Title	Association of parenting practices to encourage or discourage physical activity with Hispanic preschool children's objectively measured physical activity
Author(s)	O'Connor, TM; Cerin, E; Hughes, SO; Robles, J; Lee, RE; Butte, NF; Mendoza, JA; Baranowski, T
Citation	The 12th Annual meeting of the International Society of Behavioral Nutrition and Physical Activity (ISBNPA 2013), Ghent, Belgium, 22-25 May 2013. In Abstracts Book, 2013, p. 199-200, abstract O.002
Issued Date	2013
URL	http://hdl.handle.net/10722/188041
Rights	Creative Commons: Attribution 3.0 Hong Kong License

O.001 Early childhood predictors of toddlers' physical activity

Hnatiuk J, Salmon J, Campbell KJ, Ridgers ND, Hesketh KD

PURPOSE: Identifying early influences on children's physical activity is desirable to inform the development of effective intervention strategies to optimise physical activity levels. This study examined early childhood predictors of toddlers' physical activity across the domains of maternal cognitions and behaviours, infant behaviours and the home environment.

METHOD: Data were obtained from 214 toddlers (53% male) participating in the Melbourne InFANT program. Mothers completed a survey of physical activity predictors when their child was 4- (T1) and 9-months old (T2). Based on Social Cognitive Theory Family Perspective, 9 factors and 11 individual items were identified as potential explanatory variables. The outcome measure was toddlers' physical activity assessed by ActiGraph accelerometers at 19-months (T3) of age. Data were analysed using linear regression.

RESULT(S): One factor at T1 and one factor and two items at T2 showed some association with physical activity at T3 and were included in multivariate analyses. After adjusting for age the child started walking and maternal education, the time spent with babies of a similar age at 4-months old (ß=0.05, 95% CI [0.01, 0.08]) and the time spent being physically active with the mother at 9-months old (ß=0.06, 95% CI [0.01, 0.11]) predicted physical activity at 19-months old.

CONCLUSION(S): Early influences on children's physical activity are challenging to identify. Future research is required to identify other early life predictors of physical activity and to determine whether the time spent with other babies of a similar age or being active with the mother predicts physical activity in other cohorts.

O.002 Association of parenting practices to encourage or discourage physical activity with Hispanic preschool children's objectively measured physical activity

O'Connor TM, Cerin E, Hughes SO, Robles J, Lee RE, Butte NF, Mendoza JA, Baranowski T

PURPOSE: Assess the association of parenting practices (PP) to encourage or discourage physical activity (PA) with Hispanic 3-5 year old children's objectively measured PA

METHOD: Cross-sectional study of Hispanic parent-child dyads (n= 84) who reported their demographics and frequency of using PP that encourage (structure/encouragement) or discourage (promote inactive transport, promote screen time, psychological control, and safety concerns) child PA using verified scales. Children wore Actigraph GT3X accelerometers recording 15 second epochs for 7 days. Allowing for re-wears, 82 had valid data (≥4 days, ≥1 weekend day, and ≥480 awake min/day). Data were processed using

established cut-points for preschool children. Association of PA PP with child PA was assessed with generalized linear models adjusting for demographic correlates and non-wear time on weekdays and weekends separately.

RESULT(S): Mean child age was 4.4 (±0.8) years (55% boys). On average children spent 369 (±71) min/day sedentary, 247 (±37) min/day in light PA, and 83 (±38) min/day in moderate-to-vigorous PA (MVPA). 'Promote inactive transport,' (b=21.9, p<0.05), and 'Promote screen time' were positively (b=23.5, p<0.01), while 'Have outdoor toys' was negatively (b=-10.1, p<0.05) associated with child sedentary time on weekdays. 'Promote screen time' (b=-15.0, p<0.05) and 'Not register for sports' (b=-8.8, p<0.05) were negatively associated with light PA on weekends. 'Have outdoor toys' (b=1.1, p<0.01) and 'Not register for sports' (b=0.9, p<0.05) were positively associated with MVPA on weekends.

CONCLUSION(S): PP can encourage or discourage child PA. Additional validation studies are needed to establish the association of PA PP sub-scales with child PA.

O.003   The effects of individual, family, and environmental factors on physical activity levels in children

Cadogan SL, Keane E, Kearney PM

PURPOSE: Physical activity (PA) plays a fundamental role in maintaining and improving physical and mental health, both during childhood and in later years. This study aims to identify individual, family and environmental factors that determine PA levels in a population sample of Irish children.

METHOD: Cross-sectional analysis of the first wave (2008) of the nationally representative Growing Up in Ireland study (N=8,568). A two-stage clustered sampling method was used where schools served as the primary sampling unit (response rate: 82%) and age eligible children from participating schools were the secondary units (response rate: 57%). Parent reported child PA levels and potential covariates include favourite hobby, cumulative screen time (CST), sports participation (parent and child reported) and child BMI (measured by trained researcher). Univariate and multivariate multinomial logistic regression (forward block entry) examined the association between individual, familial and environmental correlates and PA levels.

RESULT(S): The children were classified as achieving low (25%), moderate (20%) or high (55%) PA levels. In the fully adjusted model, male gender (OR 1.64 [95%CI: 1.34-2.01]), an active favourite hobby (OR 1.65 [95%CI: 1.31-2.08]) and membership of sports/fitness team (OR 1.90 [95%CI: 1.48-2.45]) significantly increased odds of being in the high PA group. Exceeding two hours CST (OR 0.66 [95%CI: 0.52-0.85]), overweight (OR 0.41 [95%CI: 0.27-0.61]; or obesity (OR 0.68 [95%CI: 0.54-0.86]) significantly decreased odds of being in the high PA group.

CONCLUSION(S): Individual factors are the most important correlates of PA. Future initiatives should be multifaceted and encompass a broad range of hobbies/activities which are currently popular among children.