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A Comparative Analysis on Respiratory Parameters between Kabaddi and Kho-Kho Players

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Abstract: The aim of the study to find out the significant differences in respiratory parameters between kabaddi and kho-kho male players. For the purpose of the present study,twenty four (N=24) inter-college kabaddi and kho-Kho male players of Punjabi University Patiala between the age group of 18-25 years were selected as subjects. For data analyze student's t-test for independent data was used to determine the significant difference between inter-college Kabaddi and Kho-kho male players, unpaired t-test was employed for data analyses. To test the hypothesis, the level of significance was set at 0.05

Keywords: *Respiratory Parameters, Kabaddi and Kho-kho Players.*

Introduction:

Exercises in the form of sports, aerobics or workouts, if performed regularly have a beneficial effect on the various systems of the body (Ward, 1994). Breathing and exercise have always been closely linked in athletic training and keep fit propaganda and any physical effort is quite obviously dependent on efficient pulmonary ventilation (Stanley Miles,1969). Proper breathing techniques are essential to an athlete, because it can help him or her become more successful during athletic activity, and increases lung capacity. Increasing lung capacity can help an athlete become more energetic during sports, feel more refreshed after the sport, and it can also help him or her prevent respiratory distress (Jeanne Rose, 2012). Pulmonary ventilation is generally known to have a linear relationship with oxygen consumption at different levels of exercise. Oxygen consumption is also known to increase the resting state and intense exercise. Lung function parameters tend to have a relationship with lifestyle such as regular exercise and non- exercise (Wasserman et al, 1995; Twisk et al, 1998). Results from the study showed that TV and FVC, but not FEV were significantly higher in Kabaddi than in Kho-Kho players. TV, FVC and FEV were not significantly different in the two female groups. From the literature it is clear that physiological fitness is differs in Kabaddi

and Kho-Kho, it differs according to level of competitions. Therefore, in the present study the investigator intends to find out the differences in Of Respiratory Parameters between Kabaddi and Kho-Kho Players.

Selection of subjects

A group of 24 players (n_1=12 Kabaddi players and n_2=12 Kho-Kho players) in Punjabi University Patiala aged 18-25 years participated in the study. The purposive sampling technique was used to attain the objectives of the study. All the subjects, after having been informed about the objective and protocol of the study, gave their consent and volunteered to participate in this study.

Selection of variable Respiratory Parameters

- Tidal volume (VT)
- Expiratory Reserve Volume (ERV)
- Inspiratory Reserve Volume (IRV)
- Vital Capacity (VC)
- Inspiratory Capacity (IC)

Statistical procedure used

The SPSS 16.0 4software was used to analysis data. The group differences were assessed by using the Student's t-test for independent data. The level of significance was set at 0.05. level.

Analysis and results

Table 1: Insignificant differences in the Mean scores of Respiratory parameters of the Kabaddi and Kho-Kho male players

Tidal Volume (Vt)						
Group	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**	**t-value**	**p-value**
Kabaddi	12	391.42	10.00	2.89	1.45	0.15
Kho-Kho	12	396.50	6.75	1.95		
Expiratory Reserve Volume (ERV						
Kabaddi	12	4499.50	151.15	43.63	1.03	0.31
Kho-Kho	12	4558.17	125.90	36.34		

Vital Capacity (VC)						
Kabaddi	12	4499.50	151.15	43.63	1.03	0.31
Kho-Kho	12	4558.17	125.90	36.34		
Inspiratory Reserve Volume (IRV						
Kabaddi	12	2986.67	106.88	30.85	0.80	0.42
Kho-kho	12	3016.67	71.77	20.72		
Inspiratory Capacity (IC)						
Kabaddi	12	3517.92	73.16	21.12	0.83	0.21
Kho-Kho	12	3523.75	59.82	17.27		

Table 1. represents that the results of Respiratory Parameters (i.e., Tidal Volume (VT), Expiratory Reserve Volume (ERV), Inspiratory Reserve Volume (IRV), Vital Capacity (VC) and Inspiratory Capacity (IC) of University Level Girls are brought forth in table 1. The results indicated that there was no significant differences were found between Kabaddi and Kho-Kho male players .

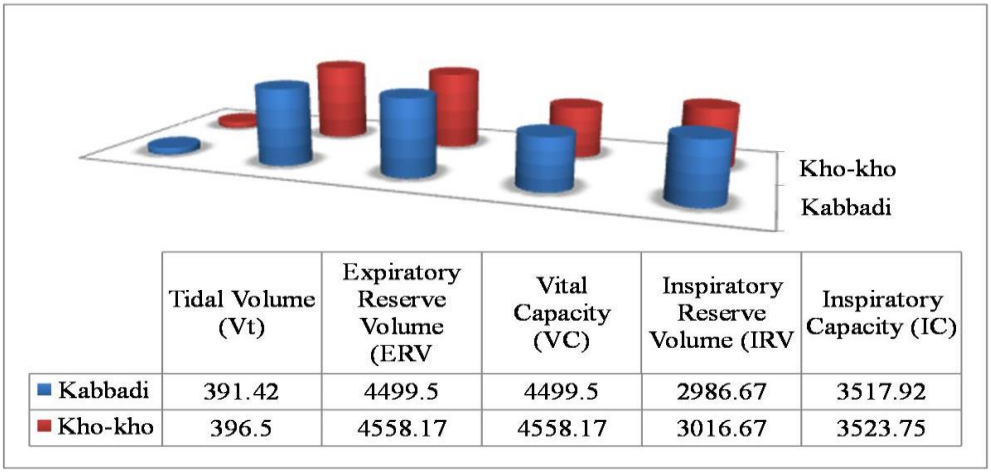

Figure: 1

Mean scores of Respiratory parameters of the Kabaddi and Kho-Kho male players

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