks. Over the years, Kabaddi has embraced modernity while retaining its traditional charm. From rural fields to international arenas, the sport has taken on various forms, including indoor and outdoor formats. Leagues such as the Pro Kabaddi League have further elevated its profile, captivating fans and athletes alike. In this exploration of Kabaddi, it delves into the history, rules, strategies, and global impact of this dynamic sport. From its humble beginnings to its contemporary stature, Kabaddi remains a testament to the enduring spirit of competition and cultural heritage.

Resistance with SAQ training for kabaddi player

Integrating Resistance training with Speed, Agility, and Quickness (SAQ) workouts can significantly enhance the performance of kabaddi players by addressing key physical attributes essential to the sport. Kabaddi demands a unique blend of explosive power, rapid directional changes, and resilience. By incorporating Resistance training, players can target specific muscle groups and movement patterns, leading to a comprehensive improvement in their overall athletic abilities. Resistance training contributes to enhanced strength, a foundational element for Kabaddi players. It targets muscles used during raids, tackles, and swift direction shifts, enabling athletes to exert force more effectively and generate greater power in their movements. This newfound strength translates into more forceful tackles, quicker escapes from opponents' holds, and improved stability during high-intensity actions moreover resistance training cultivates explosive power – a vital component in Kabaddi's fast-paced nature.

This explosive strength empowers players to initiate swift, powerful movements, facilitating efficient changes in direction and acceleration during matches. Resistance training also contributes to injury prevention by fortifying muscles, tendons, and ligaments. Strengthening these structures through resistance exercises enhances joint stability and reduces the risk of common Kabaddi-related injuries, such as sprains and strains. This enables players to perform with confidence, knowing their bodies are well-prepared to handle the physical demands of the game.

Furthermore, the inclusion of resistance training complements Speed, Agility, and Quickness (SAQ) drills by incorporating variety and progressive overload. The controlled resistance challenges players to adapt continuously, preventing plateaus in performance and promoting continual growth. As players become accustomed to handling resistance, they develop greater body control, translating to improved speed, agility, and leg strength on the Kabaddi court. In summary, combining resistance training with Speed, Agility, and Quickness (SAQ) workouts provides Kabaddi players with a holistic training approach that directly translates to enhanced on-field performance. By targeting speed, strength, explosive power, injury prevention, and adaptability, resistance training equips players with the physical attributes required to excel in the fast-paced, dynamic, and physically demanding game of Kabaddi.

Methodology

The purpose of this study was to examine the impact of

Results

Table 1: Analysis of ‘t’ ratio for leg strength and speed among two groups

Variables	Group	Test	Mean	SD	MD	t-ratio
Leg strength	Experimental Group	Pre-test	63.85	0.88	0.19	10.33*
		Post-test	66.70			
	Control Group	Pre-test	63.50	0.36	0.08	
		Post-test	63.65			
Speed	Experimental Group	Pre-test	7.12	0.13	0.03	9.47*
		Post-test	6.83			
	Control Group	Pre-test	7.30	0.05	0.12	
		Post test	7.28			

(Significance at 0.05 level of confidence)

Table I shows that the pre-test mean values of the experimental group and control group 63.85, 7.12 and 63.50, 7.30 respectively and the post-test mean values are 66.70, 6.83 and 63.65, 7.28 respectively. The obtained t-test between the pre and post-test means on leg strength and Speed of the experimental group and control group are 10.33 and 9.47 respectively. The table value required for

Resistance with Speed, Agility, and Quickness (SAQ) training on leg strength and speed in college male Kabaddi players. A total of 30 intercollegiate Kabaddi players were randomly selected (n-30) from the Department of Physical Education at Bharathiar University and Sri Ramalinga Sowdambigai College of Arts and Commerce, Coimbatore. Participants were between 18 and 25 years old and were divided into two equal groups, each containing (n-15) fifteen players. Group I underwent resistance with Speed, Agility, and Quickness (SAQ) training, while other Group II served as the control group.

Prior to the study's commencement, both groups underwent pre-test assessments on selected variables, with the results recorded in their respective units. The experimental group received Resistance with Speed, Agility, and Quickness (SAQ) training three days a week for 12 weeks, while the control group continued with their regular routine activities. After the 12-week intervention period, both groups were re-tested on the same selected variables, and the scoring was recorded as post-test scores. The pre and post test were taken for analysis.

Statistical Analysis

The collected data from pre and post-tests were statistically analysed using by paired 't' tests to determine any significant differences between the two group at a confidence level of 0.05.

significant difference with degrees of freedom (1 and 14) at 0.05 level of confidence is 2.14. The obtained ‘t’ value of the experimental group was greater than the table value. The results clearly indicated that the leg strength and Speed of the experimental group improved due to 12 weeks the Resistance with Speed, Agility, and Quickness (SAQ) training on selected college-level men Kabaddi players.

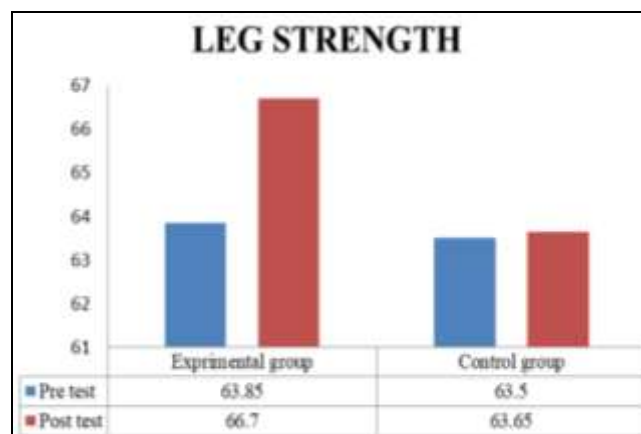


Fig I: Bar diagram showing the pre and post test means of experimental and control group on leg strength

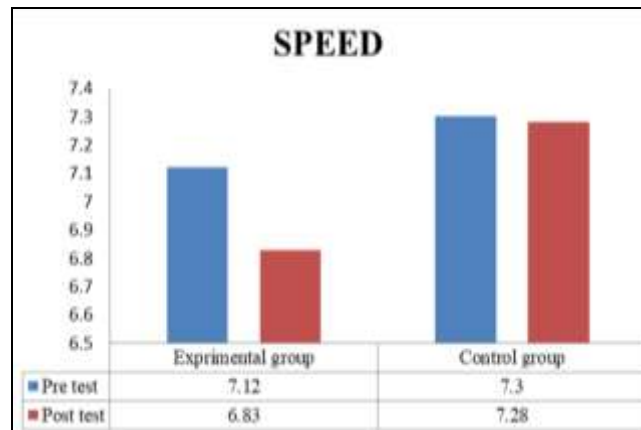


Fig 2: Bar diagram showing the pre and post-means of experimental and control groups on speed

Findings

Based on the analysis of the data it was found that Resistance with Speed, Agility, and Quickness (SAQ) training obtained significant results on speed ($7.12 < 6.83$) and leg strength ($63.85 < 66.70$) over a period of 12 weeks of Resistance training and Speed, Agility, and Quickness (SAQ) training.

Discussion on Findings

The discussion of the study's results reveals a comprehensive understanding of the impact of resistance with Speed, Agility, and Quickness (SAQ) training on leg strength and speed among college-level male Kabaddi players. Table I provides a detailed overview of the pre-test and post-test mean values for both the experimental and control groups. The data showcases that the experimental group started with mean values of 63.85 for leg strength and 7.12 for speed, while the control group began with mean values of 63.50 for leg strength and 7.30 for speed. Following the intervention, the experimental group demonstrated substantial improvement, with post-test mean values of 66.70 for leg strength and 6.83 for speed, compared to the control group's post-test mean values of 63.65 for leg strength and 7.28 for speed.

The calculated dependent t-test values for the pre and post-test means further validate the efficacy of the Resistance with Speed, Agility, and Quickness (SAQ) training. Notably, the experimental group exhibited a significant t-test value of 10.33 for leg strength improvement, while the control group displayed a value of 9.47 for the same attribute. Comparing these results to the critical table value of 2.14 (at 0.05 level of confidence) with degrees of freedom 14, it is evident that the experimental group's t-test value surpassed the threshold. This discrepancy underscores the substantial positive impact of the Resistance with Speed, Agility, and Quickness (SAQ) training on enhancing leg strength and speed among college-level male Kabaddi players.

These findings align with previous studies by Mohamed et al. (2018) and Saravanan et al. (2011), reinforcing the effectiveness of incorporating Resistance with Speed, Agility, and Quickness (SAQ) training to facilitate significant improvements in leg strength and speed. The study's outcomes underscore the value of a targeted and structured training approach in elevating the physical attributes crucial for Kabaddi performance. The notable enhancement observed in the experimental group's leg strength and speed bolsters the rationale for integrating

Resistance with Speed, Agility, and Quickness (SAQ) training as a key component of training regimens for college-level male Kabaddi players, potentially leading to heightened on-court agility, strategic manoeuvrability, and overall athletic prowess.

In essence, the specialized Speed, Agility, and Quickness (SAQ) training emerged as a catalyst for significant enhancements in leg strength and speed, demonstrating its potential to profoundly impact an athlete's physical capabilities. The participants who diligently engaged in the tailored Speed, Agility, and Quickness (SAQ) training regimen experienced palpable and noteworthy advancements in their capacity for leg strength and speed. This trend emerged as a clear demarcation between the Speed, Agility, and Quickness (SAQ)-trained group and the control group, emphasizing the potent and transformative nature of this training approach.

The implications of these findings are far-reaching. By harnessing the power of Speed, Agility, and Quickness (SAQ) training, athletes and sports enthusiasts can unlock new dimensions of their physical potential, particularly in the critical domains of leg strength and speed. This insight not only underscores the efficacy of Speed, Agility, and Quickness (SAQ) training but also underscores the significance of employing targeted and specialized methodologies to optimize athletic performance.

Conclusion

Based on the finding of the study it was concluded that twelve weeks of Resistance with Speed, Agility, and Quickness (SAQ) training played a vital role in improving speed and leg strength of inter-collegiate Kabaddi men players. The study's findings serve as a testament to the potential benefits of incorporating Resistance with Speed, Agility, and Quickness (SAQ) training to foster substantial improvements in leg strength and speed. This evidence underscores the efficacy of targeted training strategies, offering athletes a valuable tool to unlock their true potential and achieve peak performance in the realm of sports.

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