School environments and student health

A systematic review of qualitative research finds that the need for pupils to ‘act tough’, unsupervised areas, poor relationships with teachers, and wanting to ‘escape’ the premises at lunchtime are associated with risky health behaviours in school pupils.

Overview: The social and physical aspects of schools can put young people at risk of poor health behaviours, such as substance abuse (Fletcher et al. 2008) and unhealthy eating (Wills et al. 2004). School-based programmes aimed at educating children about healthy and unhealthy behaviours, such as those targeted at smoking (Thomas et al. 2013) or alcohol misuse (Foxcroft and Tsertsvadze 2011), appear to have limited effectiveness. Interventions that target the school environment could potentially improve young people’s health, in particular with respect to violence, aggression and physical activity (Bonell et al. 2013).

Current advice: The NICE guideline on school-based interventions for the prevention of alcohol use and smoking (currently being updated) recommend that tailored education on alcohol and tobacco use should be included in school curricula. In addition, schools should develop a whole-school smokefree policy in consultation with young people and staff as part of a wider healthy school strategy on wellbeing, sex and relationships education, drug education, and behaviour.

The NICE guideline on physical activity and the environment recommends that school playgrounds are designed to encourage varied, physically active play. The guideline on promoting physical activity for children and young people recommends that schools should consult with children and young people to identify local factors that may affect whether or not they are physically active. Schools should also remove locally identified barriers to participation, such as lack of privacy in changing facilities, inadequate lighting, poorly maintained facilities, and lack of access for children and young people with a disability.

The NICE Evidence Updates on school based interventions to prevent the uptake of smoking among children and young people and physical activity and the environment highlight and provide commentary on selected new evidence published since the respective NICE guidelines were issued.

New evidence: Jamal et al. (2013) did a systematic review to assess how social and physical aspects of the school environment influence health outcomes among students. A total of 19 qualitative studies were identified that assessed the effects of the school environment on students’ aggressive behaviours, substance use (smoking, drinking and drug use), diet, sexual health, and toilet use. These studies were largely from the USA (n=10) or UK (n=6) and mostly conducted in disadvantaged urban contexts (n=13). The studies were then synthesised using a meta-ethnographic method, a technique for combining findings from qualitative research by translating concepts and metaphors across studies.

The synthesis identified 4 common ways in which the social and physical aspects of the school environment influenced student health:
• Identity construction and bonding
• Physical spaces at school
• Teacher–student relationships
• ‘Escaping’ the school environment.

An important source of student collective identity and bonding was ‘acting tough’ through aggressive behaviour and substance use, in particular in schools where students felt unsafe or educationally marginalised. Physical spaces that were unsupervised, such as staircases and empty classrooms, were reported as ‘hot spots’ for health risk behaviours. In addition, chaotic and aesthetically unappealing school dining spaces were linked with poor student diet. Teachers’ inability to identify with the lives of students and their inconsistency in applying rules were implicated in adverse health consequences, as was lack of consultation with students on school rules. Students reported a need to ‘escape’ the school environment at lunchtime, which was associated with negative health behaviours such as smoking or eating junk food.

The authors suggested that interventions targeting the social and physical environment of schools could be used to promote good health in students. For example, enhanced supervision and monitoring of school spaces could reduce risky health behaviours among students, and improving the social aspects of school food environments could promote healthy eating. The authors cautioned that their review included low quality studies and that their findings may apply only to schools in urban disadvantaged areas.

Commentary: “This evidence endorses the view that taking action to target social interaction and providing a carefully designed environment will improve the health and wellbeing of young adults in the school environment. Within our group of schools we have replicated practices used in more challenging schools, such as teachers and students taking breakfast and lunch in the same environment, no staffroom, one to one support available every evening, and vertical tutor groups covering the age range 11–18. These experiences, which are not widespread in educational circles, have successfully enhanced student wellbeing and health behaviours. Ofsted noted that children at the Thomas Telford School, for example, have ‘strong and caring’ relationships and ‘know how to stay healthy’ (Ofsted Report 2009).

“Common practice in schools in relation to influencing students’ health behaviour is not very clear, and more needs to be done to address the issue nationally. Decisions need to be made at a political level to support progress. A pilot programme of action within a region or across a group of schools is needed.

“Social behaviour challenges are greater now than in any other period of education in the UK. We must therefore find new ways to address these issues by focusing on the particular areas identified by Jamal et al. (2013), including the use of latest technologies.” – Sir Kevin Satchwell, Headmaster, Thomas Telford School, Shropshire

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