Health improvement and educational attainment in secondary schools: complementary or competing priorities?

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Health and education: A “zero sum game”?

• Bonell et al. (2014) argue that resistance from policymakers and school stakeholders to implementing health improvement policies and practices is driven by perceptions of a “zero-sum game”:
  o Health improvement and educational attainment framed as competing priorities
  o Health improvement seen as diverting resource away from core business
Evidence for an association between health improvement and educational outcomes

• Reviews have shown equivocal evidence
• However, the direct effect of health improvement policies and practices on educational attainment is rarely measured:
  o Review of multi-component interventions found a mixture of positive effects on, and no impairment of, educational outcomes (Murray et al., 2007).
  o Systematic review of HPS interventions (Langford et al., 2015; Langford et al., 2014) found attendance/attainment data were rarely collected.
Aims

• This study explored associations between existing variance in the embeddedness of school health improvement policies and practices correlates and standardised markers of educational attainment.

• This offers an opportunity to test the hypothesis that attainment will be lower in schools which dedicate greater resource to health improvement.
Methods

• Data from the School Health Research Network (SHRN) School Environment Questionnaire (SEQ) in Wales in 2016.

• SEQ sections based on HPS framework

• Questions focused on several health and wellbeing issues;
  o physical activity; healthy eating; tobacco, drugs and alcohol; mental health and wellbeing; sex and relationships; health service providers; behaviour and discipline and self-harm prevention.

• Socioeconomic status (free school meal entitlement), attendance and attainment data obtained from mylocalschool.wales.gov.uk
Measures

• Overall embeddedness of health in school
• Embeddedness of physical and mental health in the curriculum
• Number of health areas covered by school policies
• Student involvement in developing policies
• Parental involvement in developing policies
• Physical activity partnerships
• Organisational commitment to health
Statistical analysis

• Spearman’s rank correlation coefficients

• Linear regression analyses to test association between health improvement variables and educational performance
  o Adjusted for SES (FSM entitlement)
  o Adjustment for prior educational performance to attempt to account for reverse causality
Results

• Health improvement data- 100/115 schools (87%)
• Educational performance data- 97/100 schools

• Correlations
  o Consistent with a hypothesis that health improvement policies and practices are associated with better educational attainment, particularly for younger students
  o No evidence that schools with higher levels of health improvement practices had better educational attainment in previous years
Results

• Key stage 3 (11-14 years)
  o Significant correlations of educational performance with:
    o Overall embeddedness of health in school, embeddedness of physical health in curriculum, coverage in written policies, parental involvement, student involvement and partnerships.
  o Once the composite measure of embeddedness of health was included within the model, the proportion of variance in educational performance explained increased to two-thirds ($r^2=0.67$).
Conclusions

• **No support** for the hypothesis that **increased health improvement policies and practices** within schools compromises educational performance.

• Hence, **concerns** which have driven an increasingly narrow focus on educational metrics, and which to date have been largely untested by public health researchers, appear to be **unfounded**.

• Some evidence that **schools with a higher emphasis on pupils’ health and wellbeing tended to do better educationally**.
Implications

• Encourage schools and educational policymakers that implementing health improvement policies and practices will not have a detrimental effect on students’ educational attainment.

• Expansion of SHRN to all schools in Wales offers future opportunities to explore:
  - Role of health in reducing or exacerbating SES inequalities in educational performance
  - Potential mechanisms linking health and educational performance
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