Assessment of Aahper Youth Fitness Norms: Srilankan (South Province) Adolescents Boys

Mr. K. Ketheeswaran. Ph.D. Scholar, Dr. V. Gopinath, Associate Professor,
Dept. of Physical Education and Sports Sciences, Annamalai University

INTRODUCTION

Lifestyles affect people's health, with eating habits and regular physical activity being the two most influential factors (Panagiotakos, 2004) irrespective of sex, age or country of residence (Yusuf, 2004). An appropriate way to assess health in apparently healthy people is to measure their health-related fitness, defined as the dynamic state of energy and vitality that allows people to perform daily tasks, enjoy active leisure and cope with unexpected emergencies without undue fatigue. At the same time, health-related fitness helps in the prevention of hypo-kinetic diseases, in maximum development of intellectual capacity, and in full enjoyment of life (Bouchard, 1993). Although regular physical exercise has a positive influence on health, a high level of fitness-related health has a greater influence (Eriksson, 2001 & Myers, 2004).

During adolescent period, major physiologic, cognitive, behavioural changes take place and biological development and psycho-social development overlap. A person's body undergoes dramatic changes. World Health Organization (WHO) defines adolescence as the period of life between 10 - 20 years of age. There are three distinct phases of transition from adolescence to adulthood. Early adolescence (10-13 years): mainly characterized with physical maturity with the onset of puberty, mid adolescence (14-15 years): with development of separate identity from parents and opposite sex, and finally the late adolescence (16-19 years): denoted as fully developed physical characteristics, formed a distinct identity and well developed opinion and ideas (Pandey *et al..,* 1999). It is clear that the mid and late phases of transition are more important because the pace of mental and physical development is rapid in these stages.

Over the past decade, there has been growing acceptance that young people between 10 and 24 years of age are a distinct population group with needs that differ from those of infants or adults .Youth from marginalized groups and lower- and middle-income countries are especially vulnerable. The nutrition transitions to lipid-rich diets and a decrease in physical activity have also seen an increasing prevalence in obesity, especially among urban youth.

The American College of Sports Medicine (ACSM) has defined health related physical fitness as "a state characterized by an ability to perform daily activities with vigour and a demonstration of traits and capacities that are associated with low risk of premature development of the hypo kinetic diseases (i.e, those associated with physical inactivity)." Health-related physical fitness consists of those components of physical fitness that have a relationship with good health. The components are commonly defined as body composition, cardiovascular fitness, musculoskeletal fitness (flexibility, muscular endurance, and muscular strength.) (Nieman, 1998). The present study compares and evaluates the norms of AAPHER youth fitness battery among Srilankan (SP) adolescent boys.

METHODOLOGY

The aim of the study was to compare and evaluate the AAPHER youth fitness test among south province adolescent boys in Srilanka. To achieve the purpose, (N=800) adolescent boys from the age of 14 years (n=400) and 15 years (n=400) were randomly selected as subjects from south province, Srilanka AAPHER (50 yards – speed, Standing broad jump – explosive power, 1.5 miles run – endurance, situps – abdominal strength shuttle run – agility, pullups-arm strength). Youth fitness test was selected as criterian. Variable and tested data were converted into AAPHER youth fitness norms (Johnson & Nelson).

RESULTS

Table 1: Aapher Norms of 14 and 15 Years Adolescent Boys of South Province (Srilanka)

	50 Yards (1/10sec)		*SLJ (Feet & Inches)*		*1.5 Miles (Minutes)*		*Situps (No./1min)*		*Shuttle Run (1/10sec)*		*Pull Ups (Nos)*	
Percentile	*14 yrs*	*15 yrs*	*14 yrs*	*15 yrs*	*14 yrs*	*15 yrs*	*14 yrs*	*15 yrs*	*14 yrs*	*15 yrs*	*14 yrs*	*15 yrs*
100th	1	-	-	-	-	-	-	-	2	-	-	2
85th	-	-	4	1	-	1	-	-	6	-	-	-
75th	-	10	29	70	-	83	-	74	163	14	84	13
50th	33	203	232	302	20	219	-	205	205	221	234	315
25th	366	187	135	27	380	97	400	121	24	165	82	70

The cumulative scores of AAPHER test battery less than 50 percentile are as follows: 50 yard (99.75%), SLJ (91.75%), 1.5 mile run (100%), situps (100%), shuttle run (57.25%) and pull ups (79%) respectively. For 15 year old boys, 50 yard (95%), SLJ (82.25%), 1.5 mile run (79%), situps (81.5%), shuttle run (96.5%) and Pull ups (96.25%) respectively were selcted. The result of AAPHER youth fitness existing norms shows that 14 and 15 years old boys of south province were mostly below 50 percentile in all the fitness activities.

CONCLUSION

From the result, it was concluded that the adolescent boys of the south province (Srilanka) were having poor physical fitness.

IMPLICATION

Some reasonably well-established facts regarding the characteristics of physical activity or exercise that contribute to an improvement in physical fitness are:

1. The pupil scored below 50 percentile on the selected fitness variable in their respective age group should be encouraged to improve their fitness level. National Level common fitness norms may be constructed and standardized for fitness assessment.
2. To identify children and adolescents at risk for the major public health diseases and to be able to evaluate effects of alternative intervention strategies in Sri Lanka, internationally comparable testing methodology across the country has to be developed, tested, agreed upon and included in the health monitoring system currently under development of the human resource department, school education department, public health department and other NGOs of Sri Lanka.
3. Physically active people at all ages exhibit fewer health problems than the very sedentary. Some of these differences may be due to self-selection or associated health habits. Thus, the entire difference may not be caused by physical activity. Both observational and experimental data are available to support the causal role for exercise in both improved health-related fitness and decreased clinical manifestations of selected disorders.

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