

Implementation of health promotion in schools: a realist review

1.	Project reference:	Final report date:	
	SPHR-PEN-PH1-SHP	September 2013	
2.	Project title:		
	Implementation of health promotion in schools: a realist review		
3.	Lead investigator(s) on project:		
	Dr Rob Anderson, Associate Professor of Health Economics and Evaluation, University of Exeter Medical School		
	Other NIHR School collaborators on project:		
	Key NIHR SPHR collaborators were: Helen Buckley Woods, Information Specialist, SchARR, Sheffield University (information specialist on the review) Prof. Rona Campbell, Professor of Public Health Research, School of Social and Community Medicine, University of Bristol (involved in coordinating our dissemination and implementation activities)		
	Names and roles of others involved in project (e.g. include fixed term contract researchers and external collaborators / partners):		
	Co-investigators: Mark Pearson, Roy Chilton, Charles Abraham, Katrina Wyatt, Tamsin Ford - (UEMS, Peninsula/Exeter)		
	Helen Buckley Woods (SchARR, Sheffield)		
	The following people from collaborating SPHR centres have provided comments and advice to the project by telephone and e-mail: Rona Campbell (Bristol), Liddy Goyder (Sheffield). So also has Chris Bonell (at the time University of Oxford, now UCL/Institute of Education)		
4.	Project start date:	Project end date:	Duration:
	1 st April 2012	30 th April 2013	12 months
5.	Project objectives originally outlined in proposal:		
	REVIEW OBJECTIVE To use a theory-driven evidence synthesis to identify what influences the successful implementation of health promotion in UK schools. The review will have two phases:		
	Phase 1 will identify programme theories about implementation (ideas about what enables or inhibits effective health promotion to be delivered in a school-setting) from a range of published and other sources. Phase 2 will test these programme theories, using published and unpublished empirical evidence, through the process of reasoning detailed under 'Data synthesis'.		

REVIEW QUESTIONS

a) What are the main factors or mechanisms that are thought to explain the success or failure of the implementation of health promotion in schools?

b) Is there an association between these factors and mechanisms and the successful implementation of health promotion in schools?

c) For what public health problems and in what circumstances do schools provide a feasible and sustainable setting for effective health promotion in the UK?

In addition, to inform Phase 1 and 2 of the realist systematic review, we conducted a rapid review of systematic reviews to identify some of the key dimensions on which school-based health promotion programmes differ and identify some initial programme theories (ideas about how programmes aim to achieve their goals). This also enabled a preliminary assessment of the amount of relevant published research from UK school settings.

This systematic review is registered on the PROSPERO database (registration number: CRD42012002640)

6. Briefly describe and explain the reason(s) for any changes to the project originally outlined in proposal:

We had initially aimed to create a network (e.g. online community or e-mail distribution list) of public health practitioners, researchers, programme developers, teachers, school nurses and others involved and interested in the implementation of health promotion in schools. The demands of conducting and completing the realist systematic review however needed to take precedence. However, this may still be feasible as part of our dissemination processes, and the perceived need for such a network will be investigated as part of our plans for sharing the project's findings (see below).

7. Brief summary of methods, findings against objectives, and conclusions (2-4 pages max):

a) What are the main factors or mechanisms that are thought to explain the success or failure of the implementation of health promotion in schools?

The evidence synthesised in Phase 1 of our review suggested that different factors or mechanisms were believed to be important at different stages of implementation: from pre-implementation (planning and consultation), through initial implementation, to recurrent or ongoing embedding into routine practice. Another set of factors - relating to the definition of core (essential) from peripheral (optional, flexible) components of the programme and the tailoring or evolution of programme content and delivery mode - was believed to be important at all stages of implementation.

This phase of the review also revealed the wide range of stakeholders that influence the successful implementation of health promotion in schools, including: headteachers, teachers, pupils, school governors, school nurses, school administration/office staff. At a regional and national level, frameworks such as the national curriculum, PHSE (Personal Health & Social Education), SEAL (Social and Emotional Aspects of Learning) and national strategies for school nursing also provide opportunities and constraints to the feasibility and sustainability of different programmes in particular schools.

The main factors from this phase of the review are summarised in the diagram on the following page (in green boxes) together with the main stakeholders in schools with a role in allowing or implementing health promotion in schools.

- National policy
- Local & regional (administration, leadership, working relationships)
- Societal & community norms

Pupils

Parents or carers

Head teachers & teachers

School administration

Other stakeholders (e.g. school nurses)

Preparing for implementation

- Consultation (information; eliciting views; sharing experience; facilitating discussion)
- Identifying potential local health benefits
- Concordance ('fit') of the programme with current practice and interests
- Identifying clear aims, priorities, intended outcomes
- School resources & competencies

Initial implementation

- Integration into school policy; support by governors and senior staff
- School staff using their leadership skills to co-ordinate activities or resources
- Personal and professional development of those who will deliver the programme
- Pupil engagement (modes of delivery; support materials)

Embedding into routine practice

- Reconciliation of stakeholders' goals
- Co-ordination of organisational decisions
- Building on staff-pupil relationships; harnessing enthusiasm and knowledge
- Retention of programme knowledge
- Responsibility for programme delivery rooted in school
- Continuing feedback, encouragement and expectations about implementation

Adaptation and evolution

- Specificity about 'core' & 'peripheral' elements
- Scope for 'mutual adaptation' between programme and people delivering it
- Scope for evolution and updating of programme content and mode of delivery over time

b) Is there an association between these factors and mechanisms and the successful implementation of health promotion in schools?

The second phase of our realist review used published empirical evidence to 'test' and refine the theories developed in phase 1. Most of the evidence related to the earlier phases of implementation (pre-implementation and initial implementation) with relatively less relating to embedding programmes into routine practice or the adaptation and evolution of programmes to different school, class or local circumstances. Evidence relating to our theories and sub-theories of embedding into routine practice was only found in 9 of the 41 included sources (relating to 8 of the 20 UK programmes). Similarly, evidence relating to our theories and sub-theories of adaptation and evolution was only found in 14 of the 41 included sources (relating to 11 of the 20 UK programmes).

The evidence synthesis sought evidence to corroborate, challenge or refine our selected programme theories and sub-theories from Phase 1. Published evidence enabled us to generate a number of evidence summaries under the following headings:

The summaries are reproduced below as our answer to the main and final question of our review.

c) For what public health problems and in what circumstances do schools provide a feasible and sustainable setting for effective health promotion in the UK?

Programme theory 1: Pre-delivery consultation

Whilst the rigour of the underlying evidence is highly variable, it is reasonable to suggest that the nature of a health promotion programme and the recent school history of delivering programmes on the topic, impact on the extent and depth of pre-delivery consultation that is likely to be necessary. A more 'mature' and uncontentious area of health promotion such as physical activity, where existing organisational networks provide a foundation to support programme delivery, is likely to require substantive but brief 'pre-delivery' consultation with school staff and parents. Where aspects of health promotion are less well-established, such as social and emotional issues in SRE, and where the topic may be a highly-charged personal issue for teachers (for example, in terms of morality and sexual identity), more extensive 'pre-delivery' consultation with school staff and parents is likely to be necessary. Areas of health promotion such as healthy eating and smoking prevention, whilst relatively uncontentious, may still require significant pre-delivery consultation, especially where a programme contains novel components with which school staff are unfamiliar.

Programme theory 1: Pupil engagement

Making a health promotion programme appealing to pupils is not necessarily straightforward. Programmes need to be developmentally appropriate and address issues perceived as relevant by pupils, whilst at the same time stretching pupils' understanding of health issues that may lie well outside of their experience or understanding. 'Sweeteners' can play an important role - pupils are strategic thinkers themselves and may well respond to the 'multiple pay-offs' that a programme can offer, such as the development of transferable educational or life skills. None of these more complex considerations should pressurise programme designers and school staff into overlooking the potential of a simple 'hook', such as the novelty of an external provider, for engaging pupils' attention.

8.	<p>Plain English Summary (400 words max) Please provide a summary of the project, including background, findings and conclusions:</p> <p>We conducted a review of evidence to identify what influences the successful implementation of health promotion in UK schools. The review aimed to answer the following questions:</p> <p>a) What are the main factors that are thought to explain the success or failure of the implementation of health promotion in schools? b) Is there an association between these factors and the successful implementation of health promotion in schools? c) For what public health problems and in what circumstances do schools provide a feasible and sustainable setting for effective health promotion in the UK?</p> <p>This is the first review of implementation of health promotion programmes in schools to have been conducted using a recognised and fully-documented review method. We have been able to improve understanding of transferable mechanisms rather than simply identifying generic implementation processes. Our review has refined existing conceptual frameworks and used evaluations in UK schools of a range of health promotion topic areas to specify particular mechanisms operate in certain contexts to produce outcomes.</p> <p>Our findings have identified key transferable mechanisms (e.g. reciprocity) that impact on implementation and which apply to both teachers and pupils. We have also been able to specify how an accepted principle of implementation, such as congruence between existing school activities and proposed health promotion activities, can operate differently (but beneficially) according to context - for example, by meeting unmet needs, complementing existing activities, or driving change so that congruence is achieved. Our findings have also identified where the mechanisms that underpin implementation differ between primary and secondary schools, and between health promotion topics. For example, we have been able to specify the actions that senior school figures should take in order to provide support the implementation of a health promotion programme.</p>
9.	<p>Keywords Please provide up to 8 keywords that relate to the research undertaken in this study:</p> <p>Health promotion, health education, schools, implementation, realist review, feasibility, sustainability, children</p>
10.	<p>Dissemination – please detail planned or published articles in peer-reviewed journals (including web links):</p> <p><u>Articles and reports</u></p> <p>NIHR Signal - How to successfully implement a school-based health promotion programme. 1 Mar 2016. http://bit.ly/1RBMLfW Commentary on Pearson M, Chilton R, Wyatt K, et al. Implementing health promotion programmes in schools: a realist systematic review of research and experience in the United Kingdom. <i>Implement Sci.</i> 2015;10(1):149.</p> <p>Pearson M, Chilton R, Wyatt K, Abraham C, Ford T, Woods HB, Anderson R. Implementing health promotion programmes in schools: a realist systematic review of research and experience in the United Kingdom. <i>Implementation Science</i> (2015) 10:149 DOI: 10.1186/s13012-015-0338-6 https://goo.gl/ODpnqh</p> <p>Pearson M, Chilton R, Buckley-Woods H, Wyatt K, Ford T, Abraham C, Anderson R. (2012) <i>Implementing health promotion in schools: protocol for a realist systematic review of research and experience in the United Kingdom (UK)</i>. <i>Systematic Reviews</i> 2012 1:48. doi:10.1186/2046-4053-1-48. PROSPERO database (registration number: CRD42012002640) https://goo.gl/AKQWwU</p>

Bonell C, Humphrey N, Fletcher A, Moore L, Anderson R, Campbell R. *Why schools should promote students' health and wellbeing*. BMJ, 2014; 348 (may13 2): g3078 DOI: 10.1136/bmj.g3078 (editorial) <https://goo.gl/KeE2EV>

Chilton C, Pearson M, Anderson R, (2015) *Health promotion in schools: a scoping review of systematic reviews*. Health Education, Vol. 115 Iss: 3/4, pp.357 – 376 DOI: 10.1108/HE-03-2014-0033 <https://goo.gl/xZP1dM>

Conference presentations

Lovell R, Husk K, Cooper C, Stahl-Timmins W, Garside R. Environmental conservation activities for health: building on systematic review methods to consider a disparate, dispersed, and limited evidence base. Public Health Science Conference (The Lancet), Glasgow, 19 Nov 2014.

Anderson P, Pearson M, Chilton R, Buckley-Woods H, Ford T, Wyatt K, Abraham C. *Implementing health promotion and illness prevention programmes in schools: A mixed methods systematic review of research and experience in the UK*. NIHR SPHR Annual Scientific Meeting. London, 8 Oct 2013.

Anderson R. *Understanding programme implementation through evidence synthesis: reflections from a realist review of introducing, adapting, and embedding health promotion in schools*. Australasian Evaluation Society annual conference, Brisbane, 2-6 Sept 2013.

Anderson R. *Implementing health promotion in UK schools: a systematic realist review of evidence*. NIHR SPHR Annual Scientific Meeting, Sheffield, 10 Oct 2012.

Anderson R, Pearson M, Chilton R, Buckley-Woods H, Wyatt K, Ford T, Abraham C. *Implementing health promotion in UK schools: a systematic realist review of evidence*. NIHR SPHR Annual Scientific Meeting, Sheffield, 10 Oct 2012. (poster)

Seminars and workshops

Anderson R, Pearson M. *Feasible and sustainable school health promotion: what are the essentials?* Promoting Health in Schools: Reviewing the Evidence, Setting the Agenda: Symposium, hosted by DeCIPHER. London, 28 Apr 2014. (workshop)

Anderson R. *Evidence related to promoting health with or in schools, or through changing the school environment*. Evidence into Practice meeting hosted by Public Health England. London, 13 Dec 2013. (presentation)

11. Public and participant involvement **Please provide comment on your experiences, any changes made and lessons drawn:**

Representatives from the following organisations or projects attended or commented as part of our Review Advisory Group: Devon PCT, Cornwall Healthy Schools Programme, Isca College of Media and Arts (secondary school), Public Health Wales (and the 'PROMISE' & 'PACES' NIHR-funded trials in schools to evaluate group CBT in schools to prevent low mood and depression)

In addition, the "Reviewing the Evidence, Setting the Agenda: Symposium (hosted by DeCIPHER. London, 28 Apr 2014) and the "Evidence into Practice meeting" (hosted by Public Health England) involved a range of stakeholders from local education departments, the PSHE Association, and others who work in or with schools.

12. What impact has the research already achieved or what might it achieve? (i.e. policy, practice, academic):

Evidence into Practice meeting hosted by Public Health England (13th December 2013):

One of four presentations of evidence related to promoting health with or in schools, or through changing the school environment. (Including attendees from Public Health England, NICE, Institute of Education, PSHE Association, UCLPartners, Mentor UK) Led to the following action points (see e-mail from Claire Robson, PHE, 18th December 2013):

1. For a recommendation to go from the group to NIHR and the Education Endowment Foundation that school based interventions should generally be evaluated for both their health and education impacts on students, and that this should be built into future research proposals
2. For representatives from the academic institutions to draft an editorial to the BMJ and Education equivalent (TES?) highlighting research concerning the link between education and health outcomes. The group should also consider the CMO and the Head of Ofsted being approached to be authors or advocates of this.**
3. Claire Robson and Fiona Brooks to distil key messages from the range of evidence presented and test back with the authors of the research and for this to form the basis of a briefing for i) Headteachers and strategic commissioners ii) implementers & programme deliverers (including teachers)
4. PHE to establish a process to facilitate ongoing discussion between research and practitioners regarding the translation of evidence into practice

*** This became the following Editorial:*

Bonell, C., Humphrey, N., Fletcher, A., Moore, L., Anderson, R., Campbell, R. Why schools should promote students' health and wellbeing. British Medical Journal. 2014; 348:g3078.

Promoting Health in Schools: Reviewing the Evidence, Setting the Agenda: Symposium, hosted by DeCIPHER (London, 28th April, 2014)

Rob Anderson and Mark Pearson ran an afternoon workshop on: 'Feasible and sustainable school health promotion: what are the essentials?'

With input from relevant collaborators and contacts we ran an exercise to elicit views on which of our review findings were highest priority/most actionable, and for whom/which audience, to develop:

- a. A summary for Developers and Deliverers of HP programmes in schools
- b. A summary for Headteachers and others who work in schools
- c. A summary for Service Commissioners (health and education)

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Department of Health Disclaimer:

The views and opinions expressed therein are those of the authors and do not necessarily reflect those of the NIHR School for Public Health Research, NIHR, NHS or the Department of Health.