



## RESEARCH ARTICLE

### EFFECT OF BALANCE TRAINING ON SOME DEFENSIVE SKILLS FOR HANDBALL PLAYERS

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#### ABSTRACT

**Background:** defensive skills consider the most important skills in handball because of the effectiveness in game, and team without good defence is loser team so coaches use a lot of ways to develop the performance in defence whether on the physical or skill side . in defence performance players take certain position make him can change his position and direction easily, but if he can not ,the amount of force exerted go in the direction unwanted and he can not produce the require in performance for with the highest magnitude .balance training can enhance body stability and make good control central of gravity and good power steering during performance. **Aim:** know the effect of balance training in defensive skills. **Methods:** experimental study on 10 players on minia sport club team (born in 2004). Data was collected from skills tests and tools of measurement. **Results:** skill performance is enhanced in post test of research (percentage of change rates was 20.8 % and 26%). **Conclusion:** Balance works to improve the level of skill performance by controlling the center of gravity of the body and improving the direction of muscle strength.

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## INTRODUCTION

The player with a better balance is a better performing skill and appears during the performance of motor skills, especially in activities that require a sudden change in movements and the transition from one skill to another, each skill requires a special type of balance that serve the skill performance that the sport concerned requires (Mahmoud I.A. 2015), and balance works to improve consistency in muscle work between working and non-working muscles such as performing a movement with resistance while standing on one foot without falling (Fabio C. 2004), and balance exercises work to increase muscle strength as well as control the position of the joints in all movements in addition to improving stability during the movement of the joint where during balance exercises a type of fixed contractions occurs that improves muscle strength (Bechley T et al. 2004), some researchs indicate that balance can decrease muscle force in performance and decrease the ability to change direction, while this research indicate that balance can improve performance in defensive skills that depend on change direction and need power in performance

## MATERIAL AND NETHODS

**Subject:** the training program was applied to 10 male (HANDBALL PLAYERS) from minia sport club for an interval of 12 week in the interval from 2/7/2019 to 23/9/2019 in minia sport club eygpt , 3 training units per week unit time (120 min) , pre and past test were used for one experimental group.

**Sample Selection Conditions:** The selected sample from Minya Governorate (Minya Sports Club, born in 2004) and play for (5) years at least.

## TESTS

**Defensive movement with change direction:** The player moves through the marks set and upon reaching each point he gets two degrees (and the complete attempt with 8 degrees) and he must maintain the defensive position of the body and move quickly and this test is done within 30 seconds.

**Blocking wall in two direction:** The player moves from the point on the 6-meter line and makes a blocking wall on the mark (those marks are depend on tall of players whom rise their arms up), then returns again to the starting point and moves again in the other direction and the player records the number of correct attempts in 15 seconds.

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Table 1. Description of the research sample

N=10	Age(years)	Hight(cm)	Weight(kg)	Training age(years)
Mean	14.8	171.5	52.5	4.5
Median	15	172	52.5	5
SD	0.37	3.4	5.68	0.707
Skewness	-1.1	0.032	zero	-1.17

TESTS

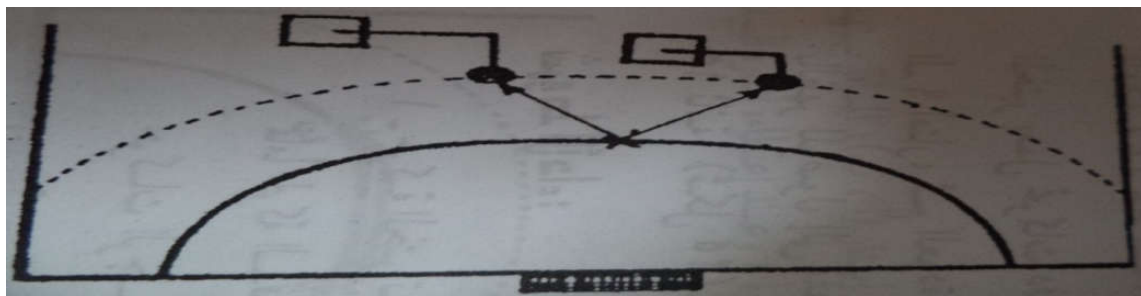
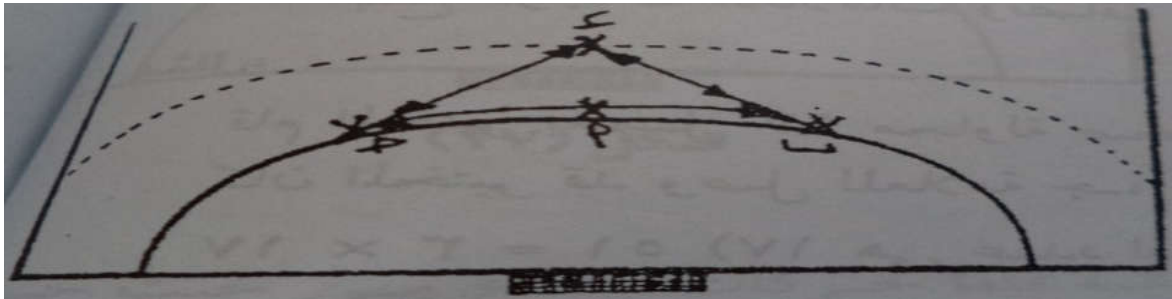


Table 2. The significant differences in defensive skill variables between pre and post test

test	N=10	Pre test		Post test		t.test	Change ratio
		mean	SD	mean	SD		
Defensive movement		6.25	0.87	7.55	0.63	3.8	20.8%
Blocking wall		5	0.81	6.3	0.67	3.88	26%

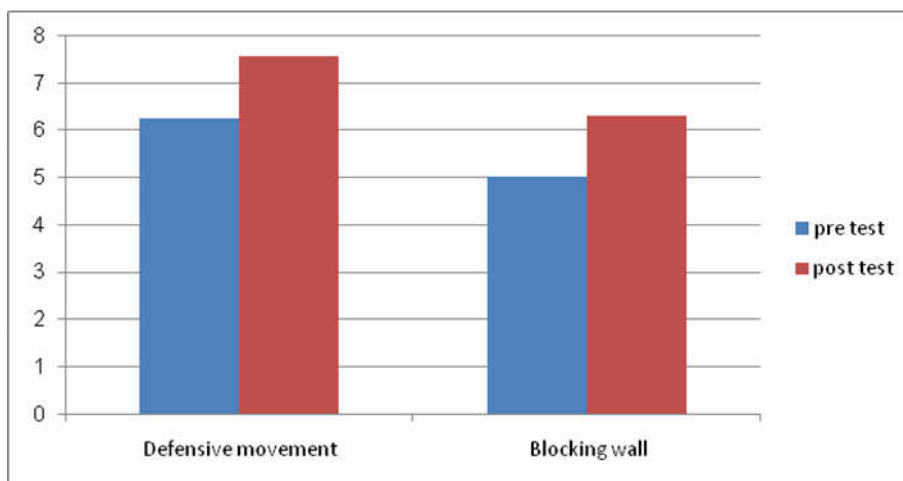


Figure 3. Average differences between pre and post tests

**Procedure:** All players will perform balance exercises for 12 weeks with their pre and post tests . Balance training will be included in the training program provided to them in the proposed research.

**Statistics:** It used Mean, Median, SD, Skewness, t.test, change ratio.

**RESULTS**

There are statistically significant differences in defensive skill variables under investigation and in the direction of post test.

## DISCUSSION

The researcher attributed the improvement to the fact that the balance training increased the player's ability to take the appropriate positions by controlling the gravitational center and enabled the player to better direct the muscle strength of the body during performance. The sense of correct body position (physical sensation) is one of the most important performance factors that must be developed because of its role in correcting the body's position during athletic performance and motor balance, and that is by placing the center of gravity in the desired direction, which allows the highest application of strength and speed during motor performance (Maynard M. 1996).

Failure to reach the correct position will lead to the occurrence of the force affecting the player's body and instead of the player taking advantage of the forces exerted during the foundations he deviates from the strength action line during the performance leading to some distortions in the force affecting the player's body (Skinkidsder, 1998), A good balance will allow the greatest force summation to be obtained which will directly affect the magnitude and direction of speed and acceleration along the kinematic path of athletic performance. (Willman D. 1996) , balance has an effect on change of direction in movement and correct body composition and the correct position of the body will affect the length of the application of force and its outcome, which is reflected in the distance of performance which perform in it and force outcome during skill performance (Maynard or.1996,Edmundson P.1996).

## Conclusion

Balancing exercises have a positive effect on defensive skill performance in handball and improve strength guidance during skill performance

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