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Do Australian primary school environments affect children's playground physical activity levels?

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Do Australian primary school environments affect children’s playground physical activity levels?

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The problem

- ¼ of Australian children are overweight/obese (NSW SPANS 2004)
- High BMI associated with low PA (Vincent et al 2003)
- Children’s PA
  9 years = 3 hours/day
  15 years = 35-49 mins/day (Sallis et al 1999, Nader et al 2008)

- 60 min/day for children (Dept of Health and Ageing 2007)
- Enabling environments such as schools (WHO 2002)
Schools provide access to most children

Break time contributes 70-80 mins of a child’s day

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What we don’t know

Purpose: What variables affect children's PA?

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What we did

- 13 Illawarra public primary schools - 3 days at each
- CAST2 (Children’s Activity Scanning Tool; Zask et al 2001)
Environmental variables

Area: Playground, surface & shade

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Fixed equipment

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Fixed equipment: Painted ground targets
Non-fixed equipment & access to it

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Temperature & humidity

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Observed physical activity

Activity Categories

- Low Activity
- Moderate Activity
- High Activity

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Odds ratio- significant variables

Environmental variables

- Access non-fixed equipment
- Bark, grass & sand
- Unshaded

Odds ratio

- 0
- 0.2
- 0.4
- 0.6
- 0.8
- 1
- 1.2
- 1.4
- 1.6
- 1.8

p < 0.05

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Non-significant findings

- teachers encouraging
- school area
- area for play
- shaded area
- covered play areas
- hard surfaces
- fixed equipment
- netball & basketball hoops
- humidity
Schools can **children’s PA by:**

- longer breaks
- soft play surfaces
- ball games
- painted ground targets
- non-fixed equipment
- sporting fields
Schools can make a difference to children's activity

Anne-Maree Parrish
Thank you

ICCObesity
Schools
Supervisors
Observers
Parrish family

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