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## Factors associated with sport participation amongst third class primary school pupils in Ireland: results from the Childhood Obesity Surveillance Initiative

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Obesity amongst children and adolescents is a growing problem worldwide.<sup>(1)</sup> Sport participation has been shown to increase physical activity amongst youth, and is thus a possible route to combat obesity.<sup>(2,3)</sup> The WHO European Childhood Obesity Surveillance Initiative (COSI) was established in 2008 to systematically measure childhood obesity in the European region. Ireland is one of the countries that contributes to COSI.<sup>(1)</sup> In the Irish study, data from 979 Irish primary school children who attended third class in 2010, who underwent anthropometric assessment and whose parents filled out questions on sports participation were included (response rate: 57.3 % of all children whose parents consented to the study). The objective was to identify what factors are associated with sport participation.

Parents filled out a questionnaire on several factors including the child's intake frequency of several food items, physical activity/inactivity patterns, and family's socioeconomic characteristics. Backwards stepwise binary logistic models were used to determine predictors of sport participation (no vs yes), and number of days participating in sport per week (<3 days vs ≥3 days). All variables that were significant up to a p-value of 0.10 in Chi-square analyses were included in the regression models.

Most of the children participated in sports (89.8 %) and over half did so for 3 days or more in a week (52.5 %). There was no statistically significant difference in sport participation based on gender. Children who participated in sports were statistically significantly more likely to spend ≥2 hours playing outside over weekend days (OR[95 %CI]:1.95[1.10–3.45]), and less likely to live in rented accommodation vs owned accommodation (OR[95 %CI]:0.14[0.08–0.24]). Children who participated ≥3 days in sports were also more likely to spend ≥2 hours playing outside over weekend days (OR[95 %CI]:2.00[1.32–3.00]), were less likely to live in rented accommodation (OR[95 %CI]: 0.27[0.15–0.51]), less likely to live in rural areas (OR[95 %CI]:0.56[0.38–0.81]), and less likely to watch TV for ≥2 hours per week day vs never (OR[95 %CI]:0.36[0.18–0.75]).

In the current study, both physical activity and socio-economic status factors were associated with sport participation.

1. Wijnhoven T & Branca F (2008) WHO European Childhood Obesity Surveillance Initiative. Protocol, Version January 2008. Copenhagen: WHO Regional Office for Europe.
2. Woods *et al.* (2010) The Children's Sport Participation and Physical Activity Study (CSPPA). School of Health and Human Performance, Dublin City University and the Irish Sports Council, Dublin.
3. Cadogan *et al.* (2014) *BMC Pediatrics* **14**(1), 107.