



ISOLATED AND COMBINED IMPACT OF WEIGHT AND LADDER TRAINING ON SELECTED MUSCULAR STRENGTH ENDURANCE AND BREATH HOLDING TIME AMONG INTER COLLEGIATE FEMALE KABADDI PLAYERS

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ABSTRACT

The purpose of this study was to find out the Isolated training group Combined impact of weight training group and ladder training group selected on muscular strength endurance and Breath Holding Time among inter collegiate female Kabaddi players. Sixty (60) female students from Dr.Sivanthi aditanar college of Engineering, Tiruchendur, Govindammal Aditanar College for women, Tiruchendur, Wavoo Wajeeha women's college of arts and science, veerapandipattanam were participant selected. The age of the participant was ranged from 18 to 25 years. The selected fitness variables Muscular strength endurance were assessed by using sit up test and the physiological variable Breath holding time were assessed by using nostril clip scoring seconds. The selected students were divided in to four groups namely Isolated training group Combined impact of weight training group and ladder training group and control group. Isolated training group Combined impact of weight training group and ladder training group underwent specific drills/exercise according to their training design which is instructed by the researcher whereas Control group underwent zero training. The obtained data were statistically analysed by ANCOVA was used to find out the significant difference among the group. An alpha level of 0.05 was used for all tests. The results indicate that there is significant difference between Control group, and three training groups Isolated training group Combined impact of weight training group and ladder training group Among the three training groups, Combined impact of weight training group shows better results compared to Isolated Training group and ladder training group.

KEYWORDS: Isolated training group Combined impact of weight training group and ladder training group Muscular strength Endurance and Breath Holding Time and Kabaddi.

INTRODUCTION

Keep singing and never give up. Our Tamils live and breathe Kabaddi. Our troops' temple is the Kabaddi field. The Kabaddi Field serves as a monument to our soldiers. The Kabaddi Field serves as a monument to our soldiers. The players who live by the adage that "Kabaddi is the lifeblood of our Kabaddi body and life" deserve this review article, which we have created for them. One of the old-fashioned games, Kabaddi, teaches us the rules, playgrounds, and strategies. Our daily lives will benefit from this discipline in addition to the game. Learn about physical prowess, mental stability, virtue and self-control, and a state of mind from the Guru or Coach. Do you believe we weren't chosen for the Indian, district, and national teams in Kabaddi? a research project on women from Tamil Nadu vying for positions on the Indian national team or in the government. We must learn about health and well-being from the Guru in order to develop our physical stamina, mental discipline, and state of mind, as well as to receive timely and appropriate training.

Players in the game of Kabaddi must react and move very swiftly because it is played so quickly. When you play the game, you won't have much time to evaluate the scenario, and since you aren't allowed to breathe, you'll need to move quickly. With practice, your physical and mental abilities will improve,

even outside of the game. You'll develop quick reflexes, the ability to rapidly weigh the pros and cons of a situation, and the capacity to render swift decisions. Kabaddi is a simple and affordable sport to pick up on top of all these health advantages. Unlike other games that need both equipment and space, such as cricket, football, tennis, squash, badminton, or table tennis, Kabaddi does not. A few friends, a green space, and a small amount of free time a few times a week are all you need.

METHODOLOGY

The purpose of this study was to find out the Isolated training group Combined impact of weight training group and ladder training group selected on muscular strength endurance and Breath Holding Time among inter collegiate female Kabaddi players. Sixty (60) female students from Dr.Sivanthi aditanar college of Engineering, Tiruchendur, Govindammal Aditanar College for women, Tiruchendur, Wavoo Wajeeha women's college of arts and science, veerapandipattanam were participant selected. The age of the participant was ranged from 18 to 25 years. The selected fitness variables Muscular strength endurance were assessed by using sit up test and the physiological variable Breath holding time were assessed by using nostril clip scoring seconds. The selected students were divided in to four groups namely Isolated training group



Combined impact of weight training group and ladder training group and control group. Isolated training group Combined impact of weight training group and ladder training group underwent specific drills/exercise according to their training design which is instructed by the researcher whereas Control group underwent zero training. The obtained data were statistically analysed by ANCOVA was used to find out the significant difference among the group. An alpha level of 0.05 was used for all tests.

EXPERIMENTAL DESIGN AND STATISTICAL TECHNIQUE

Pre- and post-testing this study used an experimental design, and a control group was included. To determine the difference in statistical significance, an ANCOVA was performed to statistically analyze the given data. The threshold for statistical significance was set at the 0.05 level of confidence.

**TABLE I
 COMPUTATION OF ANALYSIS OF CO-VARIANCE ON MUSCULAR STRENGTH ENDURANCE**

Pre test Mean				Post test Mean				Adjusted post test means				Sources of Variance	Sum of square	Df	Mean squares	F ratio
ITG	CIWTG	LTG	CG	ITG	CIWTG	LTG	CG	ITG	CIWTG	LTG	CG	Between	182.87	3	60.96	35.39
11.4 ±0.73	11.66±1.05	13.2 ±13.02	14.46 ±1.18	12.66 ±1.23	17 ±1.73	12.33 ±1.29	12.7 ±1.27	16.87	14.27	16.92	12.75	Within	94.73	55	1.72	

ITG – Isolated Training Group, CIWTG – Combined Impact of Weight Training Group,LTG-ladder Training Group and CG – Control Group

*significant at 0.05 level of confidence (The table value required for significance at 0.05 level with df 3 and 55 is 3.24)

Table I shows the pre test mean of Isolated Training Group, Combined Impact of Weight Training Training Group, Ladder Training group and Control Group are 11.04, 11.66, 13.2 and 14.4 respectively and post mean of Isolated Training Group, Combined Impact of Weight Training Training Group, Ladder Training group and Control Group are 12.66, 17, 12.33, and 12.7 respectively. The adjusted post test means of Isolated Training Group, Combined Impact of Weight Training Training Group, Ladder Training group and Control Group are 16.87, 14.27, 16.92 and 12.75 respectively. The obtained f-ratio of 35.39* which is higher than the table value 3.24 with df 3

and 55 required for significance. The result of the study indicates that there are significant mean differences on self-confidence ability among the adjusted post test means of Isolated Training Group, Combined Impact of Weight Training Training Group, Ladder Training group and Control Group are at 0.05 level of significance. Hence it is clear that the of Isolated Training Group, Combined Impact of Weight Training Training Group, Ladder Training group and Control Group are significantly the Muscular strength endurance of the Participants. Among this Three training groups Isolated Training group seems to be the best.

SCHEFFE'S POST HOC TEST ON MUSCULAR STRENGTH AND ENDURANCE

Isolated Training Group	Combined Impact of weight Training	Ladder Training	Control Group	Mean Difference	Confidence interval
16.87	14.27			2.6*	1.21
16.87		16.92		0.05*	
16.87			12.75	4.12*	
	14.27	16.92		2.65*	
		16.92	12.75	4.17*	
	14.27		12.75	1.52*	

*significant at .05 level

Table II shows that the adjusted post test mean differences in Muscular Strength Endurance between Isolated Training group and combined impact of weight training Group is 2.6 and Isolated Training group and Ladder training group is 0.05, Isolated Training Group and Control Group is 4.12 combined impact of weight training Group between ladder training group

is 2.65 ladder training group between control group 4.17 combined impact of weight between control group 1.52 which are greater than the confidence interval value of which is 1.21 statistically significant at 0.05 level of confidence.



MUSCULAR STRENGTH ENDURANCE

■ Pre-Test ■ Post Test ■ Adjusted Post Mean

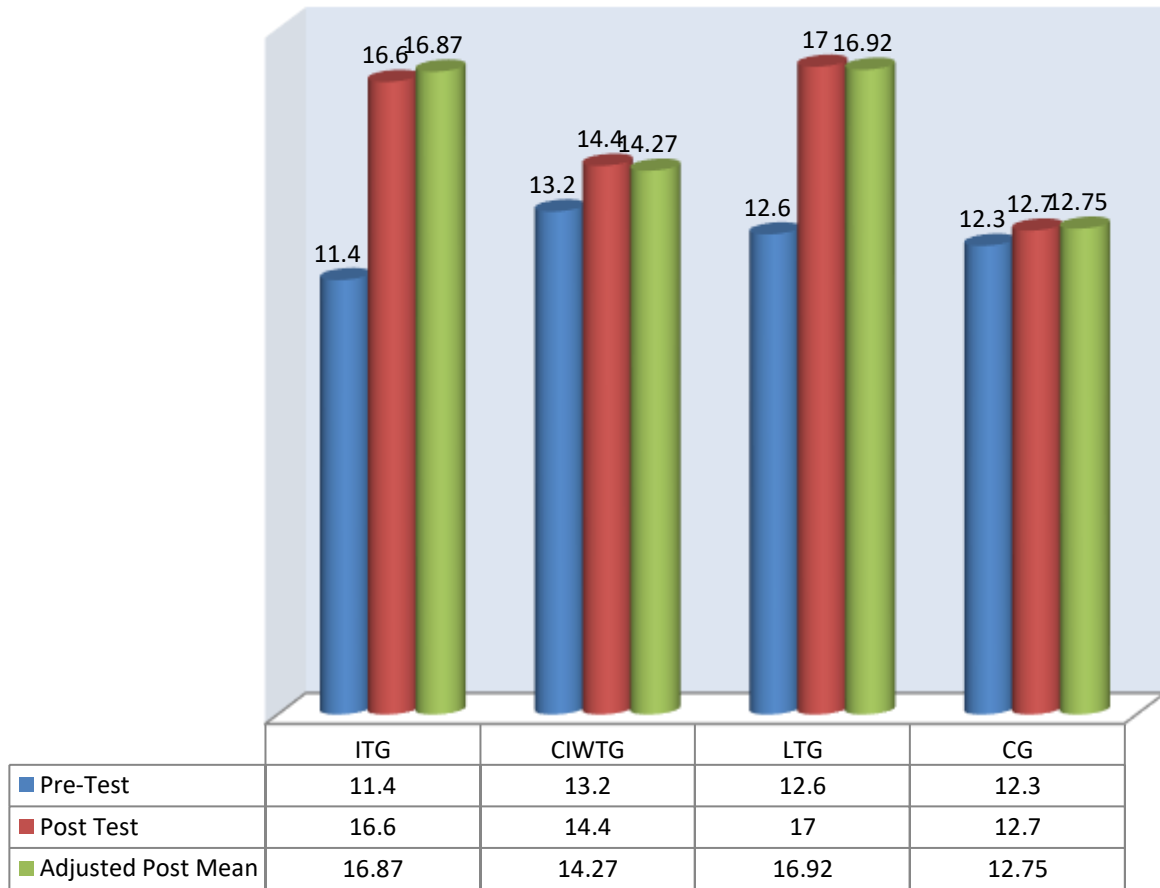


TABLE VI
COMPUTATION OF ANALYSIS OF CO-VARIANCE ONBREATH HOLDING TIME

Pre test Mean				Post test Mean				Adjusted post test means				Sources of Variance	Sum of square	Df	Mean squares	F ratio
ITG	CIWTG	LTG	CG	ITG	CIWTG	LTG	CG	ITG	CIWTG	LTG	CG	Between	1406	3	468.67	52.12
34.06 ± 2.65	49.2 ± 2.98	34.6 ± 3.06	44.66 ± 2.41	37.4 ± 2.38	42.6 ± 4.03	34.3 ± 3.03	35.2 ± 2.24	49.35	44.73	42.26	36.91	Within	494.54	55	8.99	

ITG – Isolated Training Group, **CIWTG** – Combined Impact of Weight Training Group, **LTG**-ladder Training Group and **CG** – Control Group

*significant at 0.05 level of confidence (The table value required for significance at 0.05 level with df 3 and 55 is 3.24)

Table II shows the pre test mean of Isolated Training Group, Combined Impact of Weight Training Group, Ladder Training group and Control Group are 34.06, 49.02, 34.66 and 44.6 respectively and post mean of Isolated Training Group, Combined Impact of Weight Training Training Group, Ladder

Training group and Control Group are 37.4, 42.6, 34.33, and 35.8 respectively. The adjusted post test means of Isolated Training Group, Combined Impact of Weight Training Training Group, Ladder Training group and Control Group are 49.35, 44.73, 42.26 and 36.91 respectively. The obtained f-ratio



of 52.12* which is higher than the table value 3.24 with df 3 and 55 required for significance. The result of the study indicates that there are significant mean differences on self-confidence ability among the adjusted post test means of Isolated Training Group, Combined Impact of Weight Training Training Group, Ladder Training group and Control Group are at 0.05 level of significance. Hence it is clear that the

of Isolated Training Group, Combined Impact of Weight Training Training Group, Ladder Training group and Control Group are significantly the Breath holding time of the Participants. Among this Three training groups Isolated Training group seems to be the best.

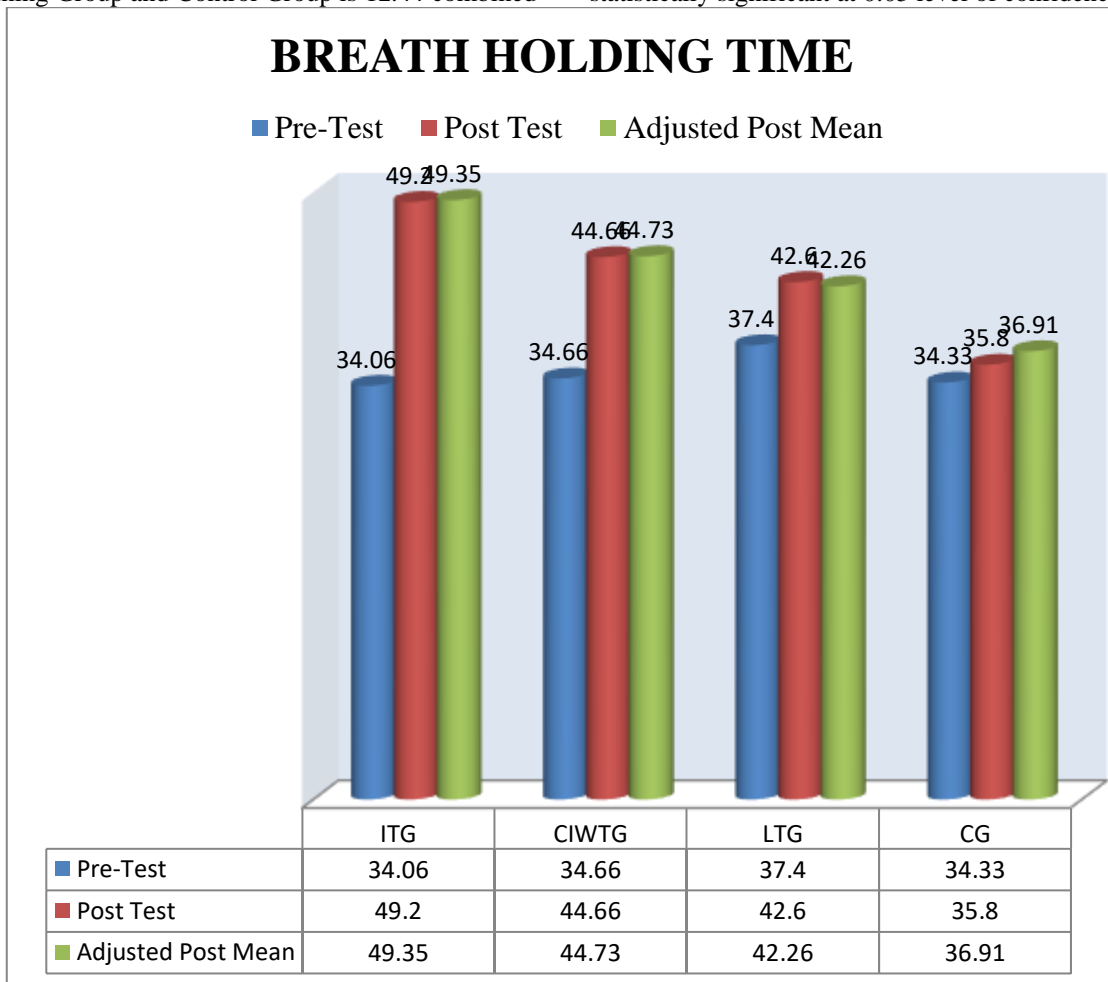
SCHEFFE'S POST HOC TEST ON MUSCULAR STRENGTH AND ENDURANCE

Isolated Training Group	Combined Impact of weight Training	Ladder Training	Control Group	Mean Difference	Confidence interval
49.35	44.73			4.62*	2.78
49.35		42.26		7.09*	
49.35			36.91	12.44*	
	44.73	42.26		2.47*	
		42.26	36.91	5.35*	
	44.73		36.91	7.82*	

*significant at .05 level

Table II shows that the adjusted post test mean differences in Muscular Strength Endurance between Isolated Training group and combined impact of weight training Group is 4.62 and Isolated Training group and Ladder training group is 7.09, Isolated Training Group and Control Group is 12.44 combined

impact of weight training Group between ladder training group is 2.47 ladder training group between control group 5.35 combined impact of weight between control group 7.82 which are greater than the confidence interval value of which is statistically significant at 0.05 level of confidence.





DISCUSSION ON FINDINGS

The results of analysis of co-variance on comparative results revealed that the mean difference existing between Control Group, ladder training Group combined impact of weight training and isolated training group on Muscular strength endurance and Breath holding time.

CONCLUSION

Based on the results of the study it was conclude that three training group namely Isolated Training group Combined impact of weight training group significance difference between Muscular strength and endurance and Hand touch ability. Among the two training group, The specific high intensity group shown good improvement on Muscular strength endurance and Hand touch ability.

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