



SCIENTIFIC TRAINING FOR HANDBALL PLAYERS: A MODEL

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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 90 male handball players (30 each from plyometric, SAQ & control group), 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 variable i.e. passing ability were selected for this study. To find out the difference among various groups of passing ability e.g. Plyometric, SAQ & Control group variable 'ANCOVA' test was applied at 0.05 level of significance. The results showed that experimental groups (Plyometric & SAQ) of handball players were having improved the performance of passing accuracy as compare to control group.

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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). Gill and Deol (2017) 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. (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 six mts 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. (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. Shivaji *et. al.*, (2013) The findings of the study have strongly indicates that 12 weeks of S.A.Q. training have significant effect on selected skill performance variables i.e., serving and passing ability of junior volleyball players.

MATERIAL AND METHODS

The purpose of the study was to find out the effect of 12 week plyometric and SAQ training on handball skill performance variable (Passing ability) of handball players. Total 90 male handball players were selected; (30 each from plyometric, SAQ & control group) age ranges between 18-25 years. The data was obtained from Punjab.

Variable

Handball skill variable

Passing Ability

Statistical consideration

For interpretation of the data statistical techniques of 'ANCOVA' test was applied to find out mean differences.

RESULTS

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

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Table 1 Analysis of Co-Variance (Ancova) of Passing Ability Test among Plyometric, Saq and Control Groups

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1625.77 ^a	3	541.92	89.89	.000
Intercept	347.51	1	347.51	57.64	.000
PASSING	328.62	1	328.62	54.51	.000
Groups	164.52	2	82.26	13.64	.000
Error	518.44	86	6.02		
Total	47932.00	90			
Corrected Total	2144.22	89			

a. R Squared = .758(Adjusted R Squared = .750)
 b. Computed using alpha = .05

Table 1 represents the F value for comparing passing ability among control, plyometric and SAQ groups, since p-value for the F- statistics is .000, which is less than 0.05, it is significant. Thus the alternative hypothesis is accepted. Since the F-value is significant, to find out the critical differences, post hoc test has been made, which is shown in the next table.

Table 2 Pairwise Comparisons of Passing Ability Test among Plyometric, Saq and Control Groups

GROUP (MEAN)	Mean Diff	Std. Error	P-VALUE (Sig.)
Control Group N= 30 (19.93 ^a)	Plyometric group -3.42*	.80	.000
Plyometric Group N= 30 (23.35 ^a)	Saq training group -1.01	.63	.34
Saq Training Group N= 30 (24.37 ^a)	Control group -4.43*	.86	.000

The mean difference is significant at the 0.05 level.

Table 2 represented that mean difference of passing ability between control group and plyometric group is found to be significant -3.42*. Plyometric group (23.35) has exhibited significantly higher passing ability than their control group (19.93). Mean difference of plyometric group and SAQ group is found to be insignificant -1.01*. SAQ group (24.37) has exhibited significantly higher in passing ability than plyometric group (23.35). Mean difference of passing ability between SAQ group and control group is found to be significant 4.43*. SAQ group has exhibited significantly higher passing ability than control group.

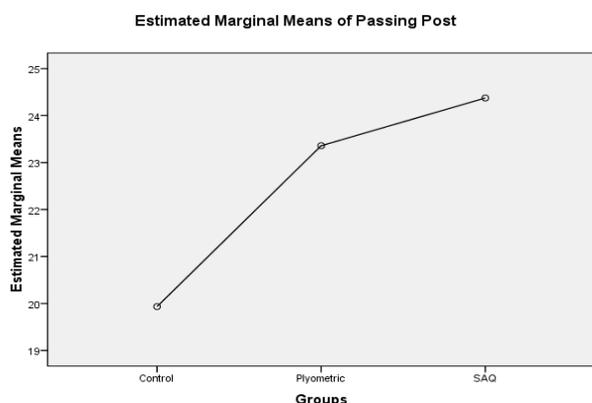


Figure Mean Scores of Passing Ability Test Among Plyometric, Saq And Control Groups

DISCUSSION

Through all the groups that is experimental and control has shown the significant difference in pre & post values of passing ability of handball players but in case of experimental group improvement in passing ability was comparatively more than the control groups. 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 improved the passing ability of handball players in experimental group. The results are aligned with Ezhilmaran (2016) noted that the experimental group showed improvement in selected skill performance variable passing due to effect of specific drills with plyometric training but it contradicts the control group did not improve the selected criterion variables. Results of this study also similar with results of 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).

CONCLUSION

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

It was detected that the experimental group (Plyometric & SAQ) of handball players were having improved the performance of passing accuracy as compare to those who were from control group.

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