

EFFECTS OF 12 WEEK SAQ TRAINING PROGRAM ON HANDBALL

SKILL VARIABLES OF HANDBALL PLAYERS

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ABSTRACT

Handball is very fascinating modern game with fast and excitement action. Successful performance in Handball requires the good motor abilities and physiological and precise skill to accomplish desired result. This study aimed to find out the effect of 12 week SAQ training on handball skill performance variables of handball players. For this purpose the researcher selected 30 male handball players, age ranges between 18-25 years. Samples were selected at different playing levels i.e. AIU, SGFI, HFI and PHA from Punjab state. Random sampling technique was applied to select the sample. Handball skill performance variables i.e. zig-zag dribbling, passing ability, throwing accuracy & shooting accuracy were selected for this study. To find out the difference between pre and post data of selected handball skill performance variable 't' test was applied at 0.05 level of significance. The results showed that there is a significant difference found between all the handball skill variables.

KEY WORDS: Speed, Agility, Quickness, Zig- Zag dribbling, Passing ability, Throwing accuracy & Shooting accuracy

INTRODUCTION:

Sport plays a very prominent role in the modern society. It is important for individuals, group, nation and indeed the world. Throughout the world, sport has a popular appeal among the people of all ages and both sexes. Much of the attraction of sport comes from the wide variety of experience and feeling that result from the participation such as success, failure, exhaustion, pain, relief and feeling of belonging. Sport can bring fame, glory, status and goodwill. However, sport can also bring tragedy, grief and even death (Uppal, 1992). (Ezhilmaran, 2016) the purpose of the study was to find out the effect of specific drills with plyometric training on selected skills performance variables of school level men handball players. The dribbling skill tested with sixmts speed dribble test and passing skill tested with speed pass test standardized tests were used. The results showed that the experimental group showed improvement in selected skill performance variables were dribbling and passing due to effect of specific drills with plyometric

training. The control group did not improve the selected the criterion variables. (Singh & Deol, 2016) present study was to determine the effect of 12 weeks of S.A.Q drills training programme on selected physical, physiological variables and hockey skills. The researcher found that after giving the S.A.Q drill training we found that there is significant effect on the selected physical fitness variables (Speed, Agility, Quickness), selected physiological variables (vital capacity, resting pulse rate, pulmonary ventilation) and hockey skills performance. But there was no significant effect of the S.A.Q drill training on the physiological variable (body mass index). (Emeish, 2015) found that speed, agility, quickness is a system of training that enhances performance levels in all sports. The results revealed significant differences between pre and post measurements (speed- agility and reactive agility tests). Our suggestion is that young athletes can benefit by reinforcing muscles and improving the speed, agility, flexibility and jump shoot performance through SAQ exercises. The results of (Matlak et. al., 2015) study underscore the importance of cognitive factors in reactive agility performance and suggest that specific methods may be required for training and testing reactive agility and change of direction speed. (Chettiamkudiyil et. al., 2015) showed that Plyometric training improved explosive strength and speed better than SAQ training both for the 6 weeks training programme among the male university level soccer players. (Siva and Jesudass, 2015) examined the impact of SAQ training on selected skill among hockey men players. The result reveals that there was a significant difference on dribble of experimental group than control group which support the present study conducted by researcher.

MATERIAL AND METHODS:

The purpose of the study was to find out the effect of 12 week plyometric and SAQ training on physical, physiological and skill performance variables of handball players. Total 30 male handball players were selected; age ranges between 18-25 years. The data was obtained from Punjab.

VARIABLES

HANDBALL SKILL VARIABLES:

1. Zig-zag Dribbling
2. Passing Ability
3. Throwing Accuracy
4. Shooting Accuracy

STATISTICAL CONSIDERATION

For interpretation of the data statistical techniques of 't' test was applied to find out mean differences.

RESULTS:

Different types of descriptive statistic such as mean and standard deviation was computed to describe each variable statistically. The level of significance was set at .05. Its results have been depicted in the following table.

TABLE – 1

**SIGNIFICANT OF MEAN DIFFERENCES BETWEEN PRE AND POST DATA OF
HANDBALL SKILLS VARIABLES OF SAQ GROUP**

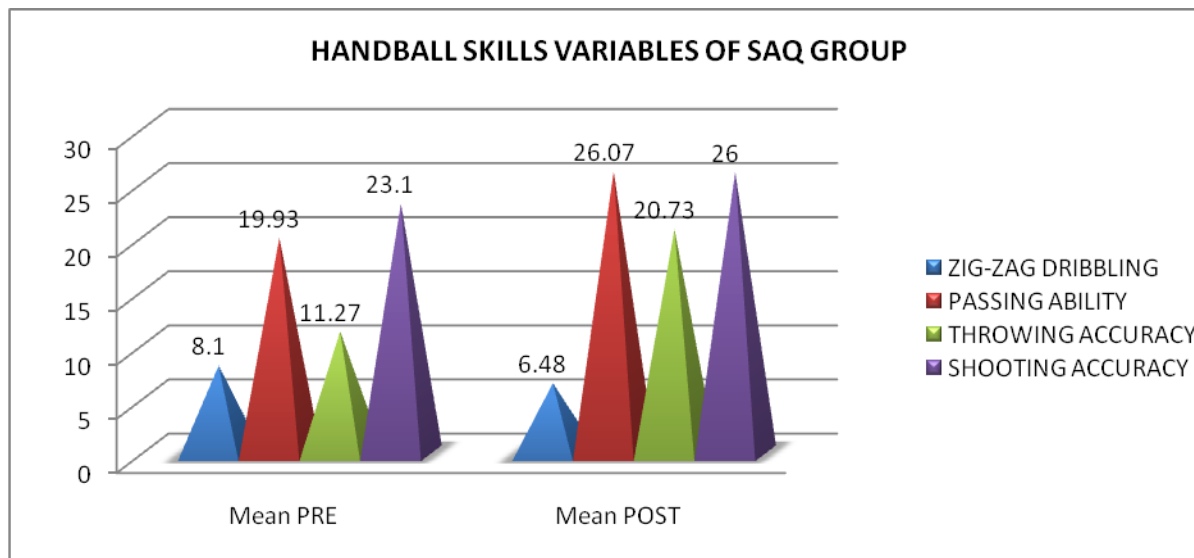
	GROUP	N	Mean	Standard deviation	Mean Diff	Std. Error Mean	Std. Error Diff	't'
ZIG-ZAG DRIBBLING	PRE TEST	30	8.10	.86	1.62	.15	.16	10.05*
	POST TEST	30	6.48	.20		.03		
PASSING ABILITY	PRE TEST	30	19.93	5.64	-6.13	1.03	1.29	-4.75*

	POST TEST	30	26.07	4.25		.77		
THROWING ACCURACY	PRE TEST	30	11.27	2.06	-9.46	.37	.55	-16.93*
	POST TEST	30	20.73	2.25		.41		
SHOOTING ACCURACY	PRE TEST	30	23.10	3.77	-2.90	.68	.81	-3.57*
	POST TEST	30	26.00	2.34		.429		

Tabulated 't' value (1.98) at .05 level of significance

df=28

Table -1 represents that the mean values of handball skill variables with regard to SAQ group are 8.10 & 6.48 for zig-zag dribbling of pre and post test. Whereas the SD is .86 & .20. On the other side, in the case of passing ability, mean values and SD values are 19.93 & 26.07 and 5.64 & 4.25 respectively. The mean value of throwing accuracy for pre test is 11.27 and for post test is 20.73. The SD values are 2.06 and 2.25 of throwing accuracy. Besides this, shooting accuracy has 23.10 and 26.00 as mean values and 3.77 and 2.34 as SD values. The calculated t-value of zig-zag dribbling of control group is 10.05, for passing ability is -4.75, throwing accuracy has -16.93 as t-value and -3.57 is for shooting accuracy. Tabulated t-value is (1.98) at .05 level. So, it shows that there was found significant difference is in zig-zag dribbling, passing ability, throwing accuracy and shooting accuracy of all handball skill variables of SAQ group.



**FIGURE-1: MEAN SCORES OF PRE AND POST DATA OF PHYSICAL FITNESS
VARIABLES OF SAQ GROUP**

DISCUSSION OF THE FINDINGS:

While comparing pre and post test during twelve weeks, led to an increase in handball skill tests performance. The different rate of improvement, however, in skills performance for the SAQ groups, lead us to conclude that training of SAQ drills produce better results. SAQ training is one of the most requested forms of training by many athletes, as well by handball players. The results of the study revealed that the 12 weeks of training programme of SAQ group had an improvement on zigzag, passing, throwing and shooting ability of handball players.

ZIG-ZAG DRIBBLING VARIABLE

It is evident from the results of the zig-zag dribbling variable that there is significant difference found between pre and post data of SAQ groups. The findings of the current study showed a steady increase in the performance of zigzag dribbling after the SAQ training of 12 weeks. It might be due to the fact that during SAQ training in week two some of the important agility drills i.e. zigzag jump drill or dot drill or lateral agility ladder was introduced to improve zigzag dribbling skill among handballers. (Ezhilmaran, 2016) conducted the study on “effect of

specific drills with plyometric training on selected skills performance variables of school level men handball players” and proved that experimental group showed improvement in selected skill performance variable was dribbling due to effect of specific drills with plyometric training. These findings are similar to the results of (Kamalakkannan and Mahadevan, 2012). These findings are reinforced with (Shallaby, 2010) He conducted a study to estimate the “effectiveness of plyometric exercises on the special physical abilities and skillful performance of basketball players” has also found that an improvement in the dribbling skillful performance.

PASSING ABILITY VARIABLE

Through the SAQ group has shown the significant difference in pre & post values of passing ability of handball players. The results reveals due to the reason that throughout 12 week training upper extremity exercises weighted arm swing & pull through was used to develop arm strength which might improve the passing ability of handball players in SAQ group. The results are aligned with (Shivaji et. al., 2013) strongly indicates that 12 weeks of S.AQ training have significant effect on selected skill performance variables i.e., serving and passing ability of junior volleyball players. These findings are similar to the results of (Shallaby, 2010).

THROWING ACCURACY VARIABLE

While comparing the results of the throwing accuracy the significant results found in between the pre & post data of SAQ group. SAQ group have a higher scoring rate of throwing accuracy after training. The results of the present study showed that experimental group improves their throwing accuracy because of different components of training schedule.

SHOOTING ACCURACY VARIABLE

When comparing the mean value of shooting accuracy it has been observed that after 12 week of SAQ training players gain the good level of shooting accuracy. SAQ training more affects the shooting accuracy of players. The basic reason behind this could be that during

shooting stability and strength is required so SAQ drills develop lower explosive strength in players which improve the stability and conversion rate during shooting.

From the findings it was evident that the treatment given to SAQ training found to enhance the handball skills performance of players for pre to post (12 weeks) test because the tabulated value was found higher than required value to be significant. The reason for this may be that the players have been exposed first time to SAQ drills training programme which is highly scientific and systematic in nature because of which optimum adaptation and enhancement in skills performance has been seen. It is proved even by the available literature by Singh quoted in his book "Science of Sports Training" page no 26 that faster adaptations also occur when new exercises are used to which the sportsmen are not habituated. Kamlesh also quoted in his book "Psychology in physical education and sports" that when an athlete begins to learn a new skill, his learning curve shows an increasing gain pattern.

CONCLUSION:

Taking into account the discoveries of this study, the accompanying conclusion were drawn:

- It was detected that after the 12 week of SAQ training handball players were having improved the performance of zig-zag dribbling, passing accuracy, throwing accuracy & shooting accuracy.

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