

but also improved as children got older ($F(1, 226) = 4.43$, $P = 0.03$, $f = -1.847$).

Conclusions: The present study adds novel data in that multiple domains of balance performance (balance

stability, sensorimotor balance) were examined, suggesting that children within the 'normal weight' category exhibit superior balance scores compared with overweight/obese children.

doi:10.1017/S1368980012002108

36 – Patterns of physical activity in primary-school children: the effect of ethnicity

EL Eyre¹, E Smith¹, S Kumar¹, AJ Wagenmakers² and KA Matyka¹

¹Warwick Medical School, The University of Warwick, UK: ²Schools of Sport and Exercise Sciences, University of Birmingham, UK

Introduction: Ethnicity is an important predictor of metabolic health and the reasons for this are likely to be multifactorial. Differences in physical activity (PA) may contribute to this risk but few data exists in childhood.

Method: 122 (57 White EU, 36 South Asian, 29 other ethnic) children (mean age 8.5 (SD 0.5) years) wore a combined physical activity/heart rate (Actiheart, UK) monitor for 7 d.

Median daily activity counts per minute (CPM) were compared between ethnic groups using Wilcoxon signed-rank test.

Results: Examining the group as whole, PA is greater on weekdays than weekends (109 *v.* 99 cpm, =3.92, $P = 0.000$) and during school than after school (117 *v.* 99 cpm, =-3.22, $P = 0.001$). Compared with children from all ethnic backgrounds, White EU were more active

on weekdays ($u = 1376$, =-2.45, $P = 0.014$; mean rank = 70 *v.* 54, white EU *v.* all other ethnic groups, respectively) and after school ($u = 1237$, =-3.16, $P = 0.002$, mean rank = 72 *v.* 52). Subgroup analysis showed that South Asian children had no differences between weekday and weekend PA (103 *v.* 92 cpm, =1.654, $P = 0.098$) but were more active at school than after school (122 *v.* 91, =3.174, $P = 0.002$). White EU children were more active on weekdays than weekends (116 *v.* 90 cpm, =-2.24, $P = 0.025$) but did similar activity after school and during school (118 *v.* 112 cpm, =4.65, $P = 0.642$).

Conclusions: Ethnic groups exercise differently but all children engage in highest activity at school. The contribution of PA on metabolic well-being needs further investigation in vulnerable groups of children.

doi:10.1017/S136898001200211X

37 – South Asian children spend more time in light activities and less time in moderate and vigorous PA on weekdays

EL Eyre¹, S Kumar¹, E Smith¹, AJ Wagenmakers² and KA Matyka¹

¹Warwick Medical School, The University of Warwick, UK: ²School of Sport and Exercise Sciences, The University of Birmingham, UK

Introduction: South Asian (SA) children are at increased metabolic risk compared with White children. The role of physical activity in this risk is unknown. The present study compares metabolic equivalent (MET) levels in SA and White EU children.

Method: Ninety-five (54 White EU, 41 SA) children (mean age 8.4 (SD 0.5) years) wore a combined activity and heart rate monitor (Actiheart, Cambridge, UK) for 7 d. Time spent in MET levels were categorized into light (LPA),

moderate (MPA) and vigorous physical activity (VPA). Results were analysed using the Mann-Whitney test.

Results: SA children spent fewer minutes (average 7 d) in VPA ($U = 589$, =-4.12, $P = 0.000$, SA mean rank = 34.62 *v.* White EU mean rank = 39.68) and more minutes in LPA than White EU ($U = 889$, -1.82, $P = 0.034$, SA mean rank = 54.37 *v.* White EU 43.94). SA children spent fewer weekday minutes in MPA ($U = 875$, =-1.75, $P = 0.040$, mean rank 42.33 *v.* 52.31 SA *v.* White EU, respectively) and