

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

*Mr. K. Ketheeswaran**
*Dr. V. Gopinath***

* Ph.D. Scholar in Physical Education, Annamalai University,
Lecturer in Sports Science Unit, University of Jaffna, Srilanka

**Professor in Physical Education, Annamalai University,
Tamilnadu (608 002) India,

Abstract

The aim of the study was to compare and evaluate the AAPER youth fitness test among north province adolescent boys in Srilanka. To achieve the purpose (N=800) adolescent boys from age of 14 years (n=400) and 15 years (n=400) were randomly selected as subjects from north province, Srilanka AAPER (50 yards - speed, Standing broad jump - explosive power, 1.5 miles run - endurance, situps - abdominal strength, shuttle run - agility and pullups - arm strength) youth fitness test were selected as criterion, variable tested, the data were converted into AAPER youth fitness norms. The result of AAPER youth fitness existing norms shows that, 14 and 15 years boys of north province were mostly below the 50th percentile in all the fitness qualities. From the result it was concluded that the adolescent boys of north province (Srilanka) were having poor physical fitness. The pupil scored below 50 decile on the selected fitness variable in their respective age group should be encouraged to improve their fitness level. National level special fitness programme will be designed and implemented to the poor fitness students. Further national level common fitness norms may be constructed and standardized for fitness assessment.

Key Words: AAPER, Fitness, Norms, Adolescent.

INTRODUCTION

The life style of today's generation has changed tremendously. The fitness level of individual has gone down badly. Students prefer video games rather than to toil sweat in the play fields. Now Kids are suffering more and more from postural deformities. The only way to remove these factors from society, the roll of Physical Education and Sports become massive. During adolescent period, major physiologic, cognitive, behavioral

changes take place and biological development and psychosocial development overlap. A person's body undergoes dramatic changes. World Health Organization (WHO) defines it 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 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 pace of mental and physical development *is* rapid in these stage.

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 survey revealed the eye opening facts of the students of public schools 55 % of students are over weight and chances of heart attacks, diabetic problems, hair loss. Blood pressure is much more in these students.

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 has to compare and evaluate the norms of AAPHER youth fitness battery among Srilankan (North Province) adolescent-boys.

METHODOLOGY

The aim of the study was to compare and evaluate the AAPHER youth fitness test among north province adolescent boys in Srilanka. To achieve the purpose (N=800) adolescent boys from age of 14 years (n=400) and 15 years (n=400) were randomly selected as subjects from north province, Srilanka, AAPHER (50 yards -speed, Standing broad jump - explosive power, 1.5 miles run - endurance, situps -abdominal strength, shuttle run - agility and pullups-arm strength) youth fitness test were selected as criterion, variable and tested. the data were converted into AAPHER youth fitness norms (Johnson and Nelson, 1976).

RESULTS

Table -1

AAPHER NORMS OF 14 AND 15 YEARS ADOLESCENT BOYS OF NORTH PROVINCE (SRILANKA)

Percentile	50 Yards		SLJ (feet & inches)		1.5 miles		Situps		Shuttlerun		Pull ups	
	(l/10sec)				(minutes)		(No./lmin)		(l/10sec)		(Nos)	
	14 yrs	15 yrs	14 yrs	15 yrs	14 yrs	15 yrs	14 yrs	15 yrs	14 yrs	15 yrs	14 yrs	15 yrs
100 th	-	-	-	-	-	-	-	-	-	-	-	-
85 th	-	-	-	-	-	-	-	-	-	1	-	-
75 th	-	-	5	-	-	7	-	1	2	16	4	2
50 th	-	42	57	81	67	117	1	97	37	21	81	191
25 th	400	358	338	319	333	276	399	302	361	362	315	207

The table indicates the 14 years boys, cumulative scores of AAPHER test battery less than 50th percentile as follow: 50 yard (100), SLJ (98.25%), 1.5 mile run 100%,situps 100%, shuttle run (99.5) and pull ups (99%) respectively. For 15 years boys 50 yard (100%), SLJ (100%), 1.5 mile run (98.25%), Situps (99.75%), shuttle run (95.75%) and Pull ups (99.5%) respectively. The result of AAPHER youth fitness existing norms shows that, 14 and 15 years boys of north province were mostly below the 50th percentile in all AAPHER youth fitness qualities.

DISCUSSION

According to the UNESCO Charter of Physical Education and sports, 1978,"Every human being has a fundamental right to access to physical education and sport, which are essential for the full development of his/ her personality. The freedom to develop physical, intellectual and moral powers through physical education and sport must be guaranteed both within the educational system and in other aspects of social and healthily life".

The public health burden of lifestyle - related diseases in the European countries is high. The most common cause of morbidity and mortality are coronary heart disease, stroke, obesity, hypertension, type-2 diabetes, allergies and several cancers. A sedentary lifestyle is a major risk factor for these diseases and is close to overtaking tobacco as the leading cause of preventable death.Physical fitness 'A set of attributes that people have or achieve relating to their ability to perform physical activity (Flowly, and Franks, 1997).

The protective effect of intentional physical activity on the above mentioned non-communicable diseases has been widely reported in people of all ages (Jonker et al.

2006). Regular participation in moderate and vigorous levels of exercise increases physical fitness, which can lead to many health benefits (Ruiz et al. 2006). Physical fitness is also determined by constitutional factors, and it has been suggested that up to -40% of variation in fitness may be attributable to genetic factors (Bouchard 1986). In adults, low physical fitness (mainly low cardiorespiratory fitness and low muscular strength) seems to be a stronger predictor of both cardiovascular and all-cause mortality than any other well established risk factors.

Physical fitness is the opposite of being fatigued from ordinary efforts, to lacking the energy to enter zestfully into life's activities, and to becoming exhausted from unexpected, demanding physical exertion (Shephard, 1994).

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)

CONCLUSION

From the result it was concluded that the adolescent boys (14 Yrs and 15 yrs) of north province (Srilanka) were having poor physical fitness qualities such as, speed, explosive power, endurance, abdominal strength, agility and arm strength.

IMPLICATION

Some reasonably well-established facts regarding the characteristics of physical activity or exercise that contribute to an improvement in physical fitness are: The pupil scored below 50th deciles 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. Further 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 Srilanka and 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 Srilanka.

References

1. Bouchard C (1986) Genetics of aerobic power and capacity. In Sports and Human Genetics. Human Kinetics, Champaign, IL.
2. Ruiz (2005) (Improvement of physical fitness as anti-aging intervention). *Med Clin* 124:146-155.
3. Honker JT, De Laet C, Franco OH, Peeters A, Mackenback J, Nusselder WJ (2006) Physical activity and life expectancy with and without diabetes: life table analysis of the Framingham Heart Study. *Diabetes Care* 29:38-43.
4. American College of Sports Medicine. (1988). Physical fitness in children and youth *Medicine Science Sports and Exercises*, 20, 422-23.
5. Bouchard C, Shepard R.J. (1993). Physical activity, fitness and health: the model and key concepts. In: Champaign: Human Kinetics, 11-24.
6. Eriksson, G. (2001), "Physical fitness and changes in mortality: the survival of the fittest." *Sports Medicine*, 31, 571 - 6.
7. Howly, T., and Franks, B. Dan. (1997), *Health Fitness Instructor's Hand book* (3rd edition). United States of America: Human Kinetics. 23.
8. Panagiotakos, D.B., Pitsavos, C, Chrysohoou, C, Skoumas, J., Tonsoulis, D., Toutouza, M. (2004), "Impact of lifestyle habits on the prevalence of the metabolic syndrome among Greek adults from the Attica Study". *American Heart Journal*, 147: 106 - 12.
9. Pandey, J., Yadav S. B., Sadhu, K.K. (1999), *Adolescence Education in Schools: Package of Basic materials*. New Delhi: NCERT.
10. Shephard, Roy.J. (1994), *Aerobic Fitness health*. United States of America: Human Kinetics Publishers. 21.
11. Barry L. Johnson and Jack.K Nelson *Practical measurements for evaluation in physical education*. 3rd Edition, 112-127.
12. Myers, J., Kaykha, A., George, S., Abella, J., Zaheer, N., Lear S, et al. (2004). Fitness versus physical activity patterns in predicting mortality in men." *American Journal of Medicine*, 117:9, 12-8.
13. Yusuf, S., Hawken, S., Ounpuu, S., Dans, T., Avezum, A., and Lanas, F. (2004), "Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the Inter heart Study): case-control study." *Lancet*, 364: 937-52.