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IMPACTS OF SPORTS-SPECIFIC DRILLS ON SKILL PERFORMANCE VARIABLES AMONG MALE COLLEGE-LEVEL HANDBALL PLAYERS (A PILOT STUDY)

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ABSTRACT

Handball represents a unique combination of three fundamental athletic disciplines: running, jumping, and throwing. A training program known as sports-specific drills has been designed specifically to enhance athletic performance by targeting skill proficiency. These drills focus on improving game-specific abilities such as throwing accuracy, shooting precision, passing proficiency, as well as overall attributes including speed, power, endurance, flexibility, mobility, and agility. The primary objective of this study was to investigate the impact of sports-specific drills on skill performance variables among male college-level handball players. To accomplish this goal, a sample of five male handball players from CMS college of arts and science in Coimbatore district, aged between 18 and 25 years, was randomly selected. The study adopted a single-group design, where all participants underwent assessment using standardized tests for various skill performance variables. Throwing ability was evaluated using the 9-meter front throw test, shooting accuracy was measured using the one-armed throw test, and passing proficiency was assessed through the overhead pass test. The experimental group, consisting of the five participants, underwent a four-week period of sports-specific drills as part of a pilot study. The results of the study indicated a significant difference in the criterion variables. This difference was attributed to the implementation of sports-specific drills, which led to notable improvements in the throwing ability, shooting accuracy, and passing skills of the male college-level handball players. In summary, the study highlighted the effectiveness of sports-specific drills in enhancing skill performance variables among male college-level handball players. The findings suggest that the targeted training regimen positively influenced throwing ability, shooting accuracy, and passing skills. These results underscore the potential of sports-specific drills to enhance overall performance in handball by improving specific game-related skills.

KEYWORDS: *Sports Specific Drills, Throwing Ability, Shooting Accuracy and Passing, and Handball Players.*

INTRODUCTION

Handball has become one of the popular sports in the world and is known for its speed. This game is also a part of Olympic Sport. The simple rules of this game, minimal ground and equipment facilities and the speed of game itself along with the scope for players to exhibit their exclusive skills makes it as a popular game among even the schools and educational institutions. An effective handball player needs to possess several physical and mental abilities such as high-speed action, neuro muscular coordination, explosive jumping and hand power with proper aiming at goal. Additional abilities like explosive power of arms and legs, sprint velocity and kinaesthetic feeling in ball control add to the playing efficacy. These physical activities, most crucial for playing Handball, are considered anaerobic mainly because of the speed at which the game is played. In the recent days, a Handball player is required to possess the longitudinal dimensions like stature, arm span, hand span and length. sports specific drills is physical activity designed specifically to increase overall efficiency as an athlete in the sport that choose. An individual could become more physically fit overall and make some progress as an athlete with sports specific drills. In sports, team training refers to a series of physical activities designed to improve a player's physical or motor skills. The training programmed should be particularly created based on the components that are needed for the talent or technique in sport when it comes to players who are at a higher level or above the basic level. Consequently, a player needs this kind of particular sports specific drills for success in sports. Thus, the present study has been carries out to study the effects of sports specific drills skills performance variables of men college level handball players through sports specific drills.

METHODOLOGY

The objective of this study was to examine the impact of sports-specific drills on skill performance variables among male college-level handball players. To accomplish this goal, a sample of five male handball players from CMS college of arts and science in Coimbatore district, aged between 18 and 25 years, would be randomly selected. The study utilized a single-group design, where

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participants' skill performance variables were evaluated through standardized tests. Throwing ability was assessed using the 9-meter front throw test, shooting accuracy was measured through the one-armed throw test, and passing proficiency was evaluated using the overhead pass test. A pilot study group consisting of five participants would undergo a four-week period of sports-specific drills. The study aimed to investigate the effects of these drills on the skill performance variables of the college-level handball players.

CRITERION MEASURES

The subjects of sports specific drills pilot study would be assessed on the selected skills performance variables by the standardized test items before and after the training period of four weeks.

Table-I

S.No	Criterion Variables	Test Items	Unit of Measurements
Skill performance variables			
1	Throwing Ability	Zinn Team Handball Skill Battery (1981)	In Points
2	Shooting Accuracy		In Points
3	Passing		In Points

TRAINING PROGRAMME

The sports-specific drills lasted for a total duration of 60 minutes and involved an incremental increase in load for two of the skill performance variables. The training sessions were conducted on three alternative days per week, specifically on Monday, Wednesday, and Friday. Throughout the four-week period of sports-specific drills, the subjects followed a structured routine. Each session began with a 15-minute warm-up period, followed by the implementation of various sports-specific drills.

These drills included activities such as jump shots, running with backwards throws, jump pushes, box jumping, full-court dribbling, dribbling routines, fast break shooting, 7-meter target shooting, deep runs, roll and shoot exercises, and dodge ball throws for a duration of 45 seconds each. Finally, the session concluded with a 10-minute cool-down period to facilitate the subjects' recovery and relaxation.

STATISTICAL TECHNIQUES

To assess the effects of sports-specific drills on the skill performance variables of college-level men handball players, the data were analyzed using paired t-tests. The significance level was set at a confidence level of 0.05, which is considered appropriate for this study. The paired t-test was chosen as the statistical analysis method to compare the pre- and post-intervention measurements and determine whether there were significant changes in the skill performance variables following the implementation of sports-specific drills

RESULTS

Table-II

Relationship of Mean, SD and'ť'-Values of Skill Performance Variables between Pre & Post Test of the Sports Specific Drills of Handball Players

	Variables	Test	Mean	S.D	'ť' values
Sports specific drills	Throwing Ability	Pre test	23.00	1.58	10.61*
		Post test	25.60	2.07	
	Shooting Accuracy	Pre test	24.60	2.07	9.79*
		Post test	27.00	2.54	
	Passing	Pre test	27.60	2.07	9.79*
		Post test	30.00	2.54	

*Significant at 0.05 level of confidence

Table-II displays the mean values of the pre-test and post-test scores for the sports-specific drills group. The pre-test and post-test mean values for throwing ability were 23.00 and 25.60, for shooting accuracy were 24.60 and 27.00, and for passing were 27.60 and 30.00, respectively. The corresponding t-ratios were 10.61, 9.79, and 9.79, respectively.

Considering a confidence level of 0.05 and a degree of freedom of 4, the critical t-value from the table is found to be 2.77. Since the obtained t-ratios were greater than the table value, it indicates significant changes in throwing ability, shooting accuracy, and passing of the handball players following the implementation of sports-specific drills.

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Figure-1 provides a graphical representation of the mean values for the sports-specific drills group. It visually depicts the improvements observed in throwing ability, shooting accuracy, and passing among the handball players after undergoing the sports specific drills.

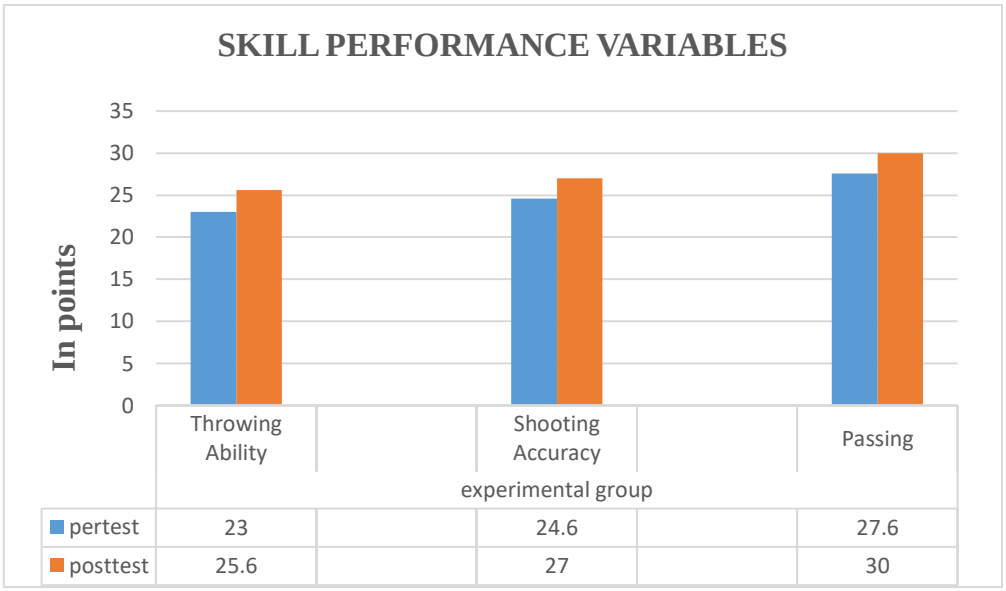

FIGURE-1: BAR DIAGRAM SHOWING THE PRE-TEST & POST-TEST ON SKILL PERFORMANCE VARIABLES OF SPORTS SPECIFIC DRILLS

DISCUSSION ON FINDINGS

Sports-specific drills have proven to be highly beneficial for college-level men handball players. This study aimed to investigate the impact of sports-specific drills on throwing ability, shooting accuracy, and passing among college-level men handball players. The participants were assigned to a sports-specific drills group, where they underwent specific drills targeting these skills. The sports-specific drills not only improved throwing ability, shooting accuracy, and passing, but also enhanced other aspects such as game tactics, anaerobic capacity, quickness, and eye-hand coordination. Additionally, the drills contributed to improvements in various physical fitness components, including speed, agility, and power.

The results of the study demonstrated a significant positive effect of the sports-specific drills on throwing ability, shooting accuracy, and passing among college-level men handball players. These findings align with previous studies conducted by **Hermassi et al. (2019) and Luteberget et al. (2018),** further supporting the effectiveness of sports-specific drills in improving handball performance.

Overall, the study underscores the value of incorporating sports-specific drills into training programs for college-level men handball players, as these drills can lead to notable enhancements in throwing ability, shooting accuracy, and passing skills.

CONCLUSIONS

The study findings indicate that the practice of sports-specific drills had a positive impact on improving the throwing ability, shooting accuracy, and passing ability of college-level men handball players. Additionally, it was observed that there was a progressive improvement in these selected criterion variables among the sports-specific drills group over the course of the four-week training program.

The results suggest that the individualized effects of the sports-specific drills group were statistically significant, indicating a positive and significant improvement in throwing ability, shooting accuracy, and passing among college-level men handball players. However, it is important to consider the limitations of the study when interpreting these findings.

In conclusion, the study highlights the effectiveness of sports-specific drills in enhancing the performance of college-level men handball players, specifically in terms of throwing ability, shooting accuracy, and passing. These findings contribute to the understanding of the potential benefits of incorporating targeted drills into training programs to improve specific skills in handball.

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