

Health Topic: Adolescent Self-Harm in the UK

The Development Phase of a Complex Public Health Intervention: THE INTERVENTION THEORY

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SUMMARY: This is the model of the intervention theory¹ that informed the design of a complex public health intervention in a UK county (2013-2015) to support **secondary school pupils at risk of developing initial self-harming behaviours**. It was designed through the concerted action of key stakeholders in health, child welfare, education and social science, due to concerns about the increasing self-harm rate within the adolescent population group². As self-harm is a complex behaviour³, and the evidence-base for effective interventions is sparse⁴, the development of protective factors⁵ within education, health and social care environments were targeted. A synergy of theoretical models from neuroscience⁶ and social science⁷ informed the intervention's logic model. An ecological systems-based public health approach⁸ was utilised to embed these protective factors across the contexts that influence young people. The overarching framework was the Local Safeguarding Children Board (LSCB), which operationalised the statutory mandate⁹ for inter-agency working to safeguard and promote the welfare of children: adolescent self-harm in UK school settings resides within county-wide child safeguarding and protection protocols. The intervention's development phase utilised the Medical Research Council's (MRC) guidance¹⁰ on complex interventions to improve public health, and the methodological knowledge transfer from the MRC Population Health Sciences Research Network (PHSRN)¹¹.

BACKGROUND CONTEXT: Self-harm has a strong prevalence within adolescent populations in Europe¹², and a potent relationship with suicide¹³. In the UK, adolescent self-harm hospital admissions are rising each year¹⁴. These statistics reflect the "tip of the iceberg", with the majority of incidents hidden from public health networks¹⁵. This invisibility creates barriers to: epidemiological information; the planning and evaluation of evidence-based support; health management within the complexity of adolescent self-harming behaviours to ensure recovery and healthy adolescent trajectories¹⁶. It is also a serious health risk for this population group, and accidental death from self-harm is one of the common causes of injury-related adolescent death¹⁷. Schools are posited as key settings where support could be delivered¹⁸. From this initial project, there are now CURRENT RESEARCH (see A) strands within DECIPHer situated upon understanding the school-based context further in regards to adolescent self-harm.

MODEL of Intervention Theory Ecological Systems-based Public Health Approach⁸



Target Population & Setting: Secondary school pupils in UK county.
Targeting Risk Behaviours: Risk of pupils using initial self-harm as maladaptive emotional regulation coping strategy, due to emotional difficulties and emotional dysregulation being present. In the UK adolescent self-harm is defined in public health services¹⁹ as when an adolescent (13 to 19 years old) intentionally damages or injures their body, usually as a way of coping with, or expressing, overwhelming emotional distress.
Intervention: A Local Safeguarding Children Board pilot programme centred upon providing system-level support for adolescents with emotional difficulties, who do not have co-existing mental health issues, who may be at risk in developing the use of initial and low level self-harming behaviours as a maladaptive emotional regulation strategy for themselves.
MRC Process Evaluation Framework¹. Intervention theory is built from *causal assumptions regarding how the intervention will work in context*, which in this case is the ecological systems-based public health approach. The model outlines the system-level support in each of the contexts.

MODEL DETAILS: Points 1 to 6 in the model outline the contexts for the adolescent self-harm in schools county-wide public health promotion intervention, and give details of each of the specific strands of the intervention within each of these contexts.

An ecological systems-based public health approach for secondary school pupils' health promotion means focussing support not just upon the individual, but also the social environment.

This includes using a systems-based health planning perspective with a lens focussed across the individual (knowledge, attitudes & skills), interpersonal (social networks) schools (environment, ethos), community & public policy⁸.

Each of the individual strands within this model are DYNAMIC and interact with each other. They are therefore designed to facilitate an adaptive & synergistic system for public health promotion.

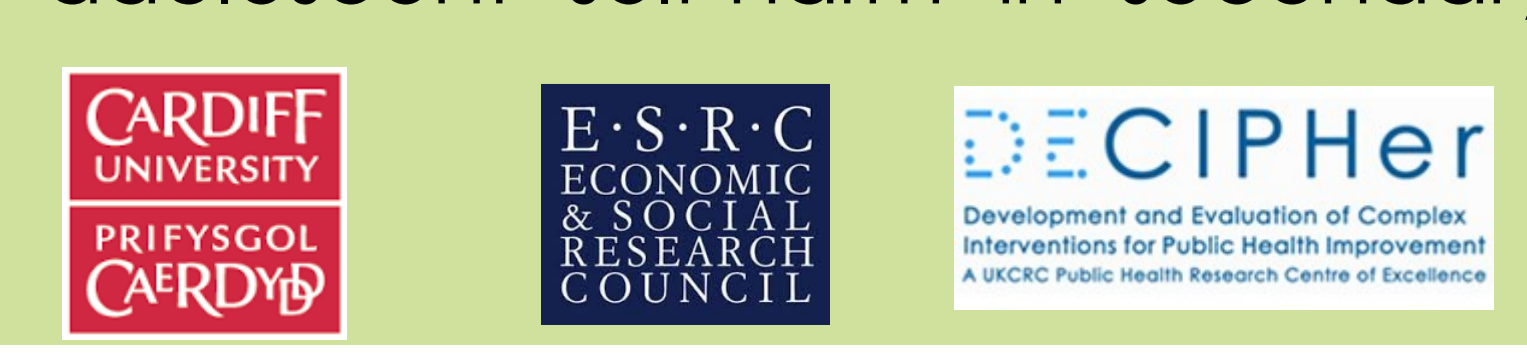


(A) CURRENT RESEARCH
(I) Evans, R & Hurrell, C. 2016. The Role of Schools in Children & Young People's Self-harm & Suicide. Systematic Review & Meta-ethnography of Qualitative Research. *BMC Public Health*, 16 (401) (Online). DOI 10.1186/s12889-016-3065-2
(II) Evans, R., Russell, A.E., Mathews, F., Parker, R., the Self-Harm & Suicide in Schools GW4 Research Collaboration & Janssens A. 2016. *GW4 Children & Young People's Self-harm & Suicide Research Collaboration: Report*. Available from: <http://medicine.exeter.ac.uk/research/healthresearch/childhealth/child-mental-health/>
(III) Parker, R. 2017. Talking About Teen Self-Harm. Research project (in progress) focussed on understanding the school-based context, through participatory learning approaches with pupils & staff to support talking about self-harm as an adolescent health topic in schools.

For the Summary Report of this presentation topic see:
Parker, R. 2015. *Targeted Mental Health in Schools: Adolescent Self-Harm Intervention*. (Online). DOI: 10.13140/RG.2.2.21382.78401 Available at: https://www.researchgate.net/publication/309320965_Targeted_Mental_Health_in_Schools_Adolescent_Self-Harm_Intervention_Pilot_Programme_Report_2015

Get in Touch about the Project:
For more details about this work, or the current DECIPHer research projects about adolescent self-harm in secondary schools, please contact:
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References:
1. Moore, G., Audrey, S., Barker, M., Bond, L., Bonell, C., Hardeman, W., Moore, L., O'Connell, A., Tivari, T., Wight, D. & Baird, J. 2015. Process Evaluation of Complex Interventions. *Medical Research Guidance*. BMJ, 350, h1258
2. Hospital Episodes Statistics Analysis Team. 2015. *Count of Finished Admissions Episodes in England for Self-Harm (for ages 10 - 19 years) for 2006 to 2015*. Leeds: Health and Social Care Information Centre.
3. Royal College of Psychiatrists. 2010. *Self-Harm, Suicide & Risk. Helping People who Self-Harm*. London: Royal College of Psychiatrists.
4. Hanton, K., Witt, K.G., Taylor Salisbury, T.L., Avenham, E., Cornwell, D., Townsend, E., Van Heeringen, K. & Hazel, P. 2015. Interventions for Self-Harm in Children & Adolescents. *Cochrane Database of Systematic Reviews*, 12, pp.1 - 108.
5. Friedli, L. 2009. *Mental Health, Resilience and Inequalities*. Copenhagen: WHO Europe.
6. Groschwitz, R.C. & Piemer, P.L. 2012. The Neurobiology of Non-suicidal Self-Injury (NSSI): A Review. *Suicidology Online*, 3, pp. 24-32. Krossky, D.E. 2009. The Functions of Self-Injury in Young Adults who Cut Themselves: Clarifying the Evidence for Adult Population. *Psychiatry Res*, 169 (2-3), pp. 200-205. Franklin, J. 2014. How does self-harm change feelings? The Fact Sheet Series. Cornell Research Program on Self-Injury and Recovery, Ithaca, NY: Cornell University.
7. Nock, M.K. 2009. Why Do People Hurt Themselves? New Insights into the Nature and Function of Self-Injury. *Current Directions in Psychological Science*, 18 (2), pp. 78-83. Hawton, K., Saunders, K.E.A. & O'Connor, R.C. 2012. Self-Harm & Suicide in Adolescents. *The Lancet*, 379 (9834), pp. 2273 - 2282.
8. McLeroy, K.R., Bibeau, D., Steckler, A. & Glanz, K. 1988. An Ecological Perspective on Health Promotion Programs. *Health Education Quarterly*, 15 (4), pp. 351-377.
9. HM Government. 2013. *Working Together to Safeguard Children*. London: HM Government.
10. Medical Research Council. 2006. *Developing & Evaluating Complex Interventions: New Guidance*. (Online) Available at: <https://www.mrc.ac.uk/documents/pdf/complex-interventions-guidance/>
11. Moore, G., Audrey, S., Barker, M., Bond, L., Bonell, C., Hardeman, W., Moore, L., O'Connell, A., Tivari, T., Wight, D. & Baird, J. 2014. Process Evaluation of Complex Interventions. *UK Medical Research Council Guidance*. Available at: <http://decipher.uk.net/process-evaluation-guidance/>
12. Hanton, K., Witt, K.G., Taylor Salisbury, T.L., Avenham, E., Cornwell, D., Townsend, E., Van Heeringen, K. & Hazel, P. 2015. Interventions for Self-Harm in Children & Adolescents. *Cochrane Database of Systematic Reviews*, 12, pp.1 - 108.
13. Hospital Episodes Statistics Analysis Team. 2015. *Count of Finished Admissions Episodes in England for Self-Harm (for ages 10 - 19 years) for 2006 to 2015*. Leeds: Health and Social Care Information Centre.
14. World Health Organization (2010) *Practical manual for establishing and maintaining surveillance systems for suicide attempts and self-harm*. Geneva: World Health Organization.
15. Wolfe, L., Macfarlane, A., Donkin, A., Marmor, M. & Viner, R. 2014. *Why Children Die: Death in Infants, Children and Young People in the UK*. London: Royal College of Paediatrics and Child Health and National Children's Bureau.
16. NCB (National Children's Bureau). 2016. *A Whole School Framework for Emotional Well-being & Mental Health*. London: National Children's Bureau.
17. NHS. 2017. *Self-harm*. Available at: <http://www.nhs.uk/Conditions/self-harm/pages/introduction.aspx> (Accessed: 5 Feb 2017)