

School influences on health behaviours

DATE

13 June 2019

VENUE

NUI Galway

AUTHOR

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Introduction

- International evidence that schools matter for health behaviours but differing results concerning how much difference they make
- Little evidence in the Irish context
- Rich information from three waves of the Growing Up in Ireland study to look at school influences on health behaviours
- Draws on a larger research programme being conducted for the HSE

Outline of the presentation

1. Previous research
2. Data and methods
3. Schools as a context for healthy behaviours
4. Clusters of healthy behaviours
5. Are there differences between schools?
6. Role of school climate and (dis)engagement
7. Conclusions

Previous research

- Evidence of significant between-school variation in substance abuse internationally (Olsson, Fritzell, 2015 in Sweden; Maes and Lievens, 2003 in Flanders; Takakura et al., 2010 in Japan)
- Varying estimates of the size of the effect: 2-15% of total variation
- Stronger than the neighbourhood effect (Dunn et al., 2015; Pedersen et al., 2017)
- Other studies find between-school variation in physical activity or diet (Steenholt et al., 2018; Townsend et al., 2011) but most focus on substance use

Why should schools matter?

- School social mix:
 - More resources to spend on alcohol/drugs (Pedersen et al., 2017; Carlson and Almquist, 2016)
 - Greater disaffection (West et al., 2004)
- School climate: quality of teacher-student relationships, school engagement; discipline policies (Perra et al., 2012; Bonnell et al., 2013; Maes and Lievens, 2003)
- Facilities can matter for physical activity (Czerwinski et al., 2015)
- Measures to promote healthy eating can make a difference (Townsend et al., 2011) but evidence is more mixed

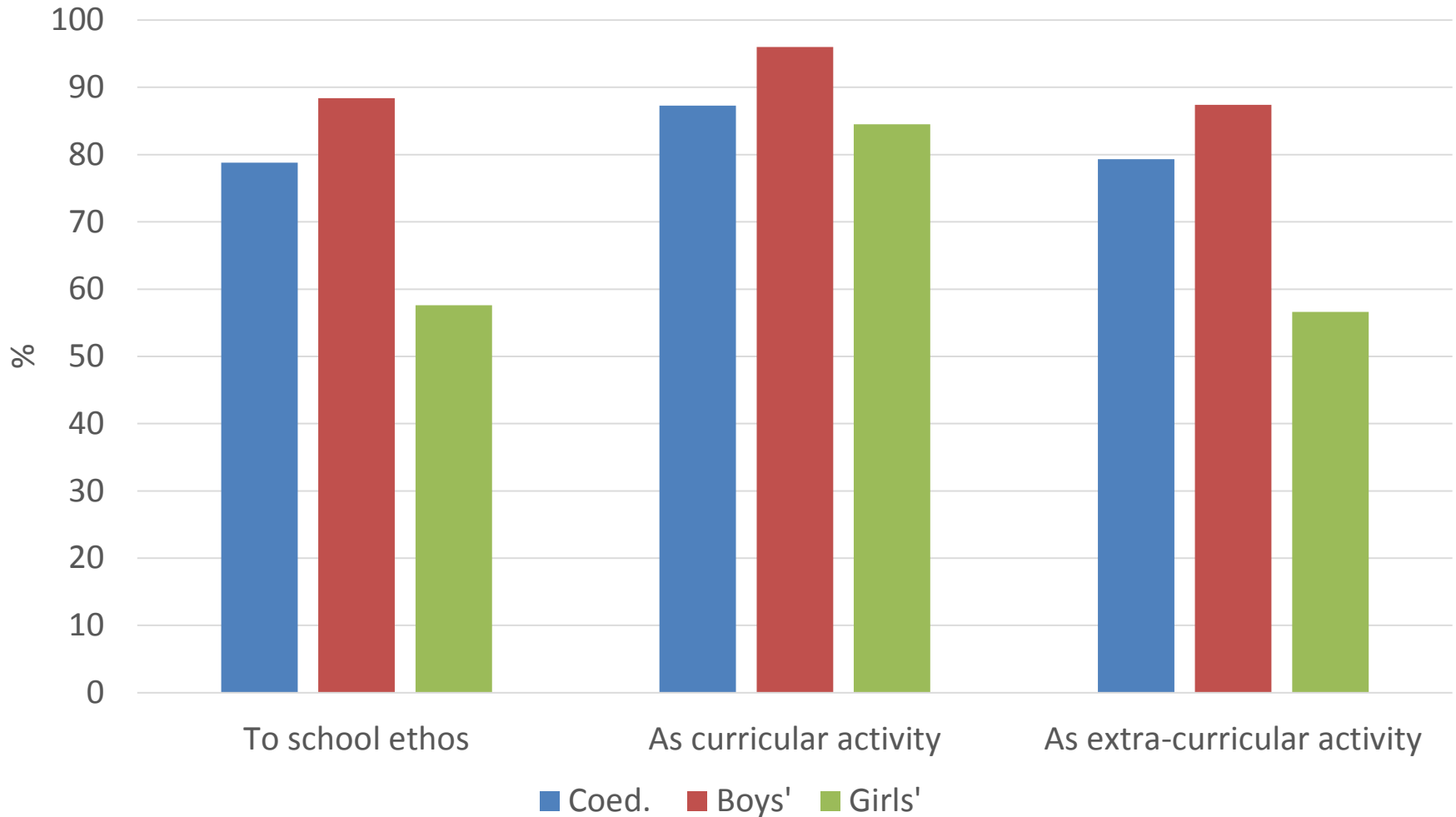
Contribution of this study

- Looks at clusters of health behaviours rather than substance use in isolation
- Focuses on the cumulative impact of schools by looking at primary and second-level effects
- Rich information on individual background and school context so can look at whether schools make a difference comparing like for like

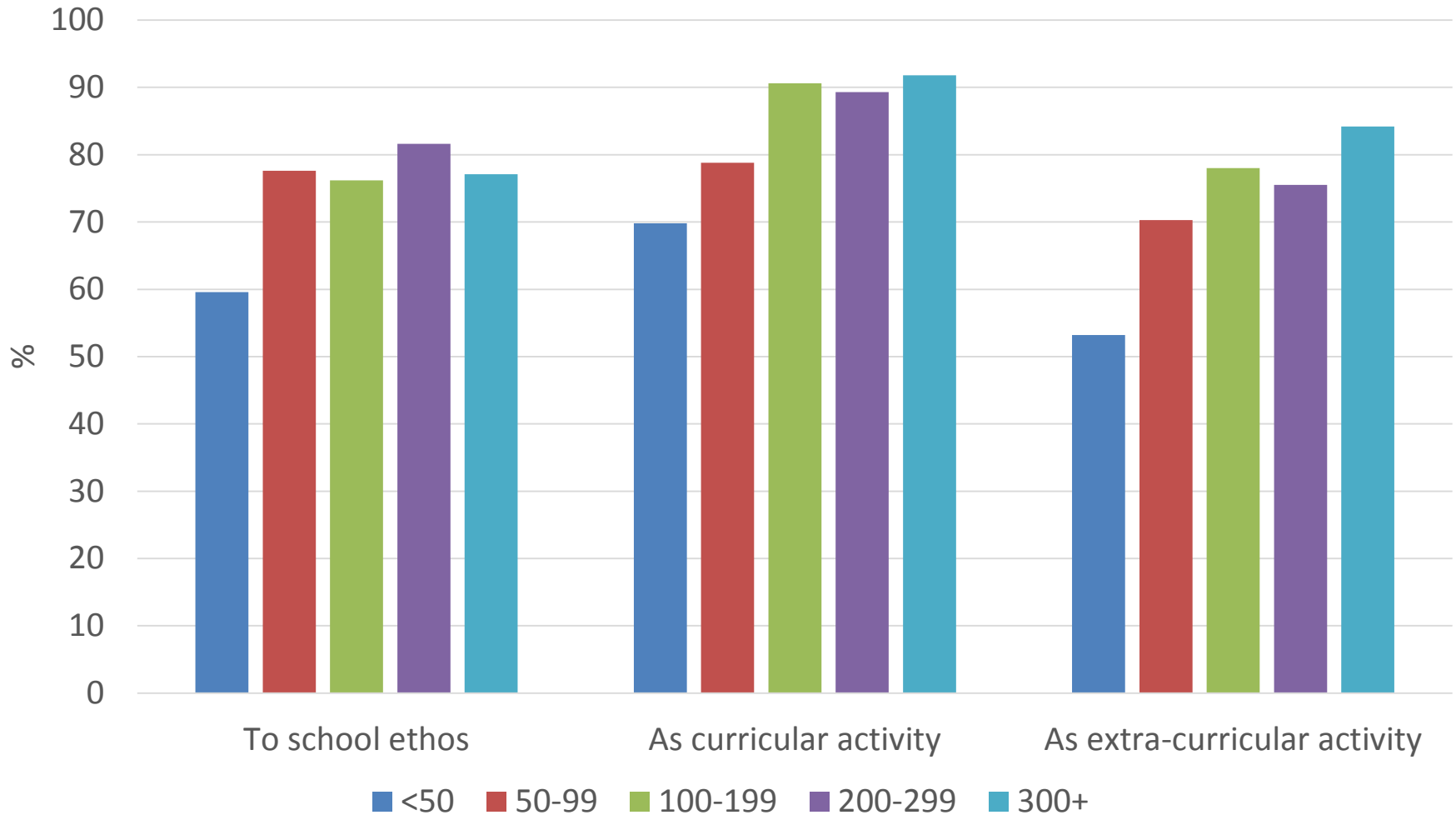
The Growing Up in Ireland study

- Three waves of Cohort '98 (the Child Cohort) conducted at 9, 13 and 17/18 years of age
- 5,750 17/18 year olds
- Outcome: clusters of health behaviour at 17/18 using latent class analysis: smoking; alcohol use; physical activity; diet
- Cross-classified multilevel models to take account of both primary and second-level school effects

Importance of PE in primary schools by gender mix



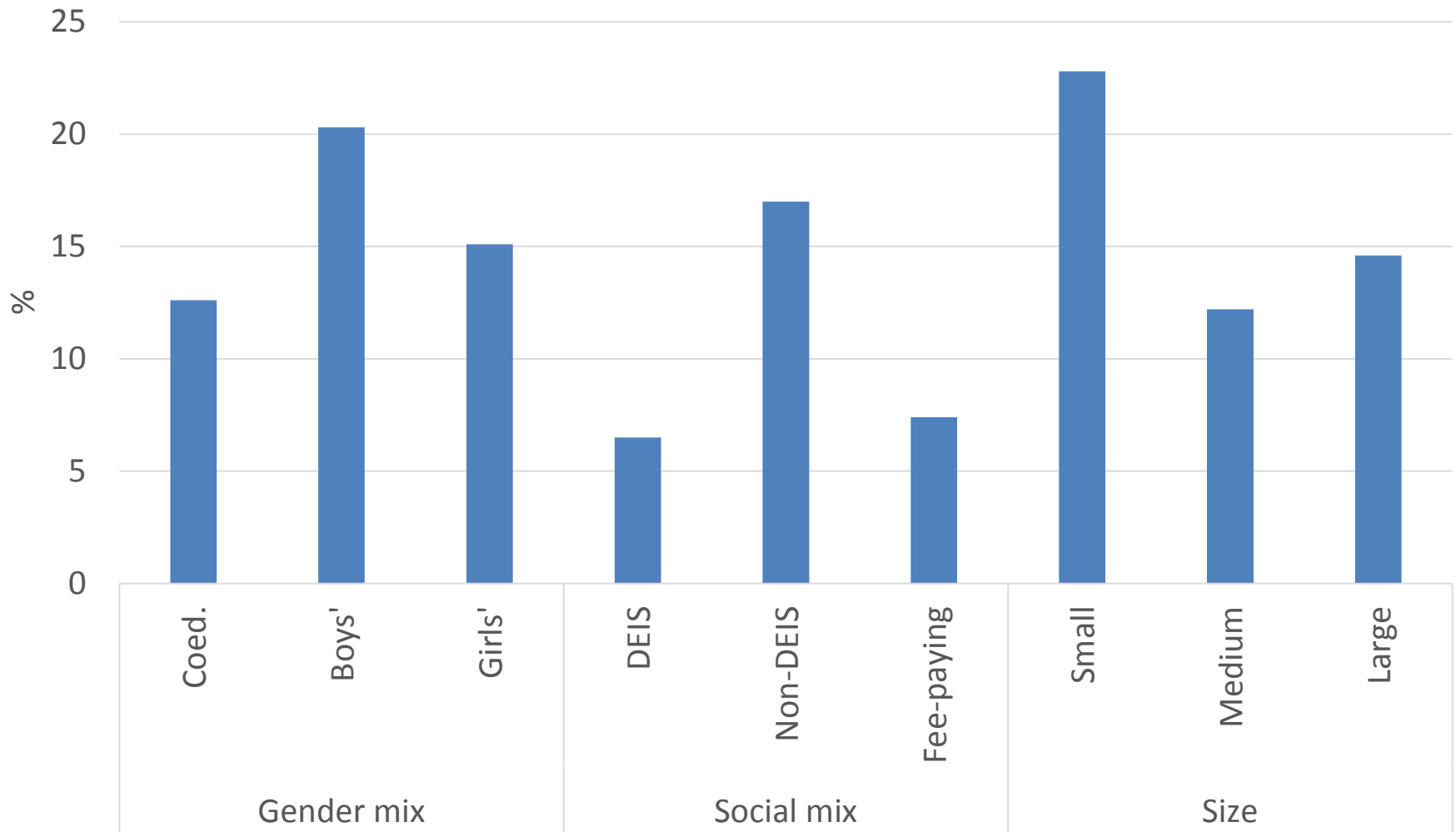
Importance of PE in primary schools by school size



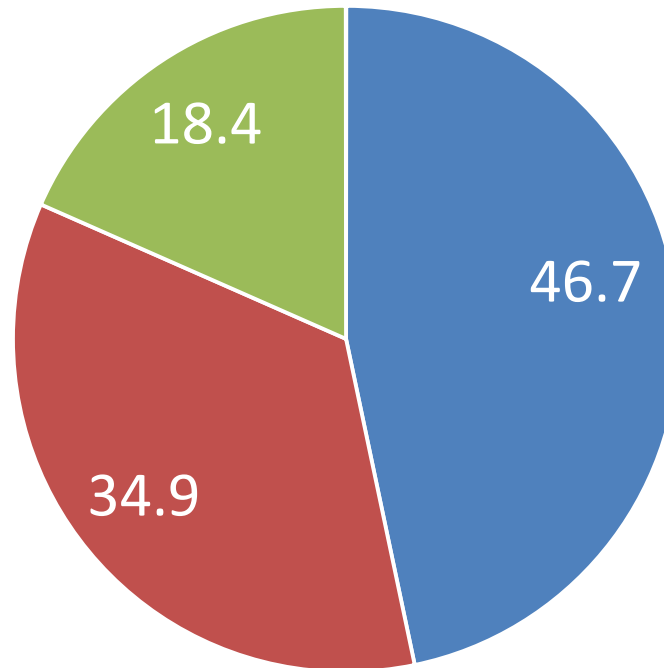
Perception of sports/PE facilities

- At primary level:
 - Worse in smaller schools
 - Excellent in fee-paying schools (and spend more time per week on PE)
- At second-level:
 - Best in larger schools
 - Better in fee-paying schools and worse in DEIS schools
 - Poorer quality in girls' schools and best in boys' schools

% in second-level schools with a lower emphasis on healthy eating policies

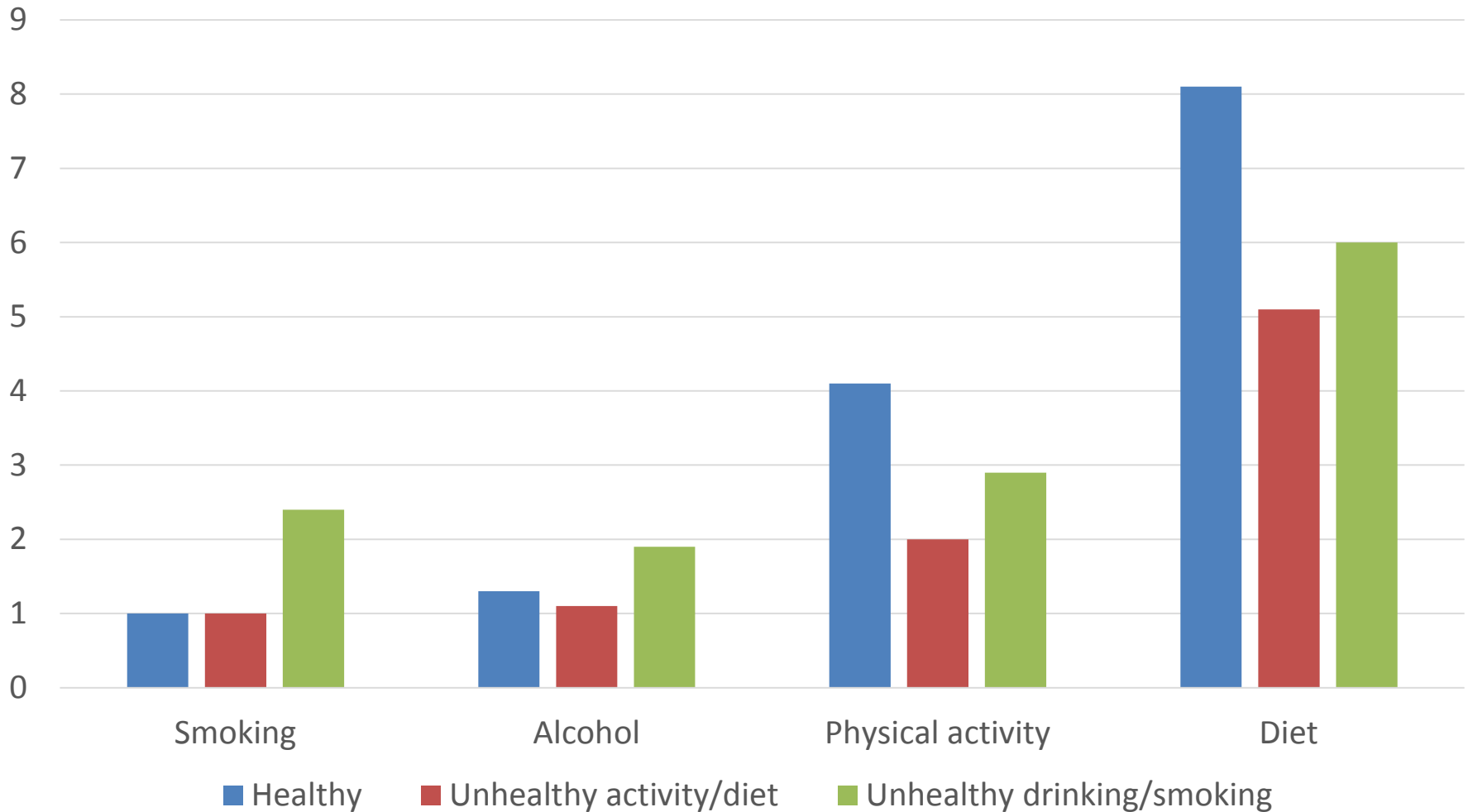


Clusters of health behaviours at 17/18



- Healthy
- Unhealthy activity/diet
- Unhealthy drinkers/smokers

Type of behaviour by cluster



Individual characteristics

Unhealthy drinkers/smokers:

- Female
- Less likely among professional/managerial group
- Less likely among highest income group
- Lone parent families

Unhealthy activity/diet:

- Female
- Mothers with lower levels of education
- Lone parent families

Between-school differences

- Very little variation by primary school attended
- Significant differences by second-level school in likelihood of being in the two unhealthy behaviour groups
- School differences in unhealthy activity/diet are explained by the type of students that attend (gender, social background)
- But school differences in unhealthy drinking/smoking are evident, even taking account of composition and a range of other factors

School characteristics

- Primary school characteristics:
 - DEIS urban band 1 schools have higher levels of unhealthy activity/diet and slightly higher rates of drinking/smoking, even taking account of their disadvantaged intake
 - No significant difference by gender mix or school size
- Second-level school characteristics:
 - DEIS schools have higher levels of unhealthy activity/diet and drinking/smoking
 - Lower rates of poor activity/diet in fee-paying schools
 - No difference by gender mix
 - Small schools have higher rates of drinking/smoking and slightly higher rates of poor activity/diet

School engagement at primary level

Unhealthy drinkers/smokers:

- Lower maths achievement at age 9
- More likely to 'sometimes' or 'never' like school at 9
- Higher levels of socio-emotional difficulties

Unhealthy activity/diet:

- Lower maths achievement at age 9
- Higher levels of socio-emotional difficulties

School engagement at second-level

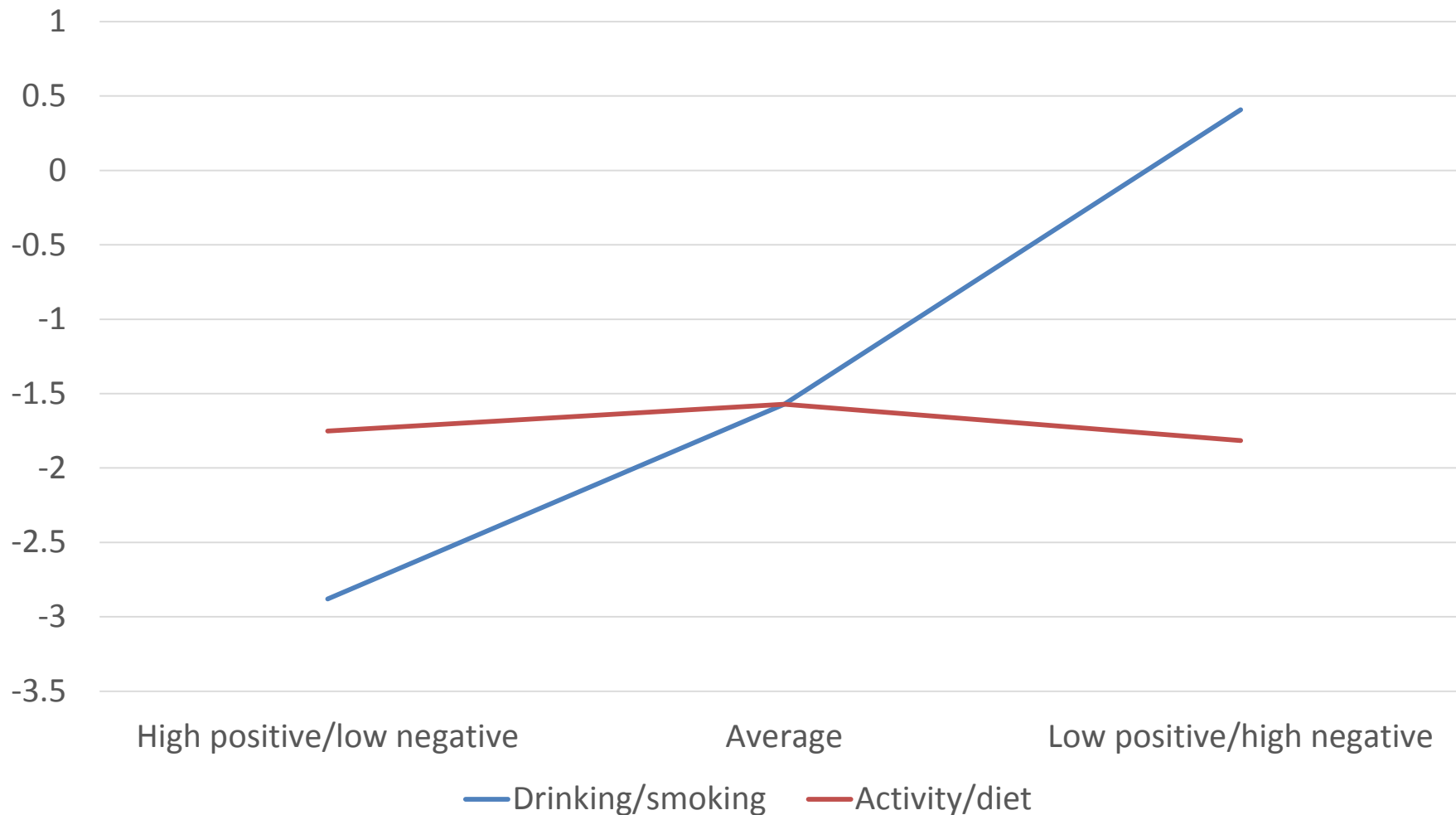
Unhealthy drinkers/smokers:

- More negative attitudes to school (at 13)
- Lower levels of positive interaction and much higher levels of negative interaction with teachers (at age 13)
- Higher levels of socio-emotional difficulties (13)
- Took fewer higher level subjects for JC
- More of their friends are older than them

Unhealthy activity/diet:

- Lower levels of both positive and negative interaction with teachers (isolation?)
- Higher levels of socio-emotional difficulties (13)
- Took slightly fewer higher level subjects for JC

Unhealthy behaviours by teacher-student interaction



School stage

- Compared to 5th years, 6th years and those who have left school are more likely to be unhealthy drinkers/smokers (strongly related to school disengagement among those who have left)
- Being in 6th year is associated with having unhealthy activity/diet, more so for females
- Differences by school social mix are explained by school engagement and school stage

The role of personality

- It could be the case that school disaffection reflects aspects of personality
- The unhealthy drinkers/smokers are less conscientious (at age 13)
- Those with unhealthy activity/diet are more agreeable and less extrovert
- The effects of school experiences and engagement do not change when personality is taken into account

Conclusions

- The second-level school attended matters for unhealthy drinking/smoking but not so much for activity/diet
- Highly gendered patterns of health behaviours and single-sex schools potentially reinforce stereotypes around PE/sports
- Differences by school social mix, especially in drinking/smoking; related to school disengagement
- Importance of school climate in influencing health behaviours; drinking/smoking as oppositional and related to peer group
- Further development of analysis: school facilities and policies; urban/rural differences; parental health behaviours

Questions for discussion

- Should schools be expected to take on the role of health promotion?
- What is their role: a site where other interventions are offered? Or a key driver of healthy behaviours?
- How can schools be used to promote healthy behaviour for those who have disengaged from school life?