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IMPACT OF PRANAYAMA ON VITAL CAPACITY AND BREATH HOLDING CAPACITY OF YOUNG CHILDREN

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ABSTRACT:

The purpose of the present study was to compare the physiological fitness components such as Vital capacity and Breath holding capacity of young school children of ZPHS Esalathakkallapalli, Palakurthi Mdl, Peddapalli Dist. Total 40 school girls and boys were selected as the subjects of this study. Among them 20 Girls and 20 boy's young school children from ZPHS Esalathakkallapalli, Palakurthi Mdl, Peddapalli Dist, their age group from 14 to 17 years. The data were collected on selected criterion variables and they were statistically analyzed by using 't' ratio at .05 level of significance. Vital capacity was measured by vital graph peak flow monitor (Liter per minutes) and Breath holding capacity was measured by Manual Nose clip method (count in seconds). There was significant difference in Vital capacity and Breath holding capacity among boys and girls of young school children of ZPHS Esalathakkallapalli, Palakurthi Mdl, Peddapalli Dist. The young boys' children were having good Vital capacity and Breath holding capacity than the young girls' children. Result shows that there was significant difference in the selected physiological variables such as Vital capacity and Breath holding capacity among boys' and girls' young children.

INTRODUCTION:

Yoga is essentially a spiritual discipline based on an extremely subtle science, which focuses on bringing harmony between mind and body. It is an art and science of healthy living. The word 'Yoga' is derived from the Sanskrit root 'Yuj', meaning 'to join' or 'to yoke' or 'to unite'. As per Yogic scriptures the practice of Yoga leads to the union of individual consciousness with

that of the Universal Consciousness, indicating a perfect harmony between the mind and body, Man & Nature.

What is Pranayama:

The word Pranayama, derived from the Sanskrit words 'prana' meaning vital energy and 'yama' meaning control, consists of various breathing techniques which include making intentional alterations in breathing.¹ When the body Prana is low, one feels uninterested, lazy, and sluggish leading to the accumulation of toxic particles in the body creating pain and illness. Pranayama helps 'Prana' flow through these parts and might help to release these toxic substances.²

Pranayama has four essential facts:

Breathing in (Puraka), Breathing out (Rechaka), Internal breath holding (Antah Kumbhaka), External breath holding (Bahih kumbhaka).

Pranayama has different variations, each having a unique technique of breathing:

Deergha pranayama, Sitali Pranayama, Ujjayi pranayama, Anuloma, Viloma Pranayama, Kapalbhathi, Bhramari pranayama.

For practicing any form of Pranayama, sit erect in a comfortable position like Sukhasana (the simple cross-legged pose) or Padmasana (A cross-legged posture in which the foot of the leg is placed on the thigh of the opposite leg). For Kapalbhathi you may sit in Vajrasana (a sitting pose formed by kneeling and sitting back on the lower limbs, so that the buttocks rest on the heels and the thighs rest on the calves).

STATEMENT OF THE PROBLEM:

The problem is entitled as "The purpose of the present study was to compare the physiological fitness components such as Vital capacity and Breath holding capacity of young school children of ZPHS Esalathakkallapalli, Palakurthi Mdl, Peddapalli Disrticts.

OBJECTIVE OF THE STUDY:

The main objective of the study was to study the Vital capacity and Breath holding capacity among young boys and girls of school children of ZPHS Esalathakkallapalli, Palakurthi Mdl, peddapalli Disrtict.

METHOLOGY:

For the present study descriptive experimental method was used to compare vital capacity and breath holding capacity among among young boys and girls of school children of ZPHS Esalathakkallapalli, Palakurthi Mdl, peddapalli Disrtict. The purpose of this study 20 boys' students and 20 girls' students studying in Zilla parishad high school among young boys and girls of school children of ZPHS Esalathakkallapalli, Palakurthi Mdl, peddapalli Disrtict. were selected as subject from Peddapalli District, who had participated at regular practice of Yoga in the school regularly and age group was between 14 to 17 years. The study was delimited to the male and female students only. Vital capacity was measured by vital graph peak flow monitor (Liter per minutes) and Breath holding capacity was measured by Manual Nose clip method (count in seconds). The among group differences were assessed by using 't' test. The level of 0.05 was considered significant.

RESULT:

Table 1: Mean Standard deviation and 't' value of Vital capacity Among boys' and girls' children of Zillah perished high school Esalathakkallapalli of Peddapalli District.

Variable	Game	N	Mean	S d	t-Value
Vital capacity	boys	20	3.98	0.56	3.08
	girls	20	3.72	0.51	

*Significant at 0.05 level.

The above table depicts the mean value, standard deviation and t' value of vital capacity. There was significant difference in Vital capacity among boys' and girls' children. Boys children have good Vital capacity than girls' children.

Table 2: It Shows Mean, Standard division and 't' value of Breath holding capacity Among boys' and girls' children of Zillah perished high school Esalathakkallapalli of Peddapalli District.

Variable	Game	N	Mean	S d	t-Value
Breath holding capacity	boys	20	70.24	7.77	5.95*
	girls	20	60.05	6.83	

*Significant at 0.05 level.

The above table shows the calculated t-value 5.96, which is significant at 0.05 levels, since this value is higher than the table value. The young boys' children were found significant than young girls' children.

RESULT:

The above result shows that there was significant difference in the selected physiological variables such as the Vital capacity and Breath holding capacity among young boys and girls of school children of ZPHS Esalathakkallapalli, Palakurthi Mdl, peddapalli Disrtict. There was significant difference in Vital capacity and Breath holding capacity between boys' young children and girls' young children of Zillah perished high school of Esalathakkallapalli, Palakurthi Mdl, Peddapalli District. Boys young children were having good Vital capacity and Breath holding capacity than Young Girls school children of ZPHS Esalathakkallapalli, Palakurthi Mdl, peddapalli Disrtict.

CONCLUSION:

Pranayama, a breathing exercise in Yoga, essentially involves making deliberate modifications in the process of breathing. It includes many breathing methods, each with its benefits. To get optimum health benefits and to avoid any health problems, one must practice Pranayama, preferably, under the guidance of a trained Yoga teacher.

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