

activity were assessed using mixed effects linear regression models in Stata 14.2.

**Results** 88.89% of children did not meet the recommended 180 min daily physical activity. Children spent a mean (SD) of 141.90 (33.10) minutes per day being physically active with 22.21 min per day (SD=9.87) in MVPA. Children spent more minutes being active on nursery days than non-nursery days (146.89 vs 137.22,  $p=0.05$ ). Boys were more physically active than girls, spending 148.95 vs 133.93 min in daily activity ( $p=0.04$ ). Older children were more physically active than younger children ( $p=0.01$ ). There were no differences in physical activity by parental education. Approximately half (50.62%) of the sample spent less than £9.00 weekly on their 2–4-year-old's physical activity. Children scoring in the highest third of PedsQL physical functioning scores had higher levels of MVPA (4.06 95% CI  $-0.41$  to 8.54,  $p$ -value 0.07). There was no evidence of a beneficial association between positive PedsQL psychosocial scores, or higher parental expenditure on physical activity, with more minutes spent being active or in MVPA.

**Conclusion** Physical activity was below the recommended 180 min of daily physical activity for this age group. Children were more physically active on nursery days. There is weak evidence of an association between better PedsQL physical scores and higher levels of MVPA. More time spent being physically active and in MVPA was not associated with higher expenditure on physical activity in this age group, but further examination in larger datasets is needed.

OP79

#### THE EFFECT OF MOVING TO EAST VILLAGE (THE FORMER LONDON 2012 OLYMPIC GAMES ATHLETES VILLAGE) ON PHYSICAL ACTIVITY AND ADIPOSITY LEVELS

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**Background** There has been increasing interest in whether the built environment influences health behaviours, but robust longitudinal evidence is limited. We assessed the effect of moving into East Village (the former London 2012 Olympic Games Athletes Village), a neighbourhood built on active design principles, on levels of physical activity (PA) and adiposity among adults.

**Methods** A cohort of 1278 adults (16+) seeking to move into social, intermediate (a mixture of shared ownership, shared equity, affordable rent), and market-rent East Village accommodation were recruited in 2013–2015, and followed up after two years. Objective measures of PA using accelerometry (ActiGraph GT3X+), body mass index (BMI) and bioelectrical impedance (fat mass %) were made. We examined change in levels of PA and adiposity, using multilevel models adjusting for sex, age group, ethnicity, housing sector (fixed effects) and household (random effect), comparing those who moved to East Village (intervention group) with those who lived outside

East Village (control group). Effects by housing sector and weekdays versus weekends for PA were also examined.

**Results** 877 adults (69%) were followed-up, half had moved to East Village. Moving to East Village was associated with a small increase in daily steps (151, 95% CI  $-233$ , 534), more so in the intermediate sector (399, 95% CI  $-211$ , 1009) than in the social and market-rent sectors, but effects were not statistically significant. There were no differences in time spent in moderate-to-vigorous PA (MVPA) or any appreciable weekday versus weekend effects. There was no evidence of differences in time spent in light PA or sedentary time both overall and by housing sector with the exception of the market-rent group in whom moving to East Village was associated with a decrease in light PA ( $-13.0$  mins, 95% CI  $-24.7$ ,  $-1.2$  mins). There were no effects of moving to East Village on BMI or fat mass% overall or by housing sector.

**Conclusion** At two-year follow-up, moving to East Village, a neighbourhood designed for healthy active living, did not have beneficial, consistent effects on objectively measured physical activity or adiposity of public health importance.

OP80

#### EFFECTIVENESS OF EUROPEAN FANS IN TRAINING (EUROFIT): RANDOMISED CONTROLLED TRIAL IN ENGLAND, PORTUGAL, THE NETHERLANDS AND NORWAY

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**Background** Despite widespread knowledge about the risks of unhealthy lifestyles, men can be reluctant to engage in lifestyle change programmes. Building on the success of the Scottish Football Fans in Training, we developed EuroFIT, a men-only, group-based lifestyle-change program to improve physical activity and reduce sitting time.

Our aim was to investigate whether EuroFIT can help men aged 30–65 years with a self-reported BMI  $\geq 27$  kg/m<sup>2</sup> to increase physical activity and decrease sitting time 12 months after baseline.

**Methods** We conducted a pragmatic, two-arm, randomised controlled trial in 15 football clubs in the Netherlands, Norway, Portugal and the UK (England). We measured participants at baseline, post-program and 12 months after baseline. Primary outcomes were objectively assessed changes in total physical activity (steps per day) and total sedentary time (minutes per day spent sitting). Secondary outcomes include self-reported food intake, weight, resting systolic and diastolic blood pressure and cardio-metabolic blood biomarkers. We conducted linear mixed effects regression analyses, including random effects for country and football club, and fixed effects for study group and baseline measurement.

**Results** 560 men were allocated to the intervention and objective measurements were achieved for 451 (81%) at 12 months; 553 were allocated to the control and objective measurements were achieved for 470 (83%). At 12 months, the mean difference in step count, adjusted for baseline steps and