





Health, happiness and wellbeing for adolescents transitioning to adulthood: a systematic review of individual-level interventions for adolescents from vulnerable groups

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MRC/CSO Social and Public Health Sciences Unit Wednesday 26th October, 2016

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Health, happiness and wellbeing for adolescents transitioning to adulthood:

a systematic review of individual-level interventions for adolescents from vulnerable groups



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The brief

- RSE ... plans to initiate a new programme of research in the area of 'health, happiness and wellbeing', specifically aimed at understanding factors that enable young people to make successful transitions from adolescence to adulthood.
- As a first step ... [we] wish to fund two systematic reviews of empirical evaluations of interventions intended to improve health, happiness and wellbeing or reduce inequalities for young people undergoing the transition to adulthood.
- [We] anticipate funding one systematic review of population interventions and one of individual interventions. ... cover published and grey literature on studies deemed both unsuccessful and successful ... include work conducted in any country where the results may be relevant to Scotland.
- ... not extend to studies conducted on clinical populations or that examine the impact of interventions on disease end points.
- The aim ... is to inform a second stage which will focus on novel studies leading to the development and delivery of an intervention study in Scotland.

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Our review

What is known about the impacts of non-clinical **individual level** interventions on the **mental health**, **or wellbeing** of **vulnerable adolescents**?

Background / rationale – adolescent wellbeing

- Mental health disorders are common / start in late adolescence and early adulthood.
 - > 13% Scottish 16-24 year-olds reported symptoms indicating presence of a possible psychiatric disorder (Whiteford et al., 2013).
 - > 7% Glaswegian 18-20 year-olds reported ever having tried to deliberately hurt or harm themselves (Young et al., 2007).
 - ➤ Only 27% Scottish 15-year olds 'very happy' with their lives; only 9% always self-confident (Currie et al., 2015).
- Mental disorders impact on many other aspects of current / future life.
- Any inequalities in adolescent mental health / psychological distress generally maintained / increased into later adulthood.
- Adolescence is therefore a potential key life-stage for mental health-related interventions.

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Background / rationale – vulnerable adolescents

- Definitions of 'vulnerable group' vary according to context.
- 'Vulnerability' associated with marginalisation, social exclusion, limited opportunities and income, the experience of abuse, hardship, prejudice and discrimination.
- Vulnerable young people:
 - > Are at risk of poor health outcomes.
 - > Face extra challenges in making transitions to adulthood.
- Vulnerabilities often cluster, increasing risk of problems.

"... 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" (Harry Burns, - 'Supporting Young People's Health & Wellbeing', SG, 2013).

Our review

Aim

 To synthesise the literature that evaluates targeted nonclinical individual interventions aiming to improve the mental health, mental wellbeing, or happiness of vulnerable adolescents.

In order to inform future work leading to the development and delivery of an intervention study in Scotland by understanding:

- What interventions have strong evidence of success (for single groups / across groups);
- Where the gaps are in terms of interventions / evidence.

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Methods - best available evidence

A phased approach

- 1. Review of **systematic reviews** plus **quality appraisal** of identified reviews and priority given to those assessed as Low Risk of Bias.
- 2. Review of **Randomised Controlled Trials (RCTs)** published in peer reviewed journals. RCTs are considered the most controlled and therefore least biased study design.
- 3. Review of **unpublished ('grey') literature** describing RCTs or evaluations with a control or comparison group.

Methods – population - vulnerable groups included

'Vulnerable populations': social groups with increased risk of health-related problems and with a focus on social inequalities, specifically:

Excluded

supervision.

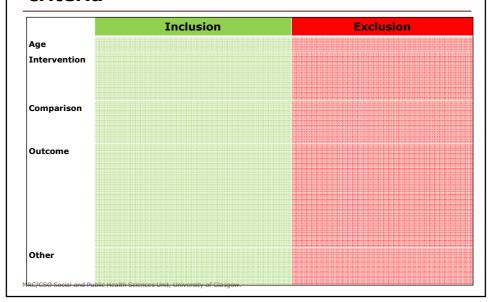
Clinical populations, under

medical treatment or

- 1. Looked after or care leavers
- 2. Homeless
- 3. Young offenders
- 4. Living in socio-economically deprived areas
- 5. Unemployed
- 6. Out of school or excluded
- 7. Teenage parent
- 8. Young carer
- 9. Ethnic minorities
- 10. Asylum seekers or Refugees
- 11.Sexually abused
- 12. Domestic Violence and Intimate Partner Violence

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Methods – other inclusion / exclusion criteria



	Inclusion	Exclusion
Age	Targeted to those aged 10-24 years.	• Not aged 10-24
Intervention		
Comparison		
Outcome		

criteria	Inclusion	Exclusion
Age		Not aged 10-24
_		Clinical or pharmacological interventions Interventions delivered in a clinical setting. School-based interventions.
Comparison		
Outcome		

Methods - other	inclusion /	exclusion
criteria		

Inclusion	Exclusion
Targeted to those aged 10-24 years.	• Not aged 10-24
Aiming to improve mental health, wellbeing, or happiness	 Clinical or pharmacological interventions Interventions delivered in a clinical setting. School-based interventions.
Research that allows us to make some evaluation of the intervention	 Studies that do not include a comparisor group. Qualitative studies.
	 Targeted to those aged 10-24 years. Aiming to improve mental health, wellbeing, or happiness Research that allows us to make some

Methods – other inclusion / exclusion criteria

	Inclusion	Exclusion
Age	Targeted to those aged 10-24 years.	• Not aged 10-24
Intervention	Aiming to improve mental health, wellbeing, or happiness	 Clinical or pharmacological interventions Interventions delivered in a clinical setting. School-based interventions.
Comparison	Research that allows us to make some evaluation of the intervention	 Studies that do not include a compariso group. Qualitative studies.
Outcome	Mental health: measures of general mental health. Mental wellbeing: wellbeing scales, measures of life satisfaction or quality of life Happiness Resilience Impulsivity Self-esteem Sense of coherence	Only a change in 'vulnerable' status Physical health Health risk behaviours Clinical diagnoses Health service use
Other		

Methods – other inclusion / exclusion criteria

	Inclusion	Exclusion
Age	Targeted to those aged 10-24 years.	Not aged 10-24
Intervention	Aiming to improve mental health, wellbeing, or happiness	 Clinical or pharmacological interventions Interventions delivered in a clinical setting. School-based interventions.
Comparison	Research that allows us to make some evaluation of the intervention	 Studies that do not include a comparison group. Qualitative studies.
Outcome	Mental health: measures of general mental health. Mental wellbeing: wellbeing scales, measures of life satisfaction or quality of life Happiness Resilience Impulsivity Self-esteem Sense of coherence	Only a change in 'vulnerable' status Physical health Health risk behaviours Clinical diagnoses Health service use
Other	English language only OECD countries only Published since 2005	Non-English länguäge. Non-OECD country. Published before 2005.

Methods – searches, screening and data extraction

Databases

 N=12 - relevant subject areas of medicine, psychology, education, social studies and children (e.g. MEDLINE; British Education Index, Socindex, Psycinfo, Cochrane Library) plus Planex (grey literature).

Screening (Covidence software)

- Of titles and abstracts by all authors (10% by two authors).
- Of full text by two authors.

Quality appraisal of Systematic Reviews

• Used AMSTAR (A Measurement Tool to Assess Systematic Reviews).

Data extraction for included studies

Using data extraction template, checked by second author.

Results - Identified evidence

Systematic Reviews

- 7,231 identified → titles and abstracts screened
- 208 → full text screened re inclusion/exclusion
- 32 → included and subject to AMSTAR quality appraisal
- 22 low risk of bias = 'Good quality' reviews
- ➤ 10 high risk of bias = 'Poor quality' reviews

Randomised Controlled Trials

- 4,449 identified → titles and abstracts screened
- 76 → full text screened re inclusion/exclusion
- 20 papers describing 16 RCTs included

Unpublished evaluations with a control group in the grey literature

- 8,854 identified → titles and abstracts screened
- 69 → full text screened re inclusion/exclusion
- > 0 included

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Results - summary Insufficient evidence to identify individual-level interventions clearly benefitting the mental health/wellbeing of any of the vulnerable groups. Unemployed No evidence Out of school or excluded Young carers Not enough Asylum seekers or refugees evidence to · Ethnic minorities really say • Exposed to domestic/intimate partner violence anything In socio-economically deprived neighbourhoods Looked after **Practical** Homeless Small amounts of evidence allowing us to support Young offenders say something Psychological Sexually abused Teenage parents - nublic Health Sciences Unit, University of Glasgow. interventions

Results – not enough evidence to really say anything

Asylum seekers or refugees

 Psychological interventions – 'good' review found one German study suggesting creative arts improved wellbeing.

Ethnic minorities

 Psychological interventions – 'good' review found no relevant studies on 'culturally sensitive' interventions; Dutch RCT found 'culturally sensitive' intervention had no impact on sense of mastery.

Exposed to domestic/intimate partner violence

 Psychological interventions – 'poor' review suggested positive impact on wellbeing but didn't report clearly; US RCT of trauma focussed CBT reported reduced anxiety and PTSD.

In socio-economically deprived neighbourhood

- **Practical support** 'good' review found no relevant studies on giving direct monetary assistance; 'poor' review didn't report clearly on community engagement; US-based Move-to-Opportunity study suggested moving to more affluent neighbourhoods might improve girls' mental health.
- **Psychological interventions** 'poor' review didn't report clearly on community mental health interventions.

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Results -

Small amounts of evidence allowing us to say something

- Numbers
- Identified papers
- Evidence

Results - looked after adolescents

Scotland numbers

- 31/07/2015 15,404 (about 1.5% under 18s).
- ~1,500 residential accommodation.
- ~14,000 split roughly equally with: parents; friends/relatives; and foster carers.

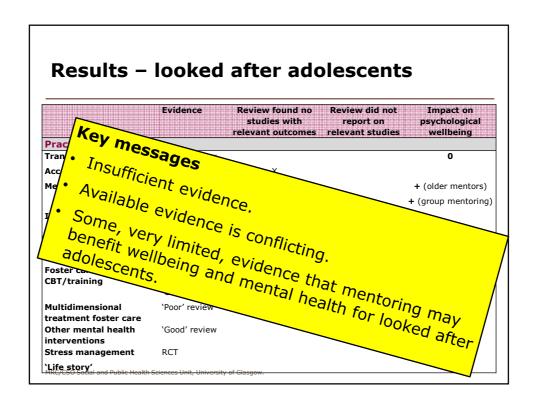
We identified

• 7 'good' reviews; 3 'poor' reviews; 3 RCTs.

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Results - looked after adolescents

	Evidence	Review found no studies with relevant outcomes	Review did not report on relevant studies	Impact on psychological wellbeing
Practical				
Transition support	'Good' review			0
Access to services	'Good' review	X		
Mentoring	'Poor' review			+ (older mentors)
	RCT (USA)			+ (group mentoring)
Independent living skills	'Good' review	x		
	'Poor' review	X		
Psychological				
СВТ	'Good' review		Х	
Foster carer CBT/training	'Good' review			mixed
· • •	'Good' review	X		
Multidimensional treatment foster care	'Poor' review			+ (based on one relevant study)
Other mental health interventions	'Good' review			mixed
Stress management	RCT			0
'Life story'	RCT ciences Unit, University	· -f Classon		+



Results - homeless adolescents

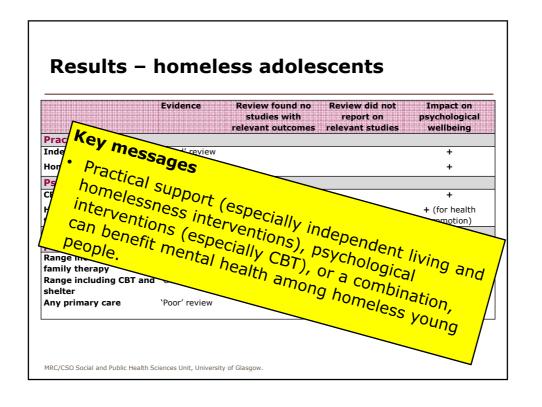
Scotland numbers

- ~ 4% of Scottish Household Survey 16-24 year olds reported ever having been homeless.
- 2014/15 ~8,200 (1.3%) 16-24 year olds assessed as homeless.
- 2014/15 16-24 year olds represented 29% of the homeless population.

We identified

• 3 'good' reviews; 1 'poor' review; 1 RCTs.

	Evidence	Review found no studies with relevant outcomes	Review did not report on relevant studies	Impact on psychological wellbeing
Practical	1			
Independent living skills	'Good' review			+
Homeless services	'Good' review			+
Psychological				
СВТ	'Good' review			+
Health promotion vs art therapy	RCT (USA)			+ (for health promotion)
Practical & psychological				
Range including CBT and family therapy	'Good' review			+ (mainly)
Range including CBT and shelter	'Good' review			+
Any primary care	'Poor' review			+ (based on one relevant study)



Results – young offenders

Scotland numbers

- 2012/13 4.7% 8-17 year olds involved in offending behaviour.
- Only 1% youth offending is violent crimes.
- $2010/11 \sim 570$ under age 18 prison / secure admissions.

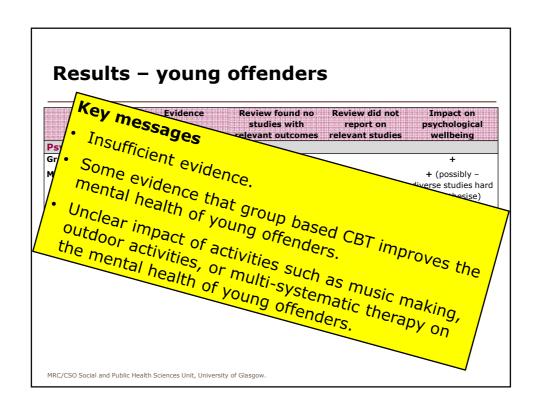
We identified

• 3 'good' reviews; 1 'poor' review; 0 RCTs.

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Results – young offenders

	Evidence	Review found no studies with relevant outcomes	Review did not report on relevant studies	Impact on psychological wellbeing
Psychological				
Group CBT	'Good' review			+
Music therapy	'Good' review			+ (possibly – diverse studies hard to synthesise)
Outdoor activities	'Good' review			Mixed
Multi-systemic therapy	'Poor' review			+ (possibly - review concludes this but unclear reporting)



Results – sexually abused adolescents

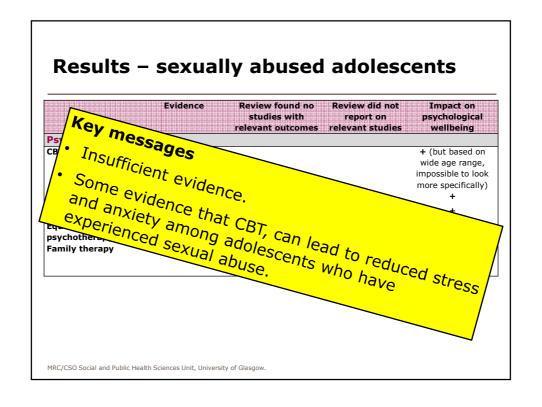
Scotland numbers

- 2014/15 3,475 recorded sexual offences against under 16s (3.8 per 1,000 children).
- Statistics based on police-recorded crimes are an inaccurate reflection of actual numbers.
- 2011 NSPCC study 11.3% of UK 18-24 year olds reported having experienced contact sexual abuse while under age 18.

We identified

• 2 'good' reviews; 2 'poor' reviews; 1 RCT.

	Evidence	Review found no studies with relevant outcomes	Review did not report on relevant studies	Impact on psychological wellbeing
Psychological				
СВТ	`Good' review			+ (but based on wide age range, impossible to look more specifically)
	'Good' review			+
	'Poor' review			+
Equine facilitated psychotherapy	'Poor' review			+ (but based on few studies)
Family therapy	RCT			+ (but methodological issues)
				,
				issues)



Results – teenage parents

Scotland numbers

- 2014 3.4% among women aged under 20.
- 2014 0.4% among under 16s.
- Recent declines but Scotland still has higher rates than most other western European countries.

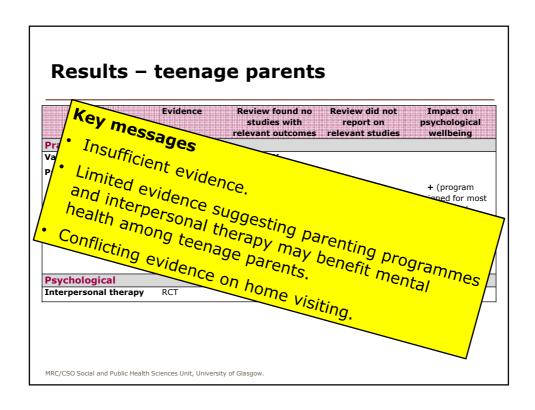
We identified

• 2 'good' reviews; 0 'poor' reviews; 7 RCTs.

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Results – teenage parents

	Evidence	Review found no studies with relevant outcomes	Review did not report on relevant studies	Impact on psychological wellbeing
Practical				
Various support services	'Good' review	Х		
Parenting support	'Good' review	X		
	RCT (USA)			+ (program designed for most deprived populations)
Home visiting	7 RCTs (USA/Chile)			mixed
Psychological				
Interpersonal therapy	RCT			+



Conclusions - summary

- Overall insufficient evidence to identify targeted nonclinical individual interventions which clearly benefit the mental health, mental wellbeing, or happiness of vulnerable adolescents.
- Diverse interventions identified broadly:
 - > provision of practical support;
 - > psychological interventions.
- Positive impacts of CBT on the mental health and wellbeing of several groups. (Perhaps just a reflection of popularity – it's been evaluated most.)
- No intervention consistently positive for all groups.

Conclusions - implications

Research

- Lack of research on mental health impacts of interventions for specific vulnerable adolescent groups.
- Useful to review evidence from non-randomised evaluations, qualitative research and 'mainstream' interventions.

Policy and practice

- We cannot provide clear intervention models for policy makers or practitioners to follow.
- We need to pay greater attention to the wellbeing of the most vulnerable groups of young people.
- Evaluations of interventions which focus on practice outcomes should also measure mental health, happiness or wellbeing outcomes.
- Such outcomes should be assessed before implementation of any intervention.