



A COMPARATIVE ANALYSIS OF PHYSICAL FITNESS ATTRIBUTES OF KHO PLAYERS IN VISAKHAPATNAM

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Abstract:

The study explores the physical fitness levels of under-15 Kho Kho players in the Visakhapatnam area, focusing on speed, explosive power, and agility. Standardized tests were used to collect data, such as the 30-meter sprint for speed, the Medicine Ball Throw for explosive power, and the Zig Zag Run for agility. Mean values and standard deviations were calculated to identify areas for strength and potential improvement. The data imply that while athletes exhibit appropriate levels of quickness, explosive force, and agility, there is space for improvement. Developing explosive power is especially important for female players. Customized training regimens that consider athletes' strengths and shortcomings could improve performance and promote athletic improvement. This study provides useful information for coaches and trainers to tailor training programs successfully to improve overall performance in Kho Kho.

Keywords:

Visakhapatnam; Kho Kho; under-15; physical fitness; speed; explosive power; agility.

Introduction:

A good player for the traditional Indian sport of Kho Kho must possess a combination of quickness, dexterity, and explosive strength. Comprehending the physical features of juvenile athletes is crucial in formulating efficacious training regimens and pinpointing domains requiring skill enhancement. To get important insight into the fitness levels and possible areas for improvement of under-15 Kho Kho players in Visakhapatnam, this study will evaluate their speed, explosive power, and agility. Speed was measured using the 30-meter dash test, which measured how long each athlete took to complete the distance. The explosive power was assessed using the Medicine Ball Throw test, in which individuals hurled a medicine ball as far as possible to demonstrate their explosive strength. Agility was assessed using the Zig Zag Run test, which measured how quickly and efficiently participants navigated a predefined course with obstacles.

Review of Literature:

The literature on Kho Kho looks at many areas of physical fitness in players, emphasizing the importance of agility, speed, and explosive power. Studies have looked into the effects of interval training on endurance and playing ability, analyzed anthropometric factors, and compared physical metrics between Kho Kho and other sports such as Kabaddi. Understanding the relationship between fitness factors and performance is critical for developing effective training programmes that are suited to individual athletes' needs. Overall, the literature offers significant information for coaches and trainers looking to improve players' performance and athletic development in Kho Kho.

Objectives of the study:

- 1) To look into the effects of interval training on endurance and playing ability in Kho Kho players.

- 2) To investigate the association between specific anthropometric and motor fitness characteristics and Kho Kho player performance.

Methodology:

Participants:

Under-15 Kho Kho athletes from various Visakhapatnam-area schools and groups participated in the study.

Gathering of Data: Every candidate underwent a physical fitness evaluation, emphasizing agility, explosive power, and speed. All attributes were measured using standardized assessments.

Attribute	Measurement Method
Speed	30 Meter Dash
Explosive Power	Medicine Ball Throw
Agility	Zig Zag Run

Analysis:

The subjects' mean values and standard deviations for agility, explosive power, and speed were determined. To find any differences in boys' and girls' levels of fitness, gender-based differences were also looked at.

Attributes	Mean Value	Standard Deviation
Speed	5.01 m/s	0.43
Explosive Power	5.51 units	1.05
Agility	15.69 sec	1.03

The descriptive analysis:-

The physical characteristics of Visakhapatnam's under-15 Kho Kho athletes. Athletes have an average speed of 5.01 m/s (± 0.43), but there is significant variation among individuals. Explosive power averages 5.51 units (± 1.05), demonstrating varying strength levels within the sample. The average Zig Zag Run time of 15.69 seconds (± 1.03) indicates moderate performance with some



variability. This highlights areas for targeted training interventions to improve overall athleticism and performance among these athletes.

Results:

Using a standard deviation of 0.43, the mean speed of under-15 Kho Kho players in Visakhapatnam was determined to be 5.01 m/s.

Explosive Power: Among the individuals, 5.51 units were recorded as the mean, with a standard deviation of 1.05.

Agility: 15.69 seconds was the average agility score recorded, with a 1.03 standard deviation.

Conclusion:

The results indicate that Visakhapatnam's under-15 Kho Kho players have appropriate levels of quickness, explosive force, and agility. But there's still opportunity for development, especially when giving female players more explosive power. Boys and girls could both benefit from strength and power development training programs, which would improve their overall performance in Kho Kho. This study sheds light on the physical fitness levels of under-15 Kho Kho players in Visakhapatnam. Coaches and trainers can customize training regimens to maximize player performance and promote athletic growth by knowing their strengths and weaknesses. Subsequent investigations may examine the efficaciousness of particular training methodologies to augment explosive strength and agility in juvenile Kho Kho athletes.

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