

Systematic Review Protocol

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Systematic literature review of interventions to improve Health, Happiness and Wellbeing in the Transition from Adolescence to Adulthood

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Overview: The Scottish Government's policy 'Supporting young people's health and wellbeing' advocates for extra support for those young people thought to be most at risk (1). 'At risk' or 'vulnerable' young people describe a group of individuals who are at higher risk of poor health outcomes, and have the potential to benefit from additional support to make the successful and healthy transition into adulthood (2). Providing appropriate and relevant support, however, has been identified as a challenge because vulnerable young people are associated with adversity, disability, and disadvantage (3), and therefore mainstream interventions such as those provided within educational settings are unlikely to meet the needs of this particular group. The aim of this review is to synthesise the literature on the current state of knowledge regarding non-clinical interventions intended to improve the mental health, happiness, or mental wellbeing of vulnerable adolescents.

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Background

The Scottish Government’s policy summary on ‘Supporting Young People’s Health and Wellbeing’ advocates for extra support for those most at risk: “while we want to support all young people, we must ensure we [also] target those most at risk of poor health outcomes, such as those exposed to chaotic early lives. We must work with these young people to improve their life chances” (1). Vulnerable people are those at risk of poor health outcomes (2), or who require additional support to make successful and healthy transitions into adulthood, and include those who are likely to be missed in interventions implemented within a mainstream educational setting. For example, there is evidence that homeless adolescents (4), young offenders (5-7), and ‘looked after’ young people (8) are at greater risk of poor health than the general population of young people. As well as having a higher risk of poor health, these young people are likely to face extra challenges in making transitions to higher education, parenthood, employment, and independent living, often in the absence of family support (3). Interventions aimed at these high-risk groups represent a valuable component of strategies to address health inequalities, a Scottish Government priority (9).

The Royal Society of Edinburgh has provided funding for two systematic reviews of empirical evaluations of interventions intended to improve health, happiness and wellbeing or reduce inequalities for young people transitioning into adulthood. The focus of this protocol is the review exploring targeted interventions. The other review will look at population-level interventions and is being led by the Mental Health Foundation.

Review aims and objectives

The aim of this review is to synthesise the literature that evaluates targeted interventions aiming to improve the mental health, mental wellbeing, or happiness of vulnerable adolescents.

Primary review objective

What is known from the existing literature about evaluations of non-clinical interventions intended to improve mental health, happiness, or wellbeing of vulnerable adolescents?

Secondary review objectives

What are the gaps in research evidence to date?

What are the most promising non-clinical intervention strategies to improve adolescent mental health, mental wellbeing, or happiness for each vulnerable group?

What interventions are most promising in terms of supporting the transition pathways to adulthood for vulnerable groups?

What are the key similarities and differences in promising interventions across population groups?

What is the utility of the results in developing and informing an intervention for vulnerable adolescents in Scotland?

Methods

Review approach

The review will adopt a configurative approach, which will systematically map what is known on the topic of interventions to improve the mental health, happiness, and wellbeing of vulnerable adolescents. Table 1 provides more information on the population groups that will be included in the review as well as the outcomes of interest, intervention and comparison criteria. A phased approach will be used to prioritise the highest quality evidence available for use in the review. In Phase I, the focus will be upon identifying systematic reviews relevant to the study topic. Good quality systematic reviews are considered to provide the 'highest quality evidence' (10). Identification and use of existing research avoids research waste and duplication by making use of comprehensive evidence syntheses already conducted. For each population group we will assess whether there is sufficient good quality and relevant evidence from systematic reviews to draw conclusions about the evaluated interventions. Where there are no well conducted, comprehensive and recent systematic reviews of a known intervention area or for an included vulnerable group (Table 1) we will proceed to Phase II, which will involve conducting additional searches to identify peer-reviewed primary research studies and grey literature.

Search strategy

A standardised search strategy with defined terms will be used to search English language papers, published since 2005 across a number of psychological, educational, social and health database providers. Defined and verified search terms at two levels—population and outcomes—will be supplemented by hand searching of reference lists in key studies. For Phase I (for reviews), full details of search terms for Medline are provided in Appendix 1. Terms will be adapted for use in Embase, PsycInfo, Psycharticles, CINAHL, British Education Index, Socindex, ERIC, Child Development & Adolescent Studies, Social care online, Psychinfo, Cochrane Library, and Campbell Library. Phase II will be developed from Phase I and will be appropriate to searching for primary studies rather than reviews.

Study selection

After removal of duplicate citations, titles and abstracts will be screened. Search results will be downloaded into Covidence, an online software programme that supports the administrative management of systematic reviews. Retrieved studies will be assessed for inclusion against the inclusion and exclusion criteria (Table 1). Those studies meeting the inclusion criteria at the initial screening stage will be included in the second assessment stage where the full text will be interrogated in reference to the inclusion and exclusion criteria. Duplicate screening will be conducted for ten percent of citations at the title/abstract stage and for all full texts i.e. independently by two reviewers. Disparities will be resolved through recourse of a third reviewer. Search results, screening decisions, and selection outcomes will be reported in a PRISMA flow diagram.

Table 1: Inclusion and exclusion criteria for review

Inclusion	Exclusion
Population	
Aged 10-24.	Studies where the intervention is not targeted at participants aged within the 10-24 age range.
<p>'Vulnerable populations': social groups with increased risk of health-related problems & with a focus on social inequalities, specifically:</p> <ul style="list-style-type: none"> Young offenders Homeless Unemployed Teenage parents Out-of-school or excluded Looked-after & care leavers Domestic violence Sexually abused Neglected Young carers Refugees/asylum seekers Ethnic minorities Living in socioeconomically deprived areas 	Clinical populations, under medical treatment or supervision. This includes interventions targeted towards those with particular diagnosed disorders, including substance use disorder.
Intervention	
Studies describing interventions that aim to improve mental health, wellbeing, or happiness (or that include one of these things as the primary outcome).	Clinical or pharmacological interventions. Interventions delivered in a clinical setting. School-based interventions.
Comparison	
Studies that allow us to make some evaluation of the intervention: those that have a comparison group or before and after measures of the outcome.	Studies that do not include a comparison (either pre-post or separate comparison group). Qualitative studies.
Outcome	
<p>Mental health: measures of general mental health.</p> <p>Mental wellbeing: wellbeing scales, measures of life satisfaction (could be a single question) or quality of life.</p> <p>Happiness: specifically states that happiness will be measured.</p> <ul style="list-style-type: none"> Resilience Impulsivity Self-esteem Sense of coherence 	<p>Studies where only a change in 'vulnerable' status has been recorded e.g. welfare to work interventions that evaluate employment outcomes but not health outcomes.</p> <p>Physical health outcomes and physical wellbeing.</p> <p>Health risk behaviours (e.g. sexual health risk behaviour; smoking; diet; exercise; substance use).</p> <p>Clinical diagnoses as outcome, including self-harm and stress.</p> <p>Change in health service use.</p>
Other	
<ul style="list-style-type: none"> English language only. OECD countries only. Published since 2005. 	<ul style="list-style-type: none"> Non-English language. Non-OECD country. Published before 2005.

Quality appraisal

Using a standardised and validated quality assessment tool, two reviewers will independently assess each systematic review included at Phase I for the adequacy of key quality issues such as search strategy, duplicate screening and extraction, as well as assessed quality. The quality and availability of the included reviews for each population will inform whether there will be a search for primary studies for that population. This procedure will also be applied to assessing the quality of empirical papers, using a separate assessment tool, tailored to assessing the quality of primary studies.

Data extraction

Structured data extraction templates for each phase will be developed by the research team. This will include data on methodology, population characteristics, intervention aims and components, evaluation methods and outcomes assessed, as appropriate for reviews and for primary studies.

Data analysis and synthesis

The present review will analyse and synthesise data using a narrative approach. This is the most appropriate form of analysis when statistical methods are not possible or desirable e.g. when data are included from different study designs which are not suitable for pooling together in the analysis, or when a wide range of intervention types are captured. A narrative synthesis can help to integrate findings through systematic organisation of data (11). In this review, data will be synthesised with reference to the nature, quantity, and quality of intervention evaluations conducted. There will be separate steps for synthesising the systematic reviews in Phase I and the primary studies and grey literature in Phase II. The synthesis will be supplemented by a visual map and tables outlining key features for each population group and intervention type where possible (12). Synthesis will be iterative, reliant on the characteristics of the included studies i.e. the synthesis method will be determined post study selection (11). The key is to avoid bias, and therefore the process of narrative data synthesis will be transparent.

Expert advisory group

An expert advisory group consisting of representatives from the RSE, NHS Health Scotland, the University of Glasgow, and Glasgow Centre for Population Health has been set up with the function of providing consultation throughout the review process, e.g. by shaping the review methodology to maximise the utility of the completed review for end users.

Outputs

Given the configurative approach albeit informed by principles of systematic review, the primary output will be a map as an accessible visual illustration of findings and evidence per population and intervention group. Practically, this means that a table with short visualisations of key information will be developed in order to provide an overview of research to date. Evidence mapping is a cost-effective method to inform users of the current state of research findings that could be used to generate hypotheses, inform future research and policy, and identify research gaps. This is achieved by generating a 'bird's eye' view which allows the user to appreciate the depth, breadth and characteristics of research in a particular area before investing valuable resources in future developments (13).

While the focus of this review is not on effectiveness but rather presenting an understanding of available information across the literature, it is nonetheless anticipated to include a section summarising high quality studies with reference to efficacy and effectiveness of interventions, as well as research gaps of interest within a Scottish context for further reference. The resulting knowledge base will inform the development and application of an intervention cognisant of the Scottish culture, issues, legislative policies, procedures, and drivers for young people transitioning into adulthood.

Timeframe

This project is funded until the end of August 2016.

Dissemination

Findings will be disseminated in a report for publication by the funder of this project. The work will be presented to the funding body, and at an event to share the results with relevant stakeholders. It is intended to publish result in an international peer-reviewed journal.

Appendix

Search terms

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) via Ovid 1946 to Present

1. exp Adolescent Behavior/
2. exp Adolescent/
3. exp Psychology, Adolescent/
4. exp Young Adult/
5. exp Child/
6. ("Adolescent transition*" or "adult-onset trajectories" or child* or girl* or boy* or "early adult*" or "emerging adult*" or "Young Adult" or "Young people" or "Young person" or "youth phase of the lifecourse" or "youth transition*" or Adolesce* or Juvenile or Teen* or Youth*).tw.
7. 1 or 2 or 3 or 4 or 5 or 6
8. exp African Americans/
9. exp African Continental Ancestry Group/
10. exp American Native Continental Ancestry Group/
11. exp Asian Continental Ancestry Group/
12. exp Child Abuse, Sexual/
13. exp Criminals/
14. exp Domestic Violence/
15. exp Foster Home Care/
16. exp Homeless Persons/
17. exp Homeless Youth/
18. exp Human Trafficking/
19. exp Oceanic Ancestry Group/
20. exp Orphanages/
21. exp Poverty areas/
22. exp Pregnancy in Adolescence/

23. exp Pregnancy, Unwanted/
24. exp Refugees/
25. exp Residence Characteristics/
26. exp Sex Offenses/
27. exp Sexually Transmitted Diseases/
28. exp Unemployment/
29. exp Vulnerable Populations/
30. ("area based" or "asylum seek*" or "Children of Teenage parent*" or "deprived area*" or "Domestic abuse" or "Domestic violence" or "Emotional abuse" or "emotional neglect" or "excluded from school" or "exclusion from school" or "foster care" or "foster-care" or "foster home" or "foster-home" or "home-leaving pattern*" or "home leaving pattern*" or "intimate partner violence" or "Kinship Care*" or "local area*" or "looked after" or "Looked-after" or "Not in Education, Employment or Training" or "Out-of-school" or "Out of school" or "physical abuse" or "physical neglect" or "sexual abuse" or "Sexual exploitation" or "street dwell*" or "street-dwell*" or "street youth" or "street-youth" or "Teenage parent*" or "teenage mother*" or "Unwanted Pregnancy" or "Young carer*" or "Young-carer*" or "Young offender*" or "Young-offender*" or Crime* or Criminal* or Ethnic* or Homeless* or IPV or LAYP or neighbourhood* or neighborhood* or NEET* or Prisoner* or Refugee* or Runaway* or Unemploy*).tw.
31. 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30
32. exp Anxiety Disorders/
33. exp Anxiety/
34. exp Depression/
35. exp Happiness/
36. exp Mental Disorders/
37. exp Mental Health/
38. exp Mood Disorders/
39. exp Quality of Life/
40. ("life satisfaction" or "mental health" or "mental wellness" or "quality of life" or "quality-of-life" or "self esteem" or "self-esteem" or "self harm" or "self-determination" or "self-harm*" or "sense of belonging" or "sense of coherence" or "well being" or "well-being" or anxiety or anxious or depress* or happiness or happier or happy or impulsive* or optimis* or resilien* or wellbeing).tw.
41. 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40
42. 7 and 31 and 41

43. limit 42 to (english language and yr="2005 -Current")

44. review.ab.

45. review.pt.

46. meta-analysis.ab.

47. meta-analysis.pt.

48. meta-analysis.ti.

49. 44 or 45 or 46 or 47 or 48

50. letter.pt.

51. comment.pt.

52. editorial.pt.

53. 50 or 51 or 52

54. 49 not 53

55. 43 and 54

References

1. Scottish Government. Supporting Young People's Health and Wellbeing. A Summary of Scottish Government Policy. Edinburgh: Scottish Government 2013.
2. Flaskerud JH, Winslow BJ. Conceptualizing vulnerable populations health-related research. *Nursing research*. 1998;47(2):69-78.
3. Osgood DW. On your own without a net: The transition to adulthood for vulnerable populations: University of Chicago Press; 2005.
4. Edidin J, Ganim Z, Hunter S, Karnik N. The Mental and Physical Health of Homeless Youth: A Literature Review. *Child Psychiatry Hum Dev*. 2012 2012/06/01;43(3):354-75.
5. Chitsabesan P, Kroll L, Bailey S, Kenning C, Sneider S, MacDONALD W, et al. Mental health needs of young offenders in custody and in the community. *The British Journal of Psychiatry*. 2006;188(6):534-40.
6. Kinner SA, Degenhardt L, Coffey C, Hearps S, Spittal M, Sawyer SM, et al. Substance use and risk of death in young offenders: A prospective data linkage study. *Drug and Alcohol Review*. 2015;34(1):46-50.
7. Kinner SA, Degenhardt L, Coffey C, Sawyer S, Hearps S, Patton G. Complex Health Needs in the Youth Justice System: A Survey of Community-Based and Custodial Offenders. *Journal of Adolescent Health*. 2014;54(5):521-6.
8. Ford T, Vostanis P, Meltzer H, Goodman R. Psychiatric disorder among British children looked after by local authorities: comparison with children living in private households. *The British Journal of Psychiatry*. 2007;190(4):319-25.
9. Scottish Government. Equally Well Review 2010: Report by the Ministerial Task Force on implementing Equally Well, the Early Years Framework and Achieving Our Potential. Edinburgh: Scottish Government 2010.
10. Gough D, Oliver S, Thomas J. Learning from Research: Systematic Reviews for Informing Policy Decisions: A Quick Guide. A paper for the Alliance for Useful Evidence. London: Nesta 2013.
11. Ryan R, Cochrane Consumers and Communication Review Group. Cochrane Consumers and Communication Review Group: meta-analysis. 2013 [17/03/16]; Available from: <http://cccrg.cochrane.org>.
12. Petticrew M, Anderson L, Elder R, Grimshaw J, Hopkins D, Hahn R, et al. Complex interventions and their implications for systematic reviews: a pragmatic approach. *Journal of Clinical Epidemiology*. 2013;66(11):1209-14.
13. Russell R CM, Balk EM, Atkinson S, Giovannucci EL, Ip S, Lichtenstein AH, Taylor Mayne S, Raman G, Ross AC, Trikalinos T, West KP Jr, Lau J. Issues and Challenges in Conducting Systematic Reviews to Support Development of Nutrient Reference Values: Workshop Summary. (Prepared by the Tufts Evidence-based Practice Center under Contract No. 290-02-0022). AHRQ Publication No. 09-0026-2. Rockville, MD: Agency for Healthcare Research and Quality 2009.

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