THE EFFECT OF AN AEROBIC BASED PHYSICAL ACTIVITY PROGRAMME ON THE PHYSICAL FITNESS OF 10 – 15 YEAR OLD GIRLS FROM A FARMING COMMUNITY

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ABSTRACT

Decreasing tendencies of physical activity among girls in their teenage years are indicated as contributing to increased health risks in this group. The purpose of this study was to determine if a 10 week aerobic based exercise programme of twice a week, with a 30 minutes duration and an intensity level of 55 – 70% heart rate max would improve strength, flexibility, body composition and endurance of 10 – 15 year old girls living in a farming community. The study involved girls (N=38) from two schools, living on nearby farms in the North West Province. Twenty (n=20) participated in the programme, while eighteen (n=18) served as a control group. The FITNESSGRAM assessed physical fitness while ACTICAL activity monitors (Mitter, 2003) were used to analyse the intensity level (energy expenditure) of the programme. Data were analysed using Statistica for descriptive purposes, and independant t-testing, Covariance of analysis (p<0.05) and effect sizes (ES<0.8) were calculated to determine significance of pre and pos-ttest differences. The results showed that the intervention programme significantly improved all health related aspects that were evaluated. It can be concluded that an aerobic dance based programme, conducted in a playfull and enjoyable manner and according to guidelines set for health enhancement can improve aerobic endurance, leading to increased physical activity among girls in their teenage years.

Key words: Physical activity, fitness, girls, children, rural, sosio-economic status, health