

Is There a Positive Relationship between Physical Fitness and Physical Activity in Children? - A Brief Review

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Abstract

Physical activity is regarded as an important component of a healthy lifestyle. It is a well-known notion that physical activity is strongly related with physical fitness in adults (Blair et al., 1989; Anderson & Haraldsdottir, 1995; Young & Steinhardt, 1993). The aim of this review is to investigate as whether this notion will exist for the Ellsiras rural children and children from other studies. Eight out of 11 found published studies which investigated the relationships between physical activity and physical fitness in children were included in the review. The included observational studies met the criteria used in the selection covering physical fitness and physical activity in children between the age from 5 to 14 years old. An overview of Ellsiras Longitudinal Study and other 7 eligible studies shared common findings of either few or low and moderate relationship between physical activity and physical fitness and especially with endurance performance does exist. The observed results therefore warrant further investigation on this relationship over a period of time from different cultural contexts.

Key Words: Physical Fitness, Physical Activity, Children, Comparative Review, Health, Chronic Diseases

Introduction

Physical fitness and physical activity of children are issues of current interest among public health and sport sciences professionals. Studies show that an early sign of chronic disease and risk factors for chronic disease like elevated cholesterol and hypertension which may be considered normal at the middle-age population can also be found in young children (*National Institutes of Health, 1996; US Department of Health and Human Services, 1996, World Health Organisation, 2002*). An alarming situation is that current generation of children and youth are often characterized as either physically unfit or physically inactive, or both (*Malina, 1997*). Therefore, the consequences of low aerobic fitness and low levels of physical activity found to be associated with chronic disease risk factors in children (*Davies et al., 1995; Deheeger et al., 1997; Kemper, 2004*).

Physical activity in the physiological terms refers to "...bodily movement produced by skeletal muscles and resulting in energy expenditure (*Bouchard et al., 1990*). Therefore, physical activity may be carried out in different forms or context such as free movement, play, formal exercise, dance, physical education, sport, work, and probably others. Physical fitness in children is classified into twofold context: motor and health-related fitness. The motor fitness includes components of skilled movements, i.e. agility, balance, coordination, power, speed, strength and muscular endurance that enable the individual to perform a great variety of physical activities. Health-related fitness is oriented towards health status and is operationalised in terms of cardiorespiratory function, abdominal and low back musculoskeletal function, and fatness (*Malina, 1997*). According to the findings by *Malina (1997)* is that in many developed countries, emphasis on the