



PARENTAL AND CHILDREN'S ASSOCIATION IN PHYSICAL ACTIVITY LEVELS

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INTRODUCTION

Parents play an important role in the development of their children habits, specially in lifestyle and health behavior (Erkelenz et al., 2014). The aim of the study was to examine the associations between parental physical activity and children's sedentary time, moderate and vigorous physical activity levels and steps per day.

METHOD

The sample comprised 34 subjects, both male and female, 17 parents and 17 children, aged six and seven years old, who were in their second year of primary education in a private school in Madrid. MVPA was measured during 6 consecutive days using the GT1M accelerometer (Actigraph LLC, Pensacola, FL, USA). In order to consider data valid, it was necessary to establish a minimum of 1 week and 1 weekend day and a minimum of 10 registered hour of data per day (Ekelund et al., 2004). Data were analyzed separately in week and weekend days.

RESULTS AND DISCUSSION

T- test for paired samples showed no association between parental and children's sedentary time, MVPA or steps per day. Sedentary weekdays time ($r=0.216$; $p=0.405$), sedentary weekend days time ($r=-0.293$; $p=0.405$), MVPA weekdays ($r=-0.420$; $p=0.093$), MVPA weekend days ($r=-0.386$; $p=0.153$), steps per weekday ($r=-0.425$; $p=0.89$) and steps per weekend day ($r=0.436$; $p=0.104$). Children showed significant higher values in MVPA week and weekend days ($p<0.01$) and steps per weekday ($p<0.05$), and lower in week days sedentary time ($p<0.01$).

CONCLUSIONS

Due to the small sample size we cannot draw conclusions about parental and children's physical activity association. The associations of children with parents activity may be mediated by differences in support and encouragement, not modelling.

Table 1: Sample physical activity levels.

	Children		Parents	
	Weekdays	Weekend days	Weekdays	Weekend days
Sedentary Time (min)	409.13 ± 119.15*	455,8913 ± 107.1	527.57 ± 98.19	410.55 ± 87.9
MVPA (min)	242.48 ± 60.76*	231.19 ± 71.23	41.2 ± 17.69	37.52 ± 22.82
Steps	11604.3 ± 2589.25*	10342.6 ± 3410.06	7506.29 ± 3157.24	7787.97 ± 2857.21

*Significant differences weekdays vs weekend days.



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