Public Health England

Protecting and improving the nation's health

Intentional self-harm in adolescence: An analysis of data from the Health Behaviour in School-aged Children (HBSC) survey for England, 2014

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Contents

Executive summary

This report summarises data on self-harm informed by an analysis of data from the Health Behaviour in School-aged Children (HBSC) survey for England, 2014.[1] The data draws on responses from 5,335 students aged 11-15 years who completed the HBSC survey in England.

This thematic report presents data from the most recent survey and illustrates associations between self-harm and demographics and social context. Relationships of importance and relevance which demonstrate considerable differences have been reported – guided by previous work on HBSC which has mapped protective factors across individual, family, school and local community domains.

This report is one of a series of three, the others covering cyberbullying and the wellbeing of adolescent girls.

This report is intended for a range of audiences interested in promoting children and young people's mental wellbeing, including for example: local public health specialists, school nurses, head teachers and college principals, CCG leads, local councillors, CAMHS leads, mental health strategic clinical networks and local children and young people's mental health commissioners.

Key points:

- 22% of 15 year olds reported that they had ever self-harmed
- nearly three times as many girls as boys reported that they had self-harmed (32% of girls compared to 11% of boys)
- the comparison between recent HBSC England findings and earlier studies[2,3] suggests that over the past decade rates of self-harm have been increasing among adolescents
- HBSC findings indicated that the likelihood of self-harming varied by social-economic status and structure of households, the incidence of self-harming is associated with lower family affluence (Table 1, Figure 1)
- in line with earlier studies,[2] the HBSC study also showed that key positive health factors could help to decrease self-harming behaviour in adolescence: young people who reported positive family communication (Table 4), positive perceptions of the school environment (Table 5) and local neighbourhood (Table 8), were less likely to report self-harming

Intentional self-harm: Key stats

Referenced from the Health Behaviour in School Age Children survey http://www.hbscengland.com/wp-content/uploads/2015/10/National-Report-2015.pdf

Introduction

Self-harm is an intentional injury to one's own body resulting in tissue damage.[4] Self-harm can include actions such as cutting, burning, biting oneself, ingesting toxic substances as well as a wider breadth of self-harming behaviours. The behaviour is predominantly a feature of the adolescent population, but not exclusively, and is more common among girls than boys.[2] Acts of deliberate self-harm are strongly associated with emotional distress and mental health issues and the behaviour is often described as being accompanied by a complex set of negative feelings, such as self-loathing, disgust and shame.[5]

Those who self-harm in mid-late adolescence potentially face increased risk of developing mental health issues, as well as higher prevalence rates across a range of health risk behaviours in late adolescence and early adulthood; including increased likelihood of suicidal thoughts. [6]

Data source - the HBSC survey

HBSC is a survey-based study conducted in collaboration with the WHO Regional Office for Europe. The survey examines the health and wellbeing, health behaviours and social environment of young people aged 11, 13 and 15 years in countries across Europe and North America.[7] For further details see Appendix 1.

Young people were asked both if they had ever self-harmed and, in case of response 'Yes', how often their self-harm behaviour had occurred. The HBSC study for England assessed self-harming prevalence among 15 year olds for the first time in 2013/2014. Details of the measures used and methodology can be found in Appendices 2 and 3.

The HBSC survey is unique in situating young people's health and wellbeing in their social context, which allows for us to examine what factors may protect young people from engaging in self-harming.

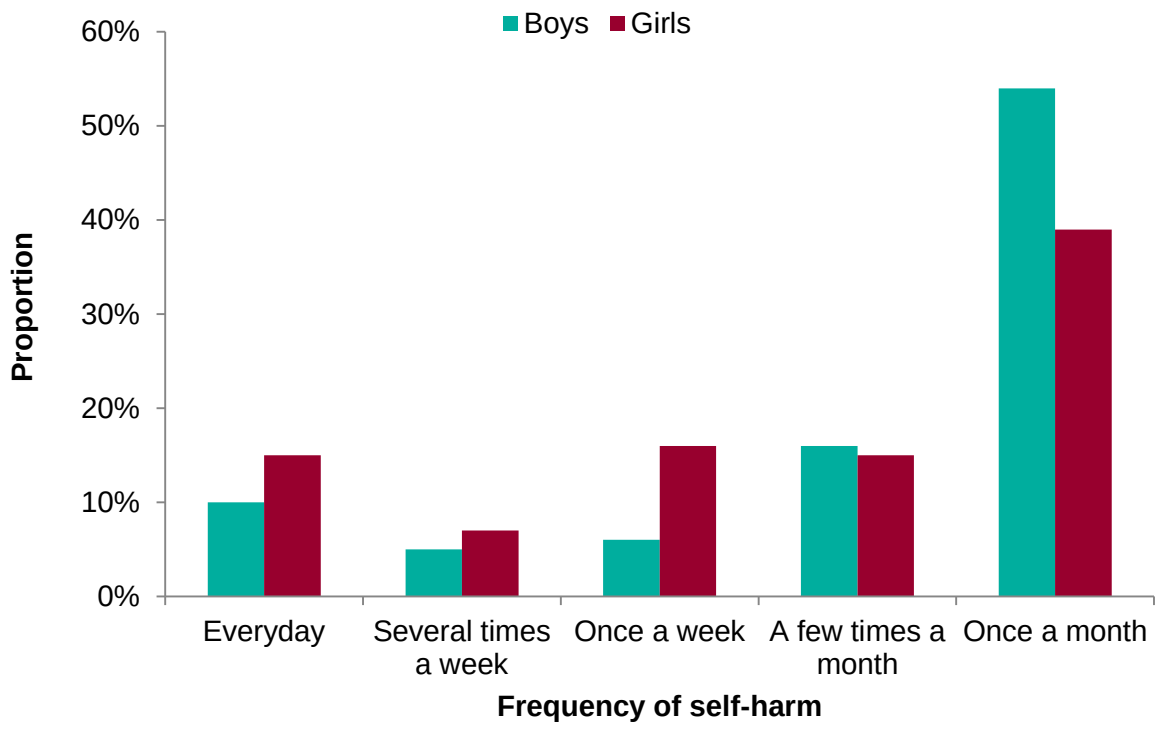
Key findings

Prevalence

Self-harm is a sensitive topic with potentially high levels of underreporting[2] and as a result accurate prevalence figures are difficult to determine precisely. Internationally, for OECD countries reports tend to indicate about 13%-18% of adolescents experience a lifetime risk of self-harm [8] with prevalence rates having increased across the last decade in many countries.

The majority of people who self-reported self-harm are aged between 11 and 25 years, however, self-harming behaviours are most likely to occur between the ages of 12 and 15 years.[2] The HBSC Study identified prevalence rates at 22% for 15 year olds in England. Nearly three times as many girls as boys reported that they had self-harmed, 11% of boys compared to 32% of girls. The majority of those young people who were self-harming reported engaging in self-harm once a month or more.

Figure 1. Frequency of reported self-harm among 15 year olds by gender



Source: WHO Health Behaviour in School-aged Children (HBSC) 2014 survey [1]

Self-harm and Inequalities

Prevalence by Family Affluence (FAS) and free school meals

Self-harm has been linked with family affluence and socio-economic status.[2] In the recent HBSC survey, the likelihood of self-harming varied by socio-economic status (SES), as measured by the Family Affluence Scale (FAS) and receipt of free school meals (FSM). The FAS was designed as a proxy measure of SES suitable for young people and categorises them as low, medium and high FAS.[1] The incidence of self-harming is associated with lower family affluence (Table 1). Similarly, young people receiving free school meals were more likely to report self-harming behaviour (29% girls and 21% boys who were in receipt of free school meals across all ages reported ever having self-harmed).

Table 1. Prevalence of self-harm by gender and family affluence scale (FAS)

FAS category	Proportion of young people		
	Boys	Girls	**Total**
Low	18%	41%	**30%**
Medium	10%	34%	**25%**
High	10%	25%	**18%**

Source: WHO Health Behaviour in School-aged Children (HBSC) 2014 survey[1]

Association of self-harm with life satisfaction

The HBSC study includes data on life satisfaction, allowing for comparisons with self-harm. Life satisfaction was measured using the Cantril Ladder,[9] where young people were asked to pick a number from 0 (worst possible life) to 10 (best possible life) presented as steps on a ladder. The following cut-off points were applied to the life satisfaction data:

0 to 4 = ‘suffering’ - low life satisfaction
5 to 6 = ‘struggling’ - medium life satisfaction
7 to 10 = ‘thriving’ - high life satisfaction

Young people who reported ever self-harming were more likely to be classed as ‘suffering’ compared to those who reported never having self-harmed (Table 2). Equally, young people who had never self-harmed were more likely to be classed as ‘thriving’ or ‘struggling’ than their peers who had reported self-harming during their life time.

[1] FAS is a proxy measure of SES suitable for young people. It assesses family wealth via six items measuring the number of cars, holidays, PCs, bedrooms and bathrooms in a household, as well as dishwasher ownership. FAS generates an overall score and categorises young people into low, medium and high FAS.

Table 2. Prevalence of self-harm by life satisfaction

Self-harmed	Life satisfaction category		
	Suffering	Struggling	Thriving
Ever	58%	29%	13%
Never	42%	71%	87%

Source: WHO Health Behaviour in School-aged Children (HBSC) 2014 survey [1]

Family

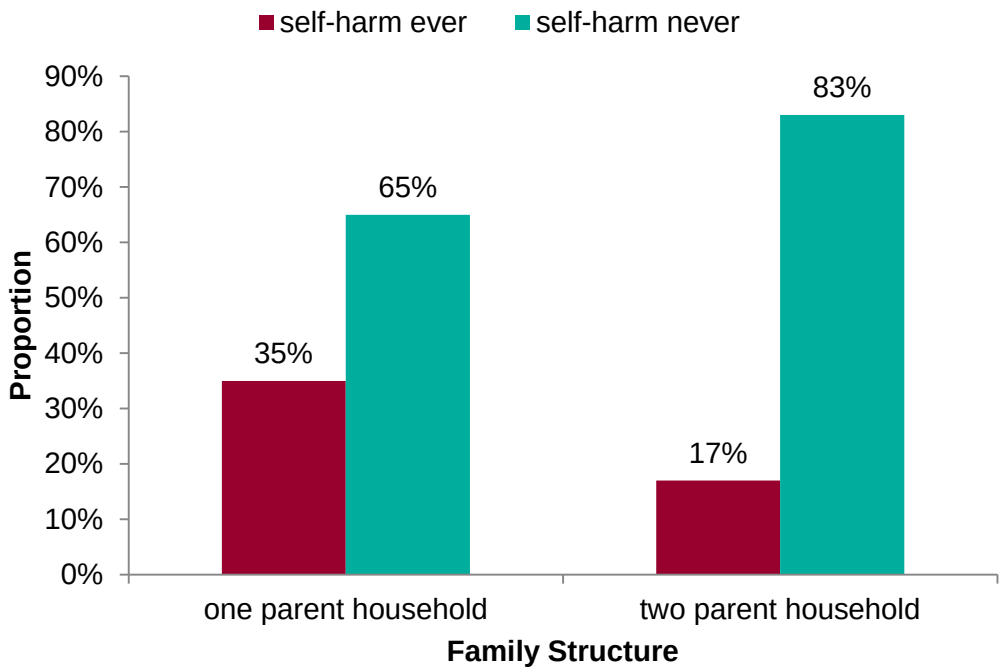
The HBSC study explores the perspectives of young people on the multiple environments of their lives including their relationships with family and peers, thereby enabling the possibility to explore the relationships between social factors and self-harm. Analysis highlighted that the family may play an especially important role in relation to self-harming behaviours.

Protective factors: family

Family structure

Self-harming behaviour was found to be more prevalent among young people living in one parent households; however it is important to recognise that one parent households are more likely to be below the poverty line and lower family affluence was strongly associated with self-harm. Thirty-five percent of 15 year olds who reported living with only one parent also reported having self-harmed, compared to 17% of those who lived in two-parent households (Figure 2).

Figure 2. Self-harm among 15 year olds by family structure



Source: WHO Health Behaviour in School-aged Children (HBSC) 2014 survey [1]

Communication with parents

Positive family relationships are strongly associated with positive health and wellbeing during adolescence.[10] Family communication represents a protective factor for positive development in adolescence. Recent investigations have stressed the importance of good communication with parents for better health and social outcomes in adolescence.[11] The HBSC England study asked young people about family dynamics, including how easy it is to communicate with parents. Young people who had ever reported self-harm were more likely to report difficult communication with both their mother and father, compared to those who said it was easy to talk to their parents (Table 3). Parents may therefore play an important role in protecting young people from self-harming; those reporting easy communication with their parents were less likely to report that they also self-harmed than those who found it more difficult to talk to their parents.[12]

Table 3. Young people having ever self-harmed, by ease of communication with parents

Communication with	Proportion of young people who found communication	
	Easy	Difficult
Mother	15%	44%
Father	11%	36%

Source: WHO Health Behaviour in School-aged Children (HBSC) 2014 survey [1]

Young people who felt that important things were discussed in their family, and that someone listened to them when they spoke, were less likely to report having ever self-harmed (Table 4). Also, young people who reported ever having self-harmed were less

likely to say that they receive emotional support from their parents, and less likely to say that they have someone in their families to share their problems with (Table 4).

Table 4. Young people who have ever self-harmed, by family support

Family support	Proportion of young people		
	Agree	Neither agree nor disagree	Disagree
Get emotional support from family	14%	26%	37%
Talking important	14%	30%	51%
Having someone in family who always listens to you	15%	52%	32%

Source: WHO Health Behaviour in School-aged Children (HBSC) 2014 survey [1]

Learning environment

The school environment is strongly associated with adolescents' health and wellbeing,[13] in particular, emotional wellbeing.

The HBSC study includes data on the school environment, allowing for comparisons against self-harming involvement. Young people who reported ever self-harming were less likely to trust their teachers, feel safe, and feel like they belong in their school.[5]

Young people who disagreed with the range of factors exploring the school environment and teacher connectedness (safety, belonging, care and trust), were more likely to report self-harming than those who agreed that their school provided a supportive school environment.[5]

Protective factors: learning environment

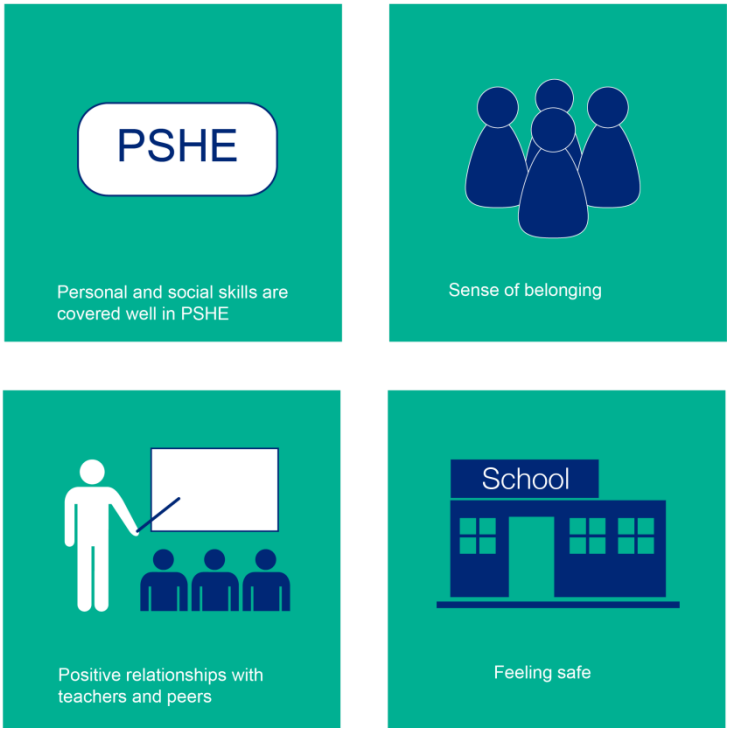


Table 5. Perception of school environment by self-harm involvement

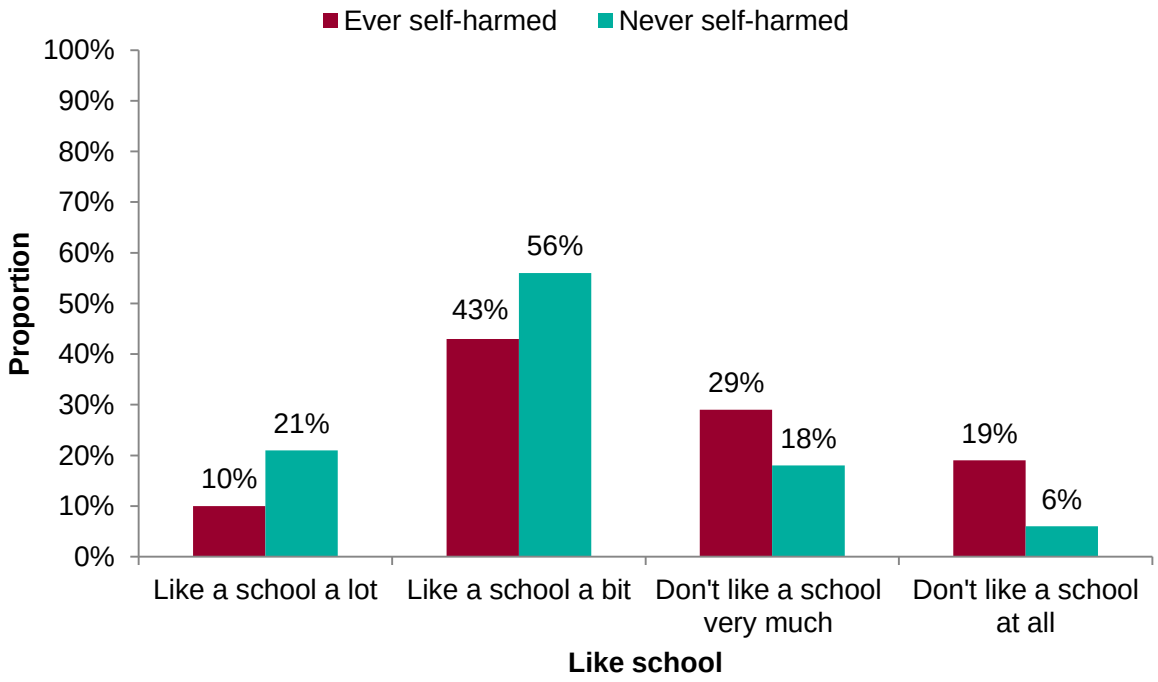
Perception of school environment	Self-harmed	Proportion of young people		
		Agree	Neither agree nor disagree	Disagree
"I feel safe in this school"	Ever	17%	34%	49%
	Never	83%	66%	51%
"I feel like I belong in this school"	Ever	15%	30%	50%
	Never	85%	70%	50%
"I feel that my teachers care about me as a person"	Ever	15%	27%	46%
	Never	85%	73%	54%
"I feel there is a lot of trust in my teachers"	Ever	14%	25%	41%
	Never	86%	75%	59%

Source: WHO Health Behaviour in School-aged Children (HBSC) 2014 survey [1]

Liking school

Young people who reported that they had self-harmed were less likely to report liking school than those who had never self-harmed (Figure 3). Young people who reported ever self-harming were three times more likely to report 'not liking school at all', compared to those who have never self-harmed (19% v. 6%).

Figure 3. Having ever self-harmed by liking school



Source: WHO Health Behaviour in School-aged Children (HBSC) 2014 survey [1]

Personal, social, health and economic education (PSHE)

The HBSC England survey investigates attitudes and beliefs regarding personal, social, health and economic education lessons (PSHE), provided by most schools in the UK. Young people were asked about the provision of PSHE education at their school, including their perception of how well PSHE lessons cover a number of topics outlined by Ofsted.[14] Of those who reported receiving PSHE education, a higher proportion of young people who said the topic of personal and social skills were poorly covered during PSHE education reported experiencing self-harm, compared with those who felt the topic had been well covered at school (Table 6). Examination of HBSC England data suggests PSHE education may function as a protective asset by fostering positive relationships within the school environment.[15]

Table 6. Perception of PSHE education provision by self-harming involvement

Self-harmed	Proportions of young people who said Personal and Social Skills covered	
	Well in PSHE	Poorly in PSHE
Ever	20%	32%
Never	80%	68%

Source: WHO Health Behaviour in School-aged Children (HBSC) 2014 survey [1]

Peers

Peers are sometimes perceived negatively in relation to self-harming behaviours, especially with regard to concerns about possible associations with peer pressure. HBSC data did identify that young people who demonstrated positive perceptions about their relationships with their school peers and classmates also reported lower levels of self-harming (Table 7).

Table 7. Perception of peers by self-harm involvement

Perception of peers	Self-harmed	Proportion of young people			
		Agree	Neither agree nor disagree	Disagree	**Total**
"Other students accept me as I am"	Ever	14%	30%	49%	**22%**
	Never	86%	70%	51%	**78%**
"The students in my class enjoy being together"	Ever	15%	29%	43 %	**22%**
	Never	85%	71%	57%	**78%**
"Most of the students in my classes are kind and helpful"	Ever	16%	25 %	40%	**22%**
	Never	84%	75%	60%	**78%**

Source: WHO Health Behaviour in School-aged Children (HBSC) 2014 survey [1]

Association of self-harm with being bullied

The HBSC study for England includes data on bullying and cyberbullying[22] allowing for comparisons against self-harm behaviour. The experience of bullying victimisation (including traditional bullying and cyberbullying)[2] is associated with experiencing and expressing emotional distress, hence it was important to examine if there were associations between bullying victimisation and self-harm. Among young people who reported ever self-harming about half reported that they had been bullied over the last two months, 49% reported experiencing traditional forms of bullying and 32% reported experiencing cyberbullying by messages. Among young people who reported never self-harming, about 24% reported experiencing traditional forms of bullying and 11% reported experiencing cyberbullying by messages.

[2] See also accompanying report on cyberbullying.

Community

Research has demonstrated the community environment where young people live can have a significant impact on health and wellbeing, especially as young people transition from childhood to more unsupervised time in their communities.[16] The HBSC England study asked young people whether they agree or disagree with a number of statements about their neighbourhood. Young people with a positive perception of their neighbourhood (including issues relating to feeling safe in their community, having positive relationships with neighbours and having good places for young people to go in their community) were less likely to report having self-harmed compared with those who held negative opinions about how supportive and safe they perceived their community to be[8]).

Protective factors: community

Table 8. Perception of neighbourhood by self-harm involvement

Perception of neighbourhood	Self-harmed	Proportions of young people		
		Agree	Neither agree nor disagree	Disagree
"I feel safe in the area where I live"	Ever	18%	27%	31%
	Never	82%	73%	69%
I could ask for help or a favour from neighbours	Ever	18%	25%	32%
	Never	82%	75%	68%
"There are good places to spend your free time eg leisure centres, parks, shops"	Never	18%	21%	30%
	Ever	82%	79%	70%

Source: WHO Health Behaviour in School-aged Children (HBSC) 2014 survey[1]

Conclusion

The information in this report demonstrates that a significant proportion of 15 year olds in the HBSC 2013/14 survey had engaged in self-harm. Nearly three times as many girls as boys reported that they had ever self-harmed. The significance of gender difference in self-harm in this age group is important for health education, family support and social care professionals to understand in developing a response to the issue. The protective nature of adolescents' multiple environments (family, learning environment and wider community) can help to inform strategies to prevent self-harming behaviour among adolescents.

Resources and further information

Public Health England (PHE)

Improving young people's health and wellbeing: A framework for public health
www.gov.uk/government/uploads/system/uploads/attachment_data/file/399391/20150128_YP_HW_Framework_FINAL_WP__3_.pdf

Measuring and monitoring children and young people's mental wellbeing: A toolkit for schools and colleges
www.annafreud.org/media/4612/mwb-toolki-final-draft-4.pdf

Children's and Young People's Mental Health and Wellbeing Profiles: a data tool on risk, prevalence and the range of health, social care and education services that support children with, or vulnerable to, mental illness
fingertips.phe.org.uk/profile-group/mental-health/profile/cypmh

Child and adolescent mental health services needs assessments and service snapshots for local authorities and CCGs
atlas.chimat.org.uk/IAS/profiles/aboutdynamicreports

Protecting children and young people's emotional health and wellbeing: A whole school and college approach
cypmhc.org.uk/sites/cypmhc.org.uk/files/Promoting%20CYP%20Emotional%20Health%20and%20Wellbeing%20Whole%20School%20Approach.pdf

Public Health England's National Child and Maternal Health Intelligence Network produce a number of eBulletins on Child and Maternal Health which you can sign up to
public.govdelivery.com/accounts/UKHPA/subscribers/new

Rise Above

A digital hub for young people, to help delay or prevent them from risky behaviours and build resilience by driving conversations across multiple topics that matter to young people and sign post where and how they can get help
www.riseabove.org.uk

Department for Education (DfE)

Longitudinal study of young people in England cohort 2: health and wellbeing at wave 2
www.gov.uk/government/publications/longitudinal-study-of-young-people-in-england-cohort-2-wave-2

The Children's Society

The good childhood report 2016
www.childrenssociety.org.uk/sites/default/files/pcr090_mainreport_web.pdf

MindEd

MindEd is a free educational resource on children and young people's mental health for adults
www.minded.org.uk/

Association for Young People's Health (AYPH)

A public health approach to promoting young people's resilience: A guide to resources for policy makers, commissioners, and service planners and providers
www.youngpeopleshealth.org.uk/wp-content/uploads/2016/03/resilience-resource-15-march-version.pdf

Young Minds

Resources for children, young people, parents and professionals on emotional wellbeing and mental health of children and young people.
www.youngminds.org.uk/

YoungMinds have a range of available resources for young people, parents and professionals on self-harm
www.youngminds.org.uk/noharmdone

National Children's Bureau

Gender and children and young people's emotional and mental health: manifestations and responses: A rapid review of the evidence
www.ncb.org.uk/sites/default/files/field/attachment/NCB%20evidence%20review%20-%20gender%20and%20CYP%20mental%20health%20-2.pdf

PSHE Association

Key standards in teaching about body image. Guidance on teaching about body image as part of the PSHE curriculum
www.pshe-association.org.uk/curriculum-and-resources/resources/key-standards-teaching-about-body-image

Guidance on preparing to teach about mental health and emotional wellbeing
www.pshe-association.org.uk/curriculum-and-resources/resources/guidance-preparing-teach-about-mental-health-and

Childline

Information and support on self-harm
www.childline.org.uk/info-advice/your-feelings/self-harm/

Mind

Information on possible causes of self-harm and how to access treatment and support
www.mind.org.uk/information-support/types-of-mental-health-problems/self-harm/#.WI9qG1WLTs1

See Me

A film and lesson plan resource pack for teachers and other practitioners working with young people to tackle the myths that surround self-harm, reduce stigma and reduce barriers to seeking help
www.seemescotland.org/media/6804/onedgepack02.pdf

University of Oxford

A guide for parents and carers who have discovered a young person's self-harm
www.psych.ox.ac.uk/research/csr/research-projects-1/coping-with-self-harm-a-guide-for-parents-and-carers

Appendices

Appendix 1: The HBSC survey

The survey is administered to a nationally representative sample of young people in each country. HBSC is repeated every four years allowing for temporal trends in young people's health and wellbeing to be examined.

In 2013/14, a random sample of English secondary schools, stratified by region and school type (independent and state), resulted in a sample size of 5,335 students.

The HBSC survey includes questions from different domains of a young person's life, for example; family communication, teacher relationships, perception of school environment and feelings of safety. For more information about the HBSC study see www.hbsc.org

Appendix 2: HSBC measure of self-harm

The measure used to assess self-harm was as follows:

1 "Have you ever deliberately hurt yourself in some way, such as cut or hit yourself on purpose or taken an overdose?"
With response options: 'Yes' or 'No'

2 "How often do you self-harm?"
With response options: every day, several times a week, once a week, a few times a month, once a month, and several times a year

Appendix 3: Methodology

This report is informed by an analysis of data from the Health Behaviour in School Age Children Survey and through cross analysis of survey questions covering spanning individual, family, school and local community domains.

Further detail of the methodology for the HBSC study can be found in the England national reports www.hbscengland.com and the full external protocol is available from www.hbsc.org. The HBSC data is hierarchical and students are nested within classes, within schools as such to account for the hierarchical data structure. Multilevel modelling is the most desirable method of analysis and the factsheets refer to existing multilevel modelling of the HBSC dataset when applicable, along with existing research in the field.

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