Analysis of Health Related Physical Fitness Components of Upper Primary School Students

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ABSTRACT

Children who are physically active are more productive. The American Medical Association (AMA) and numerous other influential organisations have issued statements supporting the importance of daily physical activity among children and youth. The study was delimited to upper primary school boys of age between 11-13 years in Kannur, Kasaragod and Kozhikode Districts. The objective of the study was to establish a baseline data which could be used for improving future performance and fitness level of school children in Kerala. The criterion variables were measured by using the prescribed test protocols of AAPHER Youth Physical Fitness Test. To represent the data in a standardised self explanatory format the percentile value of each item is calculated. Conduct an advanced study on this area is essential to explore more on this topic.

Keywords: Fitness – North Kerala – Upper Primary – AAPHER – Percentile-Lifestyle.

Introduction

Participation in physical activity during the childhood years can promote overall health and well-being. Indeed childhood is a critical time for fostering the development of a healthy lifestyle. Some aspects of child's base orientation of life are well organised by the time the child starts schooling. However, individuals can make lifestyle changes. A teacher plays a vital role in helping children to develop attitudes and behaviour related physical activity. Regular physical activity enhances overall health and wellbeing. Children who are physically educated were more likely to become more active. The American Medical Association (AMA) and numerous other influential organisations have issued statements supporting the importance of daily physical activity among children and youth.

The purpose of the study was to analyse the Health Related Fitness Components of upper primary school boys of North Kerala. The study was delimited to upper primary school boys of age between 11-13 years in Kannur, Kasaragod and Kozhikode Districts. The selected students have not undergone any specific fitness training programme. AAPHERD Health Related Physical Fitness test was used to conduct the study. The socio-economic back-ground of the participants may have an influence on the result of the study and the accuracy in data management and equipment used may also affect the study result.

The objective of the study was to establish a baseline data which could be used for improving future performance and fitness level of school children in Kerala. The result may be used to create an individual profile as well as school base profile for talent identification process. Providing an educational experience and creating an awareness of the physiological function of the body especially during exercise. Motivate individuals to improve their lifestyle by active participation in physical activities and sports. Facilitate to design and develop an individualised exercise programme.

Review of Related Literature

A study was conducted to examine the relationship between habitual physical activity and components on health related physical fitness in children. Several public elementary schools is a suburban southern California city was selected as setting 528 healthy fourth-grade children (274 boys and 254 girls) , 85% of whom were non Hispanic whites. 98% of eligible students participated. Results of six measures of physical activity in children were combined in physical activity index. This index of habitual physical activity was examined in relation to measure five components of health related fitness. (J F Sallis, T L Mackenzie, and J E Alcaraz, "*Habitual Physcial Activity and Health Related Physical Fitness in fourth grade children*" Arch Pediator Adolese Med Abstructs 1993, 147(8): p890)

Methodology

The investigator randomly selected – untrained upper primary school boys of north Kerala. From each school equal number of subjects were selected depends on the

availability of subjects and they belong to different parts of North part of Kerala. The reliability of the data was established by measuring the instrument reliability, tester reliability and subject reliability. Descriptive statistics and percentile statistics were used for analysing the data.

Analysis and Interpretation of the Data

The main aim of the study was to find out the physical fitness of upper primary school boys of north part of Kerala. For the purpose of the study the criterion variables were measured by using the prescribed test protocols of AAPHERD Youth Physical test and the result was summarised by using a mean-standard deviation table.

VARIABLES	Mean	SD
Modified sit-ups (Number)	21	9.65
Body Composition (cm)	15.49	5.64
Sit and Reach (cm)	24.5	5.5
600 yard run /walk (minute)	2.36	0.29

To represent the data in a standardised self explanatory format the percentile value of each item is calculated. It provides a more detailed and each figure will help in forming a criteria bench mark for the particular variable.

Percentile Value of AAPHERD Physical Fitness Variables

PX	**P10**	**P20**	**P30**	**P40**	**P50**	**P60**	**P70**	**P80**	**P90**	**P100**
Body Composition	9.9	11	13	14	14	15	17	19	22	40
Sit and Reach	17.9	20	22	23	25	26	28	29	31	39
Modified sit-ups	8	12	16	18	20	24	28	30	33	45
600 yard run /walk	2.13	2.17	2.19	2.25	2.29	2.33	2.39	2.45	2.59	3.52

Conclusion and Recommendations

The result of the study has come to the following conclusions and recommendations. Majority of the upper primary school boys involved in the study north Kerala were found to strong in abdominal strength. Even though the subjects were not involved in formal physical training programme they showed moderately good cardio respiratory endurance. The flexibility of the students were found to be average and high percentage of fat. It is recommended that remedial fitness programme at school level should be implemented to all students those who have scored less that 20 percentile scores. A detailed talent identification programme may be implemented to students having high level physical fitness. It is recommended to conduct an advanced study on this area is essential to explore more on this topic so that a well defined physical education curriculum to be employed at each schools.

References:

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