

# Scotland's mental health: Children & young people 2013

Full report, December 2013 NHS Health Scotland



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Scottish Public Health Observatory (ScotPHO) collaboration

The Public Health Observatory Division at NHS Health Scotland jointly leads the ScotPHO collaboration with ISD Scotland. The collaboration brings together key national organisations in public health intelligence in Scotland. We are working closely together to ensure that the public health community has easy access to clear and relevant information and statistics to support decision making. For further information, please see the ScotPHO website at www.scotpho.org.uk

# Abbreviations

APS	Annual Population Survey
C&YP	Children and young people
CR	Crude rate
SR	Standardised rate
FRS	Family Resources Survey
HBSC	Health Behaviour in School-aged Children Survey
GHQ-12	12-item General Health Questionnaire
IRR	Incident rate ratio
ISD	Information Services Division
NRS	National Records of Scotland (previously General Register Office for Scotland)
OR	Odds ratio
SALSUS	Scottish Schools Adolescent Lifestyle and Substance Use Survey
SCQF	Scottish Credit and Qualifications Framework
SDQ	Strengths and Difficulties Questionnaire
SHCS	Scottish House Condition Survey
SHeS	Scottish Health Survey
SHoS	Scottish Household Survey
SIMD	Scottish Index of Multiple Deprivation
SMR	Scottish Morbidity Record
SPS	Scottish Prison Survey
SPSS	Statistical Package for the Social Sciences
SSA	Scottish Survey of Achievement
SSAS	Scottish Social Attitudes Survey
SSLN	Scottish Survey of Literacy and Numeracy
WEMWBS	Warwick-Edinburgh Mental Well-being Scale

# **Executive summary**

#### Background

Improving mental health is a national priority in Scotland. NHS Health Scotland was commissioned by the Scottish Government to establish a core set of sustainable mental health indicators to enable regular national monitoring. The children and young people's (C&YP) indicator set was published in November 2011. The set comprises 108 indicators plus a cross-cutting equalities analysis. The indicators cover mental health (both mental wellbeing and mental health problems) and the contextual factors associated with it across the individual, family, learning environment, community and structural domains.

The mental health indicators aim to provide regular, comprehensive and up-to-date information on the mental health of the Scottish population of C&YP, thus enabling evidence-informed decision making for mental health improvement policy and planning.

This is the first analysis of the C&YP's indicators, providing a baseline picture of the mental health of C&YP and the associated contextual factors. Where the data allow, trends over time and equalities analysis (by gender, age, Scottish Index of Multiple Deprivation (SIMD) and 6-fold urban-rural classification) have been reported, with statistical analysis to assess trends and patterns, for mental health outcomes. Where data allow, a description of the wide range of contextual factors associated with the mental health outcomes have been reported, namely trends over time and equalities analysis by gender and age. All estimates are based upon the most recent data available at the time of analysis.

#### Data availability

The indicator set contains several data-less indicators and further work is required for these indicators before they could be reported on. However, 73 out of the 108 indicators (68%) had data available for analysis. Some indicators have multiple measures. Of the 152 possible measures, analysis was possible for 104 (68%). Overall, data were available for 13 of the 15 mental health outcome indicators and 60 of the 93 contextual indicators. Analysis covered C&YP aged 17 years and under, except in a few stated instances when the upper age limit of the indicator was extended.

Overall, the indicators provide a good comprehensive baseline picture of the mental health of C&YP in Scotland. Time trend data were available for 11 out of 15 mental health outcome indicators and equalities analysis was possible for between 11 and 13 indicators. Of the 93 contextual indicators associated with the mental health of C&YP, time trend data were available for 50 indicators and equalities data for 60. Four constructs (dimensions) in the individual domain, one in the learning environment, one in the community and two in the structural domain were entirely data-less and require further work. These gaps leave a degree of uncertainty around how the contextual picture for these specific areas associated with mental health has changed over recent years and how it varies by age and gender.

#### Mental health outcomes

The picture over the past decade or so can be summed up as one of broad improvement for over half of the mental health outcome measures analysed (14 measures) and general stability over time for most others (11 measures). Of the mental wellbeing measures, over half improved over the time period for which data were available, with the remainder staying relatively constant. Similarly, for mental health problems approximately half improved and half remained stable or showed no obvious pattern over time. Only one measure for an indicator of mental health problems (emotional symptoms for S4 pupils) deteriorated slightly.

Equalities analysis was undertaken for between 11 and 13 out of 15 indicators. Of these, poorer mental health outcomes were associated with gender for 28 out of 32 measures (88%), with age for 14 out of 18 (78%), with SIMD in 21 out of 23 (91%) and with urban-rural classification in five out of 11 (45%).

#### Gender

Mental wellbeing varied by gender with boys more likely to report happiness, satisfaction with life and score slightly higher for mental wellbeing (as assessed by the Warwick-Edinburgh Mental Well-being Scale (WEMWBS)) than girls. Girls scored better for pro-social behaviour than boys.

The extent of mental health problems varied by gender for all measures with the exception of emotional and behavioural problems in S2 pupils, emotional symptoms in 4 to 12 year olds and alcohol dependency in 16 to 19 year olds, which were the same or broadly similar for both genders. Overall, boys were less likely to have common mental health problems, emotional symptoms or to report sadness. Girls were less likely to have conduct problems or to suffer from drug-related disorders or to complete suicide. The direction of the gender difference was mixed for two indicators due to differences with age (emotional and behavioural problems and hyperactivity/inattention).

#### Age

For mental wellbeing, the majority of measures deteriorated with age. Life satisfaction and happiness decreased with age between P7, S2 and S4 pupils. Prosocial behaviour improved with age in younger children between four and 12 years but deteriorated with age in older children. Mental health problems generally increased with age with the exception of conduct problems and hyperactivity/inattention, which decreased with age in children aged 4 to 12 years.

#### Area deprivation

Inequalities by area deprivation (SIMD) were common across both mental wellbeing and mental health problems. C&YP living in more deprived areas had poorer mental health outcomes than those living in less deprived areas. This was observed for all but two indicators: common mental health problems and alcohol dependency.

#### **Urban-rural classification**

Only five out of 11 mental health outcome measures (45%, all mental health problems) fluctuated by urban-rural classification but showed no obvious linear pattern. The overall picture of mental health by urban–rural classification is currently, however, limited by data availability.

### **Contextual factors**

There was an overall pattern of improvement in 27 of the 50 contextual indicators analysed over time with the majority being in the individual and the structural domains. There was deterioration in 10 indicators, fluctuation with no obvious pattern for four indicators and no change/broad stability in nine indicators.

There was a mixed pattern by gender across the five contextual domains and poorer outcomes were frequently observed for older children in comparison to younger children across all contextual domains.

#### Conclusion

Overall, the mental health of C&YP has improved or remained stable over the past decade or so. There remain, however, substantial opportunities to improve mental health and the conditions in which it can flourish to enable Scotland's population of C&YP to reach its full potential. A range of national policies give direction to and support this agenda such as policies on nutrition and physical activity, drugs, alcohol, suicide prevention, poverty, and inequality.

The extensive inequalities across a wide range of mental health outcome indicators demonstrates the need for both targeted and population-wide strategies, to ensure more equal opportunities and outcomes between genders, ages and socio-economic groups. The wide-spread variation in the contextual factors associated with mental health by gender and age reinforces this need to ensure more equal opportunities and outcomes between genoups. Particular attention should be paid to the regularly occurring pattern of deterioration in many contextual measures as children get older and in the strong patterning of mental health outcomes by gender and socio-economic deprivation in particular.

This report will enable evidence-informed decision making for mental health improvement policy and planning by providing the focus for action. Given the cross-cutting nature of mental health, this applies to policy areas and agendas beyond mental health improvement and also beyond health improvement. Specifically, the findings will be informative to those working towards advancing distinctive agendas for C&YP such as the Early Years Framework, including the Early Years Collaborative, Getting it Right for Every Child (GIRFEC) and Curriculum for Excellence.

# 1. Introduction

# **1.1** The children and young people's mental health indicators for Scotland

#### Background

Improving mental health is a national priority in Scotland. *Towards a Mentally Flourishing Scotland: Policy and Action Plan 2009-2011* (*TAMFS*)<sup>1</sup> committed NHS Health Scotland to work with key stakeholders to develop a set of national indicators to monitor trends in children and young people's (C&YP) mental health and associated contextual factors. The significance of the indicators was highlighted in the latest mental health policy in Scotland *Mental Health Strategy for Scotland: 2012-2015*.<sup>2</sup>

#### Development

The C&YP's mental health indicator set was finalised in November 2011. For comprehensive information on the development process and all connected outputs, please refer to the following key papers and the C&YP's mental health indicators page on the NHS Health Scotland website (<u>www.healthscotland.com/scotlands-health/population/mental-health-indicators/children.aspx</u>):

- Rationale paper, October 2007 documents the thinking, reasons and constraints behind decisions made over the course of development of both the adult and C&YP's mental health indicator sets<sup>3</sup>
- Final briefing paper, November 2011 provides a summary of the final output from the C&YP's mental health indicators work, including recommendations, the indicators, their measures and associated data sources<sup>4</sup>
- Final report, March 2012 sets out the background, objectives, process, rationale and achievements of the *Indicators of Mental Health Programme* for C&YP. This includes the framework of constructs<sup>i</sup> within which the indicators have been developed and an overview of the evidence-base for the constructs and the indicators, working understandings, the indicators, measures and data sources themselves including the questions and scales used and recommendations. The overlap to other key Scottish policies and strategies for children and young people are also highlighted.<sup>5</sup>

#### **Describing mental health**

Historically, assessment of population mental health has largely focused on the prevalence of mental health problems using surveys and scales to do so.<sup>6, 7</sup> However, with an expanding evidence-base, mental health is now generally considered to consist of two dimensions; mental health problems and mental wellbeing. Good mental health is therefore deemed to be more than the absence of mental health problems and the growing recognition of the importance of mental wellbeing has generated increased interest in developing indicators to measure mental wellbeing, to accompany indicators of mental health problems. Accordingly, NHS Health Scotland understood mental health to include both mental health

<sup>&</sup>lt;sup>i</sup> Where a construct refers to a categorising conceptual element, see section 'The indicator set' and Table 1.

problems and mental wellbeing, and established indicators encompassing both dimensions.  $\!\!\!^3$ 

#### The indicator set

Building on previous work to develop a core set of national indicators for adult mental health,<sup>8</sup> NHS Health Scotland finalised and published a similar set for C&YP in November 2011.<sup>5</sup> The C&YP's indicator set comprises 108 indicators plus a cross-cutting equalities analysis that involves analysing each indicator by selected dimensions of equality. Some indicators have multiple measures, which have arisen because some indicators use several data sources to enable reporting for different age groups, or for reporting on different aspects of the indicator. The number of measures totals 152. A list of the indicators and their measures is provided in Appendix 1.

Unless stated otherwise, indicators cover C&YP aged 17 years and under<sup>ii</sup> and they draw on both administrative and survey data. Seventy three of the indicators and 104 of the measures were established with associated data sources. Suitable data sources have yet to be identified for the remaining indicators and measures.

The indicators are structured within a framework under constructs (categories) of two types (Table 1):

- mental health outcomes covering both mental wellbeing and mental health problems
- contextual factors covering the factors associated with mental health at an individual, family, learning environment, community and structural domain level. The direction of causality is often unknown so these may be determinants (the risk and protective factors) or consequences of mental health or both.

<sup>&</sup>lt;sup>ii</sup> The upper age limit has been extended to 18 or 19 years in a few instances to allow the creation of a robust indicator or to align with an existing national indicator.

Mental health outcomes																							
Mental wellbeing (4) Mental health problems (11)																							
Contextual factors associated with mental health																							
Individual	Family	Learning Environment								Community	Structural												
Learning and development (2)	Family relations (7)	Engagement with learning (3)		Engagement with learning		with learning		with learning		with learning		with learning		Engagement with learning		Engagement with learning		Engagement with learning		with learning		with learning Participation (4)	
Healthy living (7)	Family structure (4)	Peer & friend relationships (7)		relationships		Social networks (1)	Social inclusion (8)																
General health (3)	Parental healthy living (5)	Educational environment (5)						Social support (1)	Discrimination (3)														
Spirituality (1)	Parental health (5)	expect	ire and tations 5)	Trust (3)	Physical environment (5)																		
Emotional intelligence (1)				Safety (1)	Violence (3)																		
Life events (2)					Culture (3)																		

#### Table 1. Framework for the indicators (number of indicators shown in brackets)

## 1.2 Data report

#### Aims and objectives

The NHS Health Scotland mental health indicators aim to provide regular, comprehensive and up-to-date information on the mental health of the Scottish population, thus enabling evidence-informed decision making for mental health improvement and ultimately facilitating more effective mental health improvement policy and planning and contributing to reducing health inequalities.

Using the C&YP's indicators, this report aims to provide a comprehensive and up-todate description of C&YP's mental health in Scotland, covering mental health outcomes (both mental health problems and mental wellbeing) and the contextual factors associated with it and highlight inequalities in these.

The report has four objectives:

- to describe the mental health of C&YP in Scotland at a single point in time, using the most recent data available
- to present time trends over the last decade, where data allow, with statistical analysis undertaken for the mental health outcome time trends
- to identify inequalities in the mental health outcomes of Scotland's C&YP population, using statistical methodologies, by:

- $\circ~$  selected protected characteristics under the Equality Act 2010 (gender and age)^{iii}
- area-level deprivation (using the Scottish Index of Multiple Deprivation, SIMD)
- urban-rural classification (using the Scottish Government's 6-fold Urban-Rural classification system)<sup>9</sup>
- to provide a purely descriptive account of the contextual factors by selected protected characteristics under the Equality Act 2010 (gender and age).<sup>iii</sup>

#### **Target audience**

#### <u>National</u>

This report is concerned with mental health at a national level. It will not provide local analysis or international comparisons. The report is targeted towards organisations, partnerships, policy-makers and planners driving progress towards improved mental health in Scotland and improved health of C&YP, as well as in other areas known to impact mental health at the wider contextual level. The mental health of C&YP impacts on all aspects of their life and equally the things that impact on the mental health of C&YP arise from a wide range of factors. As such, policymakers and practitioners from a number of fields, including public health and education, are important audiences for this report.

#### Use of the indicators and data at a sub-national level

Although the indicators were developed to support monitoring at the national level, they will also be useful to the same professional groups working at a local level, as a framework to inform the development of local monitoring systems for mental health and to inform decision making and prioritisation around local action for mental health improvement and strategy development. The national-level estimates in this report provide a benchmark for local comparison.

Although data for the national indicators have been drawn from national sources which allow as much sub-national disaggregation as possible, disaggregation to the local geographies required is often limited. In instances where national data for an indicator cannot be disaggregated to the required sub-national level, there may be two options: local boosts to the relevant national surveys could be prioritised or the relevant questions/scales, used for the national indicators, could be used in surveys conducted locally. Details of sub-national data availability will be made available on the NHS Health Scotland website in due course.

#### Intended impact

By providing a comprehensive yet relatively brief description of mental health in Scotland's C&YP population, it is hoped that the report's findings will easily inform strategic decision making and action for mental health improvement.

<sup>&</sup>lt;sup>iii</sup> The Equality Act 2010 outlines nine protected characteristics, national data currently only allow breakdown for C&YP by two of these: gender and age.

## 2. Methods

## 2.1 Data availability

The children and young people's (C&YP) national mental health indicator set contains 108 indicators covering both the state of mental health (15 indicators) and associated contextual factors (93 indicators).<sup>5</sup> Of these, data availability restricted the number of reportable indicators to 73 in total: 13 mental health outcomes (four for mental wellbeing and nine for mental health problems) and 60 associated contextual factors. Appendix 1 provides the full list of indicators and their measures.

Each reported indicator has a minimum of one measure associated with it. Multiple measures have been reported for some indicators in cases where a single measure does not adequately cover the scope of the indicator. There are 152 possible measures and data are available for 104 of them.

#### 2.2 Data sources

The C&YP's indicator set is based upon data from 18 different sources (number of measures in brackets after the abbreviation):

- 1. Annual Population Survey (APS, 2)
- 2. Department for Work and Pensions Family Resources Survey (FRS, 1)
- 3. Health Behaviour in School-aged Children Survey (HBSC, 35)
- 4. ISD Scotland, Scottish Morbidity Record 01/04 (SMR01/04, 1)
- 5. ISD Scotland, Scottish Morbidity Record 02 (SMR02, 1)
- 6. ISD Scotland, Teenage pregnancy analysis team (1)
- 7. National Records of Scotland (NRS, 2)
- 8. School Leavers Destination Survey, Follow-up survey (1)
- 9. Scottish Government child care statistics (1)
- 10. Scottish Government education statistics (4)
- 11. Scottish Government housing and regeneration statistics (2)
- 12. Scottish Government income and poverty statistics (3)
- 13. Scottish Health Survey (SHeS, 24)
- 14. Scottish House Condition Survey (SHCS, 2)
- 15. Scottish Household Survey (SHoS, 7)
- 16. Scottish Prison Survey (SPS, 2)
- Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS, 13)
- 18. Scottish Survey of Achievement/Scottish Survey of Literacy and Numeracy (SSA/SSLN, 2).

Some data were requested from data managers, whilst others were accessed from published reports or obtained from the data archives by the authors of this report. Where analysis was undertaken by the authors, the Statistical Package for the Social Sciences (SPSS) version 19 was used. Appendix 2 highlights the caveats and limitations of the data sources.

#### 2.3 Target population

While the term 'children and young people' is taken throughout the report to denote all those aged 17 years and under, in some cases data availability or indicator definitions have made it necessary to analyse the indicators for a narrower age range or to extend the age range to 19 years. Age ranges are displayed in the tables of results and a full list of the age ranges used for each measure can be found in Appendix 1 and Appendix 3.

### 2.4 Mental health outcomes analysis

#### 2.4.1 Data description

Categorical mental health outcome indicator measures (14 of 20) were described using percentages. Six measures are numerical variables and four of these (two Warwick-Edinburgh Mental Well-being Scale (WEMWBS) and two life satisfaction measures) were described using the mean score. Categorical measures were reported as whole numbers and mean scores were rounded to one decimal place. Income inequality was reported using the Gini coefficient and rounded to two decimal places. The remaining two numerical measures (drug-related disorders and suicide) were described by European age-sex standardised rates per 100,000 C&YP in the population and reported to one decimal place.

Where there was a linear trend, the estimated size of the change in the continuous measures (WEMWBS and life satisfaction) over time or the size of the difference by equality characteristic, was described using the linear regression slope coefficient (B) along with the 95% confidence interval to show the precision of the estimate. Where there was no linear trend in a continuous variable, the pattern of change was described narratively.

The size of the change over time or difference by equality characteristics for categorical outcome measures (percentages) was described as the percentage change in the odds ((Odds Ratio-1)\*100) over time or percentage difference by each equality characteristic, along with the 95% confidence interval. Difference in rates by equality characteristics for drug-related disorders and suicide were described as the incident rate ratio (IRR). An odds ratio (OR) or IRR of greater than one indicates an increase for every one unit increase in the predictor variable (time, gender, age, Scottish Index of Multiple Deprivation (SIMD) or urban-rural classification), an OR or IRR of less than one indicates a decrease and an OR or IRR of 1.0 indicates no change or difference. Ninety-five per cent confidence intervals around these values were also reported.

The time period over which data correspond differs between the data sources and analyses. The convention of, for example, 2010/11 is used to signify a 12 month period which spans two calendar years and this could be a financial year or an academic year. The convention of, for example, 2010-11 is used to signify two years of data combined for the analysis i.e. 2010 and 2011.

#### 2.4.2 Point prevalence

All point estimates are reported for the most recently available year of data, or aggregation of years, where it was necessary to combine data to increase sample

sizes. Where the ages for a particular measure do not form a continuous range i.e. school years P7, S2 and S4, point estimates are presented separately for each age group.

#### 2.4.3 Trends over time

Change over time is presented for the last decade, where available, but for some measures the time series has been shortened or extended due to data availability. Time series have a minimum of three and a maximum of eleven data points. The point prevalence estimates for the population as a whole and the last data point in the time series are always based on the same data: the most recent year available at the time of analysis.

Where possible, time trend analysis was undertaken for the C&YP's population as a whole. Where the ages for a particular measure did not form a continuous range (i.e. school years P7, S2 and S4), time trends have been presented separately for each age group. There was insufficient data to calculate precise time trend estimates for individual age groups from continuous data, gender, SIMD quintiles or urban-rural classification.

Binary logistic regression was used to test for changes over time in the probability of the outcome measure occurring for all categorical dependent measures (i.e. those with a percentage based measure), whilst simultaneously adjusting for differences by the predictor variables gender, age and SIMD between years. Gender and age were treated as categorical variables in the regression model to account for differences between boys and girls and to look at non-linear differences across age groupings. SIMD was treated as a continuous variable to look at linear differences across SIMD quintiles. Urban-rural classification was not adjusted for in the time-trend analyses due to inconsistency in the availability of data over time.

Multiple linear regression was used to test for linear change over time for continuous outcome measures (i.e. those using 'mean score' as a unit of measurement). Gender, age and SIMD were also simultaneously adjusted for in these analyses in the manner explained above for binary logistic regression.

#### 2.4.4 Equalities analysis

All equalities analyses by gender, age, SIMD and urban-rural classification were based upon the most recent data available at the time of analysis. Multiple years have been combined where the sample size for the most recent year was too small to allow a robust breakdown by equality groupings.

Where possible, point prevalence estimates have been calculated for the C&YP's population as a whole. Where the age bands available for a particular measure do not form a continuous range i.e. school years P7, S2 and S4, and where data allow, equalities analyses by gender, SIMD and urban-rural classification have been presented separately for each age group.

The same statistical methodological approaches used in the time-trend analyses were replicated for the equalities analyses with the addition of Poisson regression for measures based on count data (drug-related disorders and suicide). In addition to adjusting for gender, age and SIMD, it was possible to adjust for urban-rural classification in the inequality analyses for the majority of measures, where data allowed. The Scottish Government 6-fold urban-rural criteria measures two features: size of the population in each settlement and how accessible areas are to larger settlements.<sup>9</sup> For this reason, the urban-rural variable has been treated as a categorical variable in the equalities analyses undertaken in this report. Further details will be provided in the forthcoming technical supplement.

## 2.5 Contextual factors

#### 2.5.1 Data description

As for mental health outcomes, contextual factor categorical measures (72 of 84) were described using percentages. The remaining 12 measures were numerical variables. Parental mental wellbeing was described using the mean score and one measure of alcohol consumption was described using the mean number of units of alcohol drunk in the last week. Income inequality in households with children was measured by the Gini coefficient. The indicators for teenage parents, parental imprisonment, sexual health (teenage pregnancies), school exclusions, homelessness and looked after children were measured as crude rates per 1,000 population at risk. All these measures were reported to one decimal place.

Trends over time have been described as the absolute difference between the first and last time points in each respective time series. The length of the time period reported for each measure should therefore be taken into account when considering the magnitude of change over time.

Trends with age have been described as the absolute difference between the youngest and the oldest age group. As with trends over time, the age gap should therefore be taken into account when considering the magnitude of change with age.

#### 2.5.2 Point prevalence, trends over time and equalities data

The methodology for presentation of this data for the contextual factors was the same as that for the mental health outcomes discussed above except for the following:

- no statistical analysis was performed on the trends over time or equalities data
- equalities analysis was restricted to description by individual level inequalities of gender and age only.

An accompanying Excel file includes charts for both time trends and equalities, where data allow (<u>www.scotpho.org.uk/publications/reports-and-papers/1159-</u><u>Scotlands-mental-health-children-and-young-people-2013</u>).

# 3. Mental health outcomes

### 3.1 Mental wellbeing and mental health problems

This chapter reports on mental health outcomes for children and young people (C&YP). Both dimensions of mental health, mental wellbeing and mental health problems, are covered by the indicators to reflect their importance in assessing the mental health of the C&YP of Scotland.<sup>5</sup>

The following list details the mental health outcome indicators for which some analysis was possible and the two for which analysis was not.

Mental wellbeing

- Mental wellbeing
- Life satisfaction
- Happiness
- Pro-social behaviour.

Mental health problems

- Common mental health problems
- Emotional and behavioural problems
- Emotional symptoms
- Conduct problems
- Hyperactivity/inattention
- Sadness
- Alcohol dependency
- Drug-related disorders
- Suicide
- Self-harm (No suitable data source identified)
- Eating disorders (No suitable data source identified).

#### 3.2 Most recent point estimates

Data were available for all four mental wellbeing and nine mental health problems indicators for which there was an identified data source. The most recent estimates and 95% confidence intervals for the mental health outcome indicators are presented in Table 3.1.

#### Mental wellbeing

The mean score on the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (an assessment of overall mental wellbeing) for 16 and 17 year olds in 2011<sup>iv</sup> was 50.1 and the score for S2 and S4 pupils in 2010<sup>v</sup> was 50.4 and 49.7, respectively.<sup>vi</sup>

Life satisfaction was reported for four age groups; for 16 and 17 year olds combined the mean score was 8.0 in 2011 and the mean score for P7, S2 and S4 pupils was 8.1, 7.6 and 7.3, respectively, in 2010.<sup>vii</sup>

The percentage of pupils who reported feeling happy with their life at present in 2010 was 55% for P7, 43% for S2 and 33% for S4 pupils.

Pro-social behaviour (pro-social scale - Strengths and Difficulties Questionnaire (SDQ)<sup>viii</sup>) was reported for two age groups; in 2011, 93% of 4 to 12 year olds had a normal score on the pro-social scale<sup>ix</sup> and in 2010, 73% of S2 pupils; and 70% of S4 pupils had a 'normal score'.<sup>v</sup>

#### Mental health problems

In 2011, 14% of 16 to 19 year olds scored 4 or more on the General Health Questionnaire-12 (GHQ-12), indicating a possible mental health problem over the past few weeks.

From parental completion of the SDQ in 2011,<sup>iv</sup> 14% of 4 to 12 year olds had emotional and behavioural problems (Total Difficulties Score<sup>viii</sup>); 13% had emotional symptoms; 21% had conduct problems and 20% had hyperactivity/inattention.<sup>viii</sup>

From self-completion of the SDQ by children in 2010,<sup>v</sup> 23% of S2 pupils and 26% of S4 pupils had emotional and behavioural problems; emotional symptoms were present in 15% of S2 and 19% of S4 pupils; conduct problems in 24% of both S2 and S4 pupils; and hyperactivity/inattention in 29% of S2 and 34% of S4 pupils.

<sup>viii</sup> Measures the proportion of children with a 'normal', 'borderline' or 'abnormal' score on the respective scale of the SDQ. Total Difficulties Score for emotional and behavioural problems is generated from the addition of scores for emotional symptoms, conduct problems, hyperactivity/inattention and peer-relationship problems. See Technical supplement for definition of

borderline, abnormal and normal scores on SDQ.

<sup>&</sup>lt;sup>iv</sup> Data taken from the Scottish Health Survey.

<sup>&</sup>lt;sup>v</sup> Data taken from the Scottish Schools Adolescent Life-style and Substance Use Survey (SALSUS).

<sup>&</sup>lt;sup>vi</sup> WEMWBS - on a scale from 14 (the lowest level of mental wellbeing) to 70 (the highest).

<sup>&</sup>lt;sup>vii</sup> 16 and 17 year olds measured on a scale from zero (extremely dissatisfied) to 10 (extremely satisfied) in the Scottish Health Survey. P7, S2 and S4 pupils measured on the adapted Cantril ladder, where zero is the 'worst possible life' and ten is the 'best possible life', in the Health Behaviour in School-aged Children Survey (HBSC). These two scales are NOT comparable.

<sup>&</sup>lt;sup>ix</sup> Data taken from the Scottish Health Survey and data collected by parental/guardian assessment.

In 2010, 27% of P7, 31% of S2 and 36% of S4 pupils reported feeling sad in the last week. For the period 2008 to 2011 combined, 9% of 16 to 19 year olds had possible alcohol dependency in the previous three months (as measured by a score of 2 or more on the CAGE questionnaire). In 2011/12, the rate of drug-related disorders in those aged 19 years and under was 19.4 per 100,000 C&YP<sup>x,xi</sup> and the rate of suicide<sup>xii</sup> in C&YP aged 19 years and under in the period 2007 to 2011 combined was 2.8 per 100,000 C&YP<sup>x,i</sup>

<sup>&</sup>lt;sup>x</sup> Hospital patients per 100,000 C&YP aged 19 years and under discharged in the past year for mental and behavioural disorders due to psychoactive substance use (general acute and psychiatric hospitals).

<sup>&</sup>lt;sup>xi</sup> Age-sex standardised to the 1976 European Standard Population.

<sup>&</sup>lt;sup>xii</sup> Deaths from mental and behavioural disorders due to psychoactive substance use was subsumed within the number of recorded suicides from 2011 onwards. The data presented are based on the coding prior to this change and will not be directly comparable with data published after this time. More information is available from the National Records of Scotland website.

#### Table 3.1. Mental health outcomes: most recent point estimates for the population overall

Construct	Indicator	Measure	School year / age (years)	Unit	Year(s)	Estimate	95% CI
		Mean WEMWBS score*	16 to 17	Mean	2011	50.1	49.9, 52.0
	Mental wellbeing		S2	Mean	2010	50.4	50.3, 50.6
		Mean WEMWBS score*	S4	Mean	2010	49.7	49.5, 49.8
		Mean score of how satisfied with life nowadays	16 to 17	Mean	2011	8.0	7.8, 8.2
	Life satisfaction		P7	Mean	2010	8.1	8.0, 8.3
being		Mean score on adapted Cantril ladder	S2	Mean	2010	7.6	7.5, 7.7
ul well			S4	Mean	2010	7.3	7.2, 7.4
Mental wellbeing			P7	%	2010	55	53, 58
2	Happiness	Feel very happy with their life at present	S2	%	2010	43	40, 45
			S4	%	2010	33	31, 35
		Named as an an the new second softher CDOtt	S2	%	2010	73	73, 74
	Pro-social behaviour	Normal score on the pro-social scale of the SDQ**	S4	%	2010	70	70, 71
		Normal score on the pro-social scale of the SDQ**	4 to 12	%	2011	93	91, 95
	Common mental health problems	Score of 4 or more on the GHQ-12***	16 to 19	%	2011	14	11, 18
	Emotional & behavioural problems	Borderline or abnormal total difficulties score on the SDQ**	S2	%	2010	23	22, 24
			S4	%	2010	26	26, 27
		Borderline or abnormal total difficulties score on the SDQ**	4 to 12	%	2011	14	12, 16
		Perderline or observed every on the emotional symptome code of the SDO**	S2	%	2010	15	14, 15
	Emotional symptoms	Borderline or abnormal score on the emotional symptoms scale of the SDQ**	S4	%	2010	19	19, 20
		Borderline or abnormal score on the emotional symptoms scale of the SDQ**	4 to 12	%	2011	13	11, 15
sma		Bardarling or apparently source on the conduct problems eacle of the CDO**	S2	%	2010	24	23, 25
Mental health problems	Conduct problems	Borderline or abnormal score on the conduct problems scale of the SDQ**	S4	%	2010	24	23, 25
ealth p		Borderline or abnormal score on the conduct problems scale of the SDQ**	4 to 12	%	2011	21	19, 24
ital he		Perdeding or charged every on the hyperpetivity/institution evels of the CDOtt	S2	%	2010	29	28, 29
Men	Hyperactivity / inattention	Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	S4	%	2010	34	33, 34
		Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	4 to 12	%	2011	20	17, 22
			P7	%	2010	27	25, 30
	Sadness	Felt sad quite often, very often or always in the last week	S2	%	2010	31	29, 34
			S4	%	2010	36	34, 39
	Alcohol dependency	Score of 2 or more on the CAGE questionnaire	16 to 19	%	2011	8	5, 11
	Drug-related disorders	Hospital patients: mental and behavioural disorders due to psychoactive drug use <sup>†</sup>	19 and under	SR	2011/12	19.4	16.1, 22.7
	Suicide	Deaths from intentional self-harm or by events of undertermined intent <sup>1†</sup>	19 and under	SR	2007-11	2.8	2.2, 3.5

#### Footnotes

1 No data were available for two indicators, self-harm and eating disorders, as no suitable data source has yet been identified. 2 Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall population estimate, instead, data for each discrete age group have been presented separately. **3** P7 - Primary seven (approx 11 years of age), S2 - Secondary 2 (approx 13 years of age), S4 - Secondary 4 (approx 15 years of age). **4** Data for measures for 4 to 12 year olds were collected by parental/guardian assessment. **5** Point estimates are for the most recent year of data available at the time of analysis; for some measures it has been necessary to aggregate years to increase the sample size. **6** Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator. **7** SR = Standardised Rate (age-sex standardised to the 1976 European Standard Population); % = per cent. **8** CI = Confidence Interval.

#### Notes on indicators

\*WEMWBS - Warwick-Edinburgh Mental Well-being Scale. \*\*SDQ - Strengths and Difficulties Questionnaire. \*\*\*GHQ-12 - General Health Questionnaire -12. <sup>†</sup>Drug-related disorders - hospital patients per 100,000 C&YP aged 19 years and under in the past year from mental and behavioural disorders due to psychoactive substance use - general acute and psychiatric hospitals (age-standardised rate). <sup>††</sup>Suicide - deaths per 100,000 C&YP aged 19 years and under in the past year from intentional self-harm or by events of undetermined intent (age standardised rate). Coding applied reflects definition of suicide prior to changes introduced by the World Health Organization in 2011.

#### 3.3 Trends over time

Time trend analysis was possible for 11 out of 15 indicators (26 measures). Table 3.2 details the mental health outcomes which have improved over time, deteriorated or showed little change as well as those for which a time trend could not be reported. The longest time series spanned 14 years with a total of six data points (common mental health problems and alcohol dependency between 1998 and 2011) and the shortest with only three data points (pro-social behaviour, emotional and behavioural problems, emotional symptoms, conduct problems and hyperactivity/inattention all spanning 2006 to 2010).

A description of the annual change for each indicator measure is given below along with the 95% confidence interval in brackets.

#### Mental wellbeing

Mental wellbeing (as measured by WEMWBS<sup>vi</sup>) did not display a clear linear trend between 2008 and 2011 as it fluctuated from a mean score of 51.0 in 2008 to a high of 52.1 in 2009 before dropping to 50.1 points in 2011.<sup>iv</sup>

Life satisfaction remained broadly stable over time for each of the four age groups. For 16 and 17 year olds, between 2008 and 2011, there was a slight annual reduction in the mean score of 0.03 points (-0.11 to 0.05) on the life satisfaction scale.<sup>iv</sup> For younger school pupils there was a slight overall increase in mean score between 2002 and 2010; P7 pupils 0.02 points (-0.02 to 0.04) year on year; S2 pupils 0.01 points (-0.01 to 0.03); and S4 pupils 0.01 points (-0.01 to 0.02).<sup>vii</sup> vii

The odds of C&YP reporting that they felt happy with their life improved for all age groups between 1998 and 2010. For P7 pupils, the odds were 2.5% (2% to 3%) higher per year; for S2 pupils 3% (2% to 4%) higher; and for S4 pupils 2% (1% to 3%) higher. The odds of having a 'normal' pro-social behaviour score improved over time for all three age groups; 4 to 12 year olds increased by 3% (0% to 6%) per year between 2003 and 2011;<sup>ix</sup> S2 pupils by 4% (3% to 6%) per year;<sup>v</sup> and S4 pupils by 3% (1% to 4%) per year between 2006 and 2010.<sup>v</sup>

#### Mental health problems

The odds of a 16 to 19 year old having a common mental health problem (as measured by the GHQ-12) increased slightly by 2% (-2% to 7%) per year between 1998 and 2011. The change in the proportion of C&YP with emotional and behavioural problems<sup>viii</sup> over time was not uniform across all age groups. The odds decreased year on year between 2006 and 2010 for S2 pupils by 3% (-4% to -2%) and increased by 2% (1% to 4%) for S4 pupils.<sup>v</sup> The odds also decreased by 3% (-5% to -1%) each year for C&YP aged 4 to 12 years between 2003 and 2011.<sup>ix</sup>

The odds of having emotional symptoms<sup>viii</sup> in S2 pupils showed no change year on year between 2006 and 2010, 0% (-2% to 2%), while the odds for S4 pupils were 6% (4% to 8%) worse per year.<sup>v</sup> The odds for 4 to 12 year olds between 2003 and 2011 reduced by 2% (-4% to 0%) per year.<sup>ix</sup>

The odds of having conduct problems<sup>viii</sup> decreased over time for all age groups: S2 pupils and S4 pupils had a year on year decline between 2006 and 2010 of 8% (-9%

to -6%) and 6% (-7% to -4%) respectively;<sup>v</sup> and the odds for 4 to 12 year olds also decreased year on year between 2003 and 2011 by 2% (-4% to 0%).<sup>ix</sup>

There was a steady annual decline between 2008 and 2010 in the odds of S2 pupils displaying hyperactivity/inattention<sup>viii</sup> with a reduction of 4% (-5% to -2%) per year.<sup>v</sup> S4 pupils showed very little year on year change over the same time period with an average annual decline of 1% (-2% to 1%)<sup>v</sup> and 4 to 12 years with an average increase of 1% (-1% to 3%) per year between 2003 and 2011.<sup>iv</sup>

Alcohol dependency fluctuated in 16 to 19 year olds year on year with no obvious pattern or trend.

#### Table 3.2. Mental health outcomes: trends over time



Statistically significantly better across time period<sup>1</sup> Statistically not significantly different across time period<sup>1</sup> Statistically significantly worse across time period<sup>1</sup>

	Statistically significantly worse across time period						Year									
Construct	Indicator	Measure	School year / age (years)	Unit	1998	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	P-value
	Mental wellbeing	Mean WEMWBS score*	16 to 17	Mean								51.0	52.1	51.4	50.1	0.21
		Mean score of how satisfied with life nowadays	16 to 17	Mean								8.1	7.9	8.0	8.0	0.49
	Life satisfaction		P7	Mean		8.0				7.9				8.1		0.09
	Life satisfaction	Mean score on adapted Cantril ladder	S2	Mean		7.5				7.5				7.6		0.28
being			S4	Mean		7.4				7.1				7.3		0.46
Mental wellbeing	Happiness		P7	%	51	55				60				55		<0.01
Menta		Feel very happy with their life at present	S2	%	38	44				50				43		<0.01
			S4	%	30	38				36				33		<0.01
	Pro-social behaviour	Normal score on the pro-social scale of the SDQ**	S2	%						69		72		73		<0.01
		Normal score on the pro-social scale of the SDQ <sup>m</sup>	S4	%						67		71		70		0.01
		Normal score on the pro-social scale of the SDQ**	4 to 12	%			91					91	93	91	93	<0.05
	Common mental health problems	Score of 4 or more on the GHQ-12***	16 to 19	%	12		12					11	14	12	14	0.32
	Emotional & behavioural problems	vioural problems	S2	%						28		24		23		<0.01
			S4	%						27		26		26		0.01
		Borderline or abnormal total difficulties score on the SDQ**	4 to 12	%			17					15	14	15	14	0.01
			S2	%						16		14		15		0.92
olems	Emotional symptoms	Borderline or abnormal score on the emotional symptoms scale of the SDQ**	S4	%						17		18		19		<0.01
Mental health problems		Borderline or abnormal score on the emotional symptoms scale of the SDQ**	4 to 12	%			17					15	14	17	13	0.10
healt			S2	%						33		28		24		<0.01
Aental	Conduct problems	Borderline or abnormal score on the conduct problems scale of the SDQ**	S4	%						31		27		24		<0.01
2		Borderline or abnormal score on the conduct problems scale of the SDQ**	4 to 12	%			24					23	22	22	21	0.03
			S2	%						33		33		29		<0.01
	Hyperactivity / inattention	Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	S4	%						35		36		34		0.28
		Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	4 to 12	%			19					20	19	20	20	0.44
	Alcohol dependency	Score of 2 or more on the CAGE questionnaire	16 to 19	%	6		5					15	13	3	8	0.29

#### Footnotes

1 Shaded cells indicate a statistically significant difference (P<0.05) over time period. 2 No data were available for two indicators, self-harm and eating disorders, as no suitable data source has yet been identified. 3 Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall time trend. Instead a time trend for each discrete age group has been presented separately. 4 P7 - Primary seven (approx 13 years of age), S2 - Secondary 4 (approx 15 years of age). 5 Data for measures for 4 to 12 year olds was collected by parental/guardian assessment. 6 Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator. 7 Only indicators with time series data have been included in the table, those without time trend data are noted in the table below. 8 SR = Standardised Rate (age-sex standardised to the 1976 European Standard Population); % = per cent. Notes on indicators

\*WEMWBS - Warwick-Edinburgh Mental Well-being Scale. \*\*SDQ - Strengths and Difficulties Questionnaire. \*\*\*GHQ-12 - General Health Questionnaire -12.

#### **Dataless indicators/measures**

Construct	Indicator	Measure	School year / age (years)	Unit
Mental wellbeing	Mental wellbeing	Mean WEMWBS score*	S2, S4	Mean
	Sadness	Felt sad quite often, very often or always in the last week	P7, S2, S4	%
Mental health problems		Hospital patients discharged in the past year for mental and behavioural disorders due to psychoactive substance use (general acute and psychiatric hospitals)	19 and under	SR
	Suicide	Deaths from intentional self-harm or by events of undertermined intent	19 and under	SR

#### How big is the change in mental health over time?

The direction of change over time for each mental health outcome varied with six out of 17 measures improving over time, one measure deteriorating over time and 11 measures remaining broadly constant. Table 3.2a describes and illustrates the size of the annual relative change for categorical measures as the odds ratio (OR). All continuous measures for mental wellbeing and life satisfaction were broadly stable over time. These have not been included in the table below.

						•			_		ge over ti			
lict		Units for	Relative	95%		Annual			•	Worsene				
Construct	Indicator	Relative change measure	change (OR)	Lower	Upper	% change in OR	Time period	P-value	0.90	0.9		s ratio	1.05	1.10
	Happiness (P7 pupils)	OR	1.025	1.020	1.030	2	1998-2010	<0.01				T •		Í
_ 2	Happiness (S2 pupils)	OR	1.030	1.020	1.040	3	1998-2010	<0.01				⊢●	-	
Mental ellbein	Happiness (S2 pupils) Happiness (S4 pupils) Pro-social (4 to 12 years)	OR	1.018	1.010	1.027	2	1998-2010					H <b>-</b>		
Me	Pro-social (4 to 12 years)	OR	1.030	1.000	1.060	3	2003-2011	<0.05				•		
- š	Pro-social (S2 pupils)	OR	1.043	1.026	1.060	4	2006-2010					⊢ ⊢		
	Pro-social (S4 pupils)	OR	1.022	1.007	1.037	3	2006-2010						-	
	Common mental health problems (16 to 19 years)		1.022	0.979	1.067	2	1998-2011	0.32			-	+		
	Emotional & behavioural problems (4 to 12 years)	OR	0.970	0.950	0.990	-3	2003-2011	0.01		-				
S	Emotional & behavioural problems (S2 pupils)	OR	0.967	0.951	0.983	-3	2006-2010			F				
problems	Emotional & behavioural problems (S4 pupils)	OR	1.020	1.010	1.040	2	2006-2010						1	
ldo	Emotional symptoms (4 to 12 years)	OR	0.980	0.960	1.000	-2	2003-2011	0.1				<u> </u>		
	Emotional symptoms (S2 pupils)	OR	1.000	0.980	1.020	0	2006-2010							
Mental health	Emotional symptoms (S4 pupils)	OR	1.060	1.040	1.080	6	2006-2010							
je	Conduct problems (4 to 12 years)	OR	0.980	0.960	1.000	-2	2003-2011	0.03						
a	Conduct problems (S2 pupils)	OR	0.920	0.910	0.940	-8	2006-2010							
ent	Conduct problems (S4 pupils)	OR	0.940	0.930	0.960	-6	2006-2010							
ž	Hyperactivity/inattention (4 to 12 years)	OR	1.010	0.990	1.030	1	2003-2011	0.44						
	Hyperactivity/inattention (S2 pupils)	OR	0.960	0.950	0.980	-4	2008-2010							
	Hyperactivity/inattention (S4 pupils)	OR	0.990	0.980	1.010	-1	2008-2010					T .		
	Alcohol dependency (16 to 19 years)	OR	1.030	0.970	1.090	3	1998-2011	0.29				-		

## Table 3.2a. Trends over time in mental health outcomes, annual change<sup>xiii</sup>

Improved over time

<sup>&</sup>lt;sup>xiii</sup> Green and red dots indicate where the trend is likely to be different from zero at the p<0.05 level. An amber dot indicates that the estimated trend is too imprecise to be confident that the trend is not due to chance at the p<0.05 level.

## 3.4 Equalities analysis

This section of the results shows whether there are any differences in the mental health outcomes of the Scottish population of C&YP by gender, age, Scottish Index of Multiple Deprivation (SIMD) and urban-rural classification (Tables 3.3 to 3.6) and presents the 95% confidence intervals for the difference in brackets.

Equalities analysis was undertaken for a total of 13 out of 15 mental health outcome indicators; gender - 13 indicators (32 measures); age - 11 indicators (18 measures); SIMD - 11 indicators (23 measures); and urban-rural classification – seven indicators (12 measures)).

Of these, gender was associated with differences in mental health for 28 out of 32 measures (88%), age with 14 out of 18 (78%), SIMD with 21 out of 23 (91%) and urban-rural classification with five out of 11 (45%).

#### 3.4.1 Mental health outcomes: by gender

Mental health outcomes differed by gender for 12 out of the 13 reportable indicators. Boys fared better than girls in eight indicators (17 measures) and girls fared better than boys in four indicators (10 measures). Mental health outcome estimates by gender are presented in Table 3.3 and the size of the difference between boys and girls in Table 3.3a.

There was no significant difference by gender for the following indicator measures:

- Life satisfaction in P7 pupils;<sup>vii</sup> boys and girls both had a mean score of 8.1, a difference of 0 points (-0.16 to 0.17)
- Emotional and behavioural problems in S2 pupils:<sup>v</sup> 23% for both boys and girls with an estimated variation in the odds of 1% (0.9% to 1.1%)
- Emotional symptoms in 4 to 12 year olds.<sup>ix</sup> boys 14% and girls 16% with an estimated percentage difference in the odds of 16% (3% to 38%)
- Alcohol dependency in 16 to 19 year olds: boys 10% and girls 9% with an estimated percentage difference in the odds of 1% (0.6% to 1.3%).

#### Mental wellbeing

Boys fared better than girls in three out of four mental wellbeing indicators. Boys were more likely to score marginally higher than girls for mental wellbeing on the WEMWBS scale<sup>vi</sup> for all age groups: in the period 2010 to 2011 combined, 16 and 17 year old girls scored on average 1.5 points (-2.8 to 0.2) less on the scale than boys: mean score for boys 51.6 and girls 49.8.<sup>iv</sup> In 2010, S2 girls scored on average 1.0 points (-1.2 to -0.7) less on the scale than S2 boys, mean score for boys 50.9 and girls 49.9, and S4 girls scored on average 2.3 points (-2.6 to -2.0) less than S4 boys, mean score for boys 50.8 and girls 48.5.<sup>v</sup>

Life satisfaction was marginally higher for boys across three age groups.<sup>vii</sup> In 2010, S2 boys scored on average 0.4 points (0.2 to 0.6) higher than S2 girls: the mean score for boys was 7.8 and for girls was 7.4. Similarly, S4 boys scored slightly better than S4 girls by an average of 0.3 points (0.2 to 0.5) more: the mean score for boys was 7.5 and for girls was 7.2. In the period 2010 to 2011 combined, 16 and 17 year old girls scored on average 0.3 points (-0.6 to -0.1) less than boys of the same age: the mean score for boys was 8.1 and for girls was 7.8.

In 2010, boys were more likely to report feeling happy than girls across each age group: the odds of P7 boys reporting feeling happy were 30% (10% to 60%) larger than the odds for girls (boys 59% and girls 52%). The odds for S2 boys were 60% (30% to 90%) higher than the odds for girls (boys 48% and girls 37%) and the odds for S4 boys were 50% (30% to 80%) larger than the odds for girls (boys 38% and girls 29%).

Girls fared better than boys, in one out of four mental wellbeing indicators. Girls were more likely to score 'normally' for pro-social behaviour than boys.<sup>viii</sup> In 2010, the odds for S2 girls were twice as large as the odds for boys (boys 63%, girls 83%) and the odds for S4 girls were 2.3 times as large as the odds for boys (boys 59%, girls 82%).<sup>v</sup> In 2011, the odds for girls aged 4 to 12 year olds were 77% (40% to 123%) higher than the odds for boys (boys 90% and girls 94%).<sup>ix</sup>

#### Mental health problems

Boys fared better than girls in four out of nine mental health problem indicators. Common mental health problems in 16 to 19 year olds were less common for boys in the period 2008 to 2011 combined, with the odds for girls being 48% (11% to 97%) as large as the odds for boys (boys 11% and girls 15%). In 2010, emotional and behavioural problems<sup>viii</sup> were less common in S4 boys with the odds for S4 girls being on average 39% (30% to 49%) larger than that for boys (boys 23% and girls 29%).

Boys were less likely to suffer emotional symptoms than girls. In 2010, the odds were more than twice as large for S2 girls (10% of boys and 20% of girls) and twice as large for S4 girls compared with boys (boys 11% and girls 28%).

In 2010, the odds of S4 girls having hyperactivity/inattention were 10% (0% to 20%) higher than the odds for boys (boys 32% and girls 35%). This is in contrast to the relationship described for hyperactivity/inattention in S2 pupils, discussed below, which showed the opposite relationship.

Boys were less likely to report feeling sad than girls in 2010. The odds of P7 girls reporting sadness were 31% (8% to 57%) higher than the odds for boys (boys 25% and girls 30%). The odds for S2 girls were 63% (34% to 99%) larger than the odds for boys (boys 26% and girls 36%) and the odds for S4 girls were 92% (62% to 129%) larger than the odds for boys (boys 29% and girls 43%).

Girls fared better than boys in five out of nine mental health problem indicators. In the period 2008 to 2011 combined, the odds of boys aged 4 to 12 years having emotional and behavioural problems were 37% (15% to 64%) larger than the odds for girls (boys 16% and girls 12%).<sup>ix</sup> This is the opposite pattern to that described above for S4 pupils.<sup>v</sup>

Conduct problems were less prevalent in girls than boys across all age groups. In 2010, the odds for S2 girls were 39% (-43% to -34%) less than the odds for boys (boys 28% and girls 20%) and the odds for S4 girls were 34% (-39% to -30%) less than the odds for boys (boys 28% and girls 20%).<sup>v</sup> In the period 2008 to 2011 combined, the odds for girls aged 4 to 12 years were 20% (-31% to -8%) less than the odds for boys (boys 24% and girls 20%).<sup>ix</sup>

Hyperactivity/inattention was less prevalent in two age groups. In the period 2008 to 2011 combined, the odds for girls aged 4 to 12 years were 48% (-55% to -39%) less than the odds for boys (boys 24% and girls 14%).<sup>ix</sup> In 2010, the odds for S2 girls were 13% (-19% to -7%) less than the odds for boys (boys 30% and girls 27%).<sup>v</sup> This is in contrast to the pattern described above for children in S4.<sup>v</sup>

In the year 2011/12, girls aged 19 years and under were less likely to be admitted to hospital for drug-related disorders than boys of the same age: girls had a rate of 12.5 per 100,000 per year and boys a rate of 26.3 per 100,000 per year, a difference of 13.8 per 100,000 per year. In the period 2007 to 2011 combined, less girls aged 19 years and under completed suicide in the past year (2.1 per 100,000 per year) compared with boys of the same age (4.4 per 100,000 per year); a difference of 2.3 per 100,000 per year.

#### Table 3.3. Mental health outcomes: by gender

Boys fare better than girls<sup>1</sup> Girls fare better than boys<sup>1</sup>

	Girls fare better than boys <sup>1</sup> No statistically significant difference	e between boys and girls <sup>1</sup>					Gender	
Construct	Indicator	Measure	School year / age (years)	Unit	Year(s)	Boys	Girls	P-value
		Mean WEMWBS score*	16 to 17	Mean	2010-11	51.6	49.8	0.03
	Mental wellbeing		S2	Mean	2010	50.9	49.9	<0.01
		Mean WEMWBS score*	S4	Mean	2010	50.8	48.5	<0.01
		Mean score of how satisfied with life nowadays	16 to 17	Mean	2010-11	8.1	7.8	0.01
	Life satisfaction		P7	Mean	2010	8.1	8.1	0.96
being		Mean score on adapted Cantril ladder	S2	Mean	2010	7.8	7.4	<0.01
Mental wellbeing			S4	Mean	2010	7.5	7.2	<0.01
Menta			P7	%	2010	59	52	0.00
	Happiness	Feel very happy with their life at present	S2	%	2010	48	37	<0.01
			S4	%	2010	38	29	<0.01
	Pro-social behaviour	Normal score on the pro-social scale of the SDQ**	S2	%	2010	63	83	<0.01
			S4	%	2010	59	82	<0.01
		Normal score on the pro-social scale of the SDQ**	4 to 12	%	2008-11	90	94	<0.01
	Common mental health problems	Score of 4 or more on the GHQ-12***	16 to 19	%	2008-11	11	15	0.01
	Emotional & behavioural problems	Borderline or abnormal total difficulties score on the SDQ**	S2	%	2010	23	23	0.88
			S4	%	2010	23	29	<0.01
		Borderline or abnormal total difficulties score on the SDQ**	4 to 12	%	2008-11	16	12	<0.01
		Borderline or abnormal score on the emotional symptoms scale of the SDQ**	S2	%	2010	10	20	<0.01
	Emotional symptoms		S4	%	2010	11	28	<0.01
		Borderline or abnormal score on the emotional symptoms scale of the SDQ**	4 to 12	%	2008-11	14	16	0.10
sms		Borderline or abnormal score on the conduct problems scale of the SDQ**	S2	%	2010	28	20	<0.01
Mental health problems	Conduct problems		S4	%	2010	28	20	<0.01
ealth		Borderline or abnormal score on the conduct problems scale of the SDQ**	4 to 12	%	2008-11	24	20	0.00
ntal h		Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	S2	%	2010	30	27	<0.01
Me	Hyperactivity / inattention		S4	%	2010	32	35	<0.01
		Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	4 to 12	%	2008-11	24	14	<0.01
			P7	%	2010	25	30	0.01
	Sadness	Felt sad quite often, very often or always in the last week	S2	%	2010	26	36	<0.01
			S4	%	2010	29	43	<0.01
	Alcohol dependency	Score of 2 or more on the CAGE questionnaire	16 to 19	%	2008-11	10	9	0.55

Drug-related disorders	Hospital patients: mental and behavioural disorders due to psychoactive drug use <sup>TT</sup>	19 and under	SR	2011/12	26.3	12.5	<0.01
Suicide	Deaths from intentional self-harm or by events of undertermined intent <sup>†††</sup>	19 and under	SR	2007-11	4.4	2.1	<0.01

#### Footnotes

1 Shaded cells and P-values of <0.05 indicate a statistically significant difference between boys and girls. 2 No data were available for two indicators, self-harm and eating disorders, as no suitable data source has yet been identified. 3 Where the age range available for a measure is discontinuous, data for each age group have not been combined to give estimates by gender, instead, gender data for each discrete age group have been presented separately. 4 P7 -Primary seven (approx 11 years of age), S2 - Secondary 2 (approx 13 years of age), S4 - Secondary 4 (approx 15 years of age). 5 Data for measures for 4 to 12 year olds was collected by parental/guardian assessment. 6 Point estimates are for the most recent year of data available at the time of analysis, for some measures it has been necessary to aggregate years to increase the sample size. 7 Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator. 8 SR = Standardised Rate (age-sex standardised to the 1976 European Standard Population); % = per cent. Notes on indicators

\*WEMWBS - Warwick-Edinburgh Mental Well-being Scale. \*\*SDQ - Strengths and Difficulties Questionnaire. \*\*\*GHQ-12 - General Health Questionnaire -12. <sup>††</sup>Drug-related disorders - hospital patients per 100,000 C&YP aged 19 years and under in the past year from mental and behavioural disorders due to psychoactive substance use - general acute and psychiatric hospitals (age-standardised rate). <sup>†††</sup>Suicide - deaths per 100,000 C&YP aged 19 years and under in the past year from intentional self-harm or by events of undetermined intent (age standardised rate). Coding applied reflects definition of suicide prior to changes introduced by the World Health Organization in 2011.

#### How big is the gender gap in mental health?

Continuous measures for mental wellbeing and life satisfaction are described below in Table 3.3a. Regression co-efficients (B) show the mean difference in score between the sexes. Boys scored better than girls where the slope coefficient is greater than zero and where the p-value was <0.05. Where the p-value is greater than 0.05, the difference between boys and girls was not deemed to be significant.

Continuous outcome variables	Slope coefficient (B)	95% CI <sup>xiv</sup>	P-value
WEMWBS (S2 pupils)	0.96	0.67 to 1.24	<0.01
WEMWBS (S4 pupils)	2.31	2.04 to 2.58	<0.01
WEMWBS (16 to 17 years)	1.51	0.16 to 2.85	0.03
Life satisfaction (P7 pupils)	0.01	-0.16 to 0.17	0.96
Life satisfaction (S2 pupils)	0.40	0.22 to 0.59	<0.01
Life satisfaction (S4 pupils)	0.32	0.19 to 0.46	<0.01
Life satisfaction (16 to 17 years)	0.32	0.08 to 0.57	0.01

Table 3.3a. Gender differences in mental health outcomes, continuous variables

Table 3.3b shows the relative differences in mental health between the sexes, expressed as odds ratios (categorical measures).

<sup>&</sup>lt;sup>xiv</sup> Confidence Interval.

#### Table 3.3b. Gender difference in mental health outcomes

Boys fare better than girls

No difference between boys and girls

Girls fare better than boys

	Relative	95%	6 CI	%				_						
Indicator				change		P-value			Odds ra	itio				
	· · · · · · · · · · · · · · · · · · ·	Lower	Upper		period		0.00	0.50	1 00	1 50	2.00	2 50	3 00	3.50
		4 0 0 0	4 500		0010	.0.01	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50
										_	_			
										i 🔟		4		
												1		.
														-
Pro-social (S4 pupils)	3.260	3.040	3.490											• •
Common mental health problems (16 to 17 years)	1.480	1.110	1.970	48	2008-2011	<0.01			⊢ ⊢					
Emotional & behavioural problems (4 to 12)	1.370	1.150	1.640	37	2008-2011	<0.01			F					
Emotional & behavioural problems (S2 pupils)	1.010	0.940	1.080	1	2010	0.88			H H					
Emotional & behavioural problems (S4 pupils)	1.390	1.300	1.490	39	2010	<0.01				HOH				
Emotional symptoms (4 to 12 years)	1.160	0.970	1.380	16	2008-2011	0.10			H					
Emotional symptoms (S2 pupils)	2.180	1.990	2.390	118	2010	<0.01								
Emotional symptoms (S4 pupils)	3.315	3.051	3.602	232	2010	<0.01							H	•
Conduct problems (4 to 12 years)	0.800	0.690	0.920	-20	2008-2011	<0.01			⊢●⊣					
	0.610	0.567	0.656	-39	2010	<0.01		•						
	0.660	0.610	0.700	-34	2010	<0.01								
	0.522	0.445	0.602	-48	2008-2011	<0.01		- H <b>e</b> H						
			0.930	-13	2010	<0.01			H <b>O</b> H					
					2010				H	н				
					2010									
										F	_	-		
										_	-			
	Emotional & behavioural problems (4 to 12) Emotional & behavioural problems (S2 pupils) Emotional & behavioural problems (S4 pupils) Emotional symptoms (4 to 12 years) Emotional symptoms (S2 pupils)	Indicatordifference by sex (OR)Happiness (P7 pupils)1.310Happiness (S2 pupils)1.600Happiness (S4 pupils)1.490Pro-social (4 to 12 years)1.770Pro-social (S2 pupils)3.030Pro-social (S4 pupils)3.260Common mental health problems (16 to 17 years)1.480Emotional & behavioural problems (S2 pupils)1.010Emotional & behavioural problems (S2 pupils)1.370Emotional & behavioural problems (S4 pupils)1.390Emotional symptoms (4 to 12 years)1.160Emotional symptoms (S2 pupils)2.180Emotional symptoms (S4 pupils)3.315Conduct problems (S4 pupils)0.610Conduct problems (S4 pupils)0.610Conduct problems (S4 pupils)0.622Hyperactivity/inattention (4 to 12 years)0.522Hyperactivity/inattention (S4 pupils)1.310Sadness (P7 pupils)1.310Sadness (S2 pupils)1.630Sadness (S4 pupils)1.920	Indicatordifference by sex (OR)LowerHappiness (P7 pupils)1.3101.090Happiness (S2 pupils)1.6001.340Happiness (S4 pupils)1.4901.260Pro-social (4 to 12 years)1.7701.400Pro-social (S2 pupils)3.0302.820Pro-social (S4 pupils)3.2603.040Common mental health problems (16 to 17 years)1.4801.110Emotional & behavioural problems (4 to 12)1.3701.150Emotional & behavioural problems (S2 pupils)1.0100.940Emotional & behavioural problems (S4 pupils)1.3901.300Emotional symptoms (4 to 12 years)1.1600.970Emotional symptoms (S2 pupils)3.3153.051Conduct problems (S4 pupils)3.3153.051Conduct problems (S4 pupils)0.6100.567Conduct problems (S4 pupils)0.6100.567Conduct problems (S4 pupils)0.8700.810Hyperactivity/inattention (4 to 12 years)0.5220.445Hyperactivity/inattention (S2 pupils)1.1401.070Sadness (P7 pupils)1.3101.080Sadness (S4 pupils)1.6301.330Sadness (S4 pupils)1.6301.330	Indicator         difference by sex (OR)         Lower         Upper           Happiness (P7 pupils)         1.310         1.090         1.580           Happiness (S2 pupils)         1.600         1.340         1.900           Happiness (S4 pupils)         1.490         1.260         1.760           Pro-social (4 to 12 years)         1.770         1.400         2.230           Pro-social (S2 pupils)         3.030         2.820         3.270           Pro-social (S4 pupils)         3.260         3.040         3.490           Common mental health problems (16 to 17 years)         1.480         1.110         1.970           Emotional & behavioural problems (S2 pupils)         1.010         0.940         1.680           Emotional & behavioural problems (S4 pupils)         1.390         1.300         1.490           Emotional symptoms (4 to 12 years)         1.160         0.970         1.380           Emotional symptoms (S2 pupils)         2.180         1.990         2.390           Emotional symptoms (S4 pupils)         3.315         3.051         3.602           Conduct problems (S4 pupils)         0.660         0.610         0.700           Hyperactivity/inattention (4 to 12 years)         0.522         0.445         0.602 <td>Indicator         difference by sex (OR)         Lower Lower         Upper         change in OR           Happiness (P7 pupils)         1.310         1.090         1.580         31           Happiness (S2 pupils)         1.600         1.340         1.900         60           Happiness (S4 pupils)         1.490         1.260         1.760         49           Pro-social (4 to 12 years)         1.770         1.400         2.230         77           Pro-social (S2 pupils)         3.030         2.820         3.270         203           Pro-social (S4 pupils)         3.260         3.040         3.490         226           Common mental health problems (16 to 17 years)         1.480         1.110         1.970         48           Emotional &amp; behavioural problems (S2 pupils)         1.010         0.940         1.080         1           Emotional &amp; behavioural problems (S4 pupils)         1.390         1.300         1.490         39           Emotional symptoms (4 to 12 years)         1.160         0.970         1.380         16           Emotional symptoms (S2 pupils)         2.180         1.990         2.390         118           Emotional symptoms (S4 pupils)         0.610         0.567         0.656         -39</td> <td>Indicatordifference by sex (OR)LowerUpperchange in ORTime periodHappiness (P7 pupils)1.3101.0901.580312010Happiness (S2 pupils)1.6001.3401.900602010Happiness (S4 pupils)1.4901.2601.760492010Pro-social (4 to 12 years)1.7701.4002.230772008-2011Pro-social (S2 pupils)3.0302.8203.0403.4902262010Common mental health problems (16 to 17 years)1.4801.1101.970482008-2011Emotional &amp; behavioural problems (S4 pupils)1.3701.1501.640372008-2011Emotional &amp; behavioural problems (S4 pupils)1.3901.3001.490392010Emotional &amp; behavioural problems (S4 pupils)1.1000.9401.08012010Emotional symptoms (4 to 12 years)1.1600.9701.380162008-2011Emotional symptoms (S2 pupils)3.3153.0513.6022322010Conduct problems (S4 pupils)3.3153.0513.6022322010Conduct problems (S4 pupils)0.6600.6100.700-342010Conduct problems (S4 pupils)0.6600.6100.700-342010Conduct problems (S4 pupils)0.6600.6100.700-342010Conduct problems (S4 pupils)0.6600.6100.700-342010Mypera</td> <td>Indicatordifference by sex (OR)LowerUpperchange in ORTime periodP-valueHappiness (P7 pupils)1.3101.0901.580312010&lt;0.01</td> Happiness (S2 pupils)1.6001.3401.900602010<0.01	Indicator         difference by sex (OR)         Lower Lower         Upper         change in OR           Happiness (P7 pupils)         1.310         1.090         1.580         31           Happiness (S2 pupils)         1.600         1.340         1.900         60           Happiness (S4 pupils)         1.490         1.260         1.760         49           Pro-social (4 to 12 years)         1.770         1.400         2.230         77           Pro-social (S2 pupils)         3.030         2.820         3.270         203           Pro-social (S4 pupils)         3.260         3.040         3.490         226           Common mental health problems (16 to 17 years)         1.480         1.110         1.970         48           Emotional & behavioural problems (S2 pupils)         1.010         0.940         1.080         1           Emotional & behavioural problems (S4 pupils)         1.390         1.300         1.490         39           Emotional symptoms (4 to 12 years)         1.160         0.970         1.380         16           Emotional symptoms (S2 pupils)         2.180         1.990         2.390         118           Emotional symptoms (S4 pupils)         0.610         0.567         0.656         -39	Indicatordifference by sex (OR)LowerUpperchange in ORTime periodHappiness (P7 pupils)1.3101.0901.580312010Happiness (S2 pupils)1.6001.3401.900602010Happiness (S4 pupils)1.4901.2601.760492010Pro-social (4 to 12 years)1.7701.4002.230772008-2011Pro-social (S2 pupils)3.0302.8203.0403.4902262010Common mental health problems (16 to 17 years)1.4801.1101.970482008-2011Emotional & behavioural problems (S4 pupils)1.3701.1501.640372008-2011Emotional & behavioural problems (S4 pupils)1.3901.3001.490392010Emotional & behavioural problems (S4 pupils)1.1000.9401.08012010Emotional symptoms (4 to 12 years)1.1600.9701.380162008-2011Emotional symptoms (S2 pupils)3.3153.0513.6022322010Conduct problems (S4 pupils)3.3153.0513.6022322010Conduct problems (S4 pupils)0.6600.6100.700-342010Conduct problems (S4 pupils)0.6600.6100.700-342010Conduct problems (S4 pupils)0.6600.6100.700-342010Conduct problems (S4 pupils)0.6600.6100.700-342010Mypera	Indicatordifference by sex (OR)LowerUpperchange in ORTime periodP-valueHappiness (P7 pupils)1.3101.0901.580312010<0.01	Indicator         difference by sex (OR)         Lower Lower         Upper Upper         change in OR         Time period         P-value period         0.00           Happiness (P7 pupils)         1.310         1.090         1.580         31         2010         <0.01	Indicator         difference by sex. (OR)         Lower (OR)         Upper (DR)         Time period OR         P-value           Happiness (P7 pupils)         1.310         1.090         1.580         31         2010         <0.01	Indicator         difference by sex (OR)         Lower Lower         Upper OR         Time period         P-value         Odds re 0.00         Odds re 0.00           Happiness (P7 pupils)         1.310         1.090         1.580         31         2010         <0.01	Indicator         difference by sex (OR)         Cover Lower         Upper (In)         Change period OR         Time period OR         P-value         Odds ratio           Happiness (P7 pupils)         1.310         1.090         1.580         31         2010         <0.01	Indicator         difference by sex (OR)         Lower Lower         Upper (NR)         Time period OR         P-value         Odds ratio           Happiness (S2 pupils)         1.310         1.090         1.580         31         2010         <0.01	Indicator         difference by sex (OR)         Lower Upper         Upper in OR         Time period OR         P-value         Odds ratio           Happiness (S2 pupils)         1.310         1.090         1.580         31         2010         <0.01	Indicator         difference by sex (OR)         Lower (OR)         Upper (n) (OR)         Time period (OR)         P-value (n)         Odds ratio           Happiness (S2 pupils)         1.310         1.090         1.580         31         2010         <0.01

<sup>xv</sup> Factors included in the model: sex, age, SIMD and urban-rural classification. In the differences for alcohol dependency we did not control for urban-rural classification due to the small number of cases.

#### 3.4.2 Mental health outcomes: by age

Analysis by age was possible for 11 out of 15 indicators. Mental health outcomes varied by age for 10 out of 11 reportable indicators (14 out of 18 measures). Considerable variability in the age bands available for each indicator meant that it was not possible to choose two particular age groups to make meaningful comparisons across the entire indicator set. Mental health outcomes by age are presented in Table 3.4.

There was no or very little difference by age for the following indicator measures:

- Mental wellbeing, 16 and 17 year olds
- Life satisfaction, 16 and 17 year olds
- Common mental health problems, 16 to 19 year olds
- Conduct problems, S2 and S4 pupils.

#### Mental wellbeing

A comparison of S2 pupils with S4 pupils in 2010 showed a slight decrease in mental wellbeing with increasing age with the mean score for S2 pupils on WEMWBS being 50.4 and for S4 pupils 49.7, a decrease of 0.7 points.<sup>vi</sup> There was a steady decrease in life satisfaction with increasing age; P7 pupils had a mean score of 8.1 points, S2 pupils a mean score of 7.6 points, and S4 pupils a mean score of 7.3 points.<sup>vii</sup>

In 2010, the percentage of C&YP who were happy with life declined steadily as pupils got older with 55% of P7 pupils, 43% of S2 pupils, and 33% of S4 pupils reporting happiness.

In 2010 to 2011 combined, pro-social behaviour improved with age in children aged 4 to 12 years: 89% of 4 to 5 year olds; 92% of 6 to 7 year olds; and 93% of 10 to 12 year olds had a 'normal' score.<sup>ix</sup> When compared with C&YP aged 4 to 5 years, those in the older age groups had increased odds of having a 'normal' pro-social score: 6 to 7 years, odds increased by 45% (66% to 100%); and 8 to 9 years, 71% (22% to 141%) and 10 to 12 years, 80% (34% to 242%). Pro-social behaviour in S2 and S4 pupils conversely showed a decline with age: S2 pupils, 73%; and S4 pupils, 70%.<sup>v</sup> When compared with S2 pupils, S4 pupils had slightly reduced odds of 13% (-17% to -8%).

#### Mental health problems

In the period 2008 to 2011 combined, the proportion of children aged 16 to 19 years with common mental health problems fluctuated between age groups with no obvious pattern. Emotional and behavioural problems worsened slightly with increasing age, being present in 23% of S2 pupils and 26% of S4 pupils.<sup>V</sup> When compared with S2 pupils, S4 pupils had slightly increased odds of 19% (13% to 25%). There was a similar linear pattern in children aged 4 to 12 years with 12% of 4 to 5 year olds, 15% of 6 to 7 year olds, 15% of 8 to 9 years, and 16% of 10 to 12 year olds.<sup>ix</sup> When compared with 4 to 5 year olds, those in the older age groups had increased odds of having emotional and behavioural problems. Six to 7 year olds had odds ratio of 27% (4% to 68%), 8 to 9 years, 35% (2% to 80%), and 10 to 12 years, 51% (18% to 94%).

In 2010, emotional symptoms worsened with age being present in 15% of S2 pupils and 19% of S4 pupils.<sup>v</sup> Compared with S2 pupils, the odds of S4 pupils having emotional symptoms increased by 41% (32% to 49%). A similar increase with age was observed for 4 to 12 year olds in 2008 to 2011 combined, with emotional symptoms recorded for 8% of 4 to 5 year olds, 14% of 6 to 7 year olds, 16% of 8 to 9 year olds and 19% of 10 to 12 year olds.<sup>ix</sup> Compared with 4 to 5 year olds, the older age groups had increased odds of emotional symptoms being 96% (44% to 167%) for 6 to 7 year olds, over twice as high for 8 to 9 year olds (123% (65% to 204%)) and nearly three times as high in 10 to 12 year olds (191% (121% to 284%)).

In 2008 to 2011 combined, there was a steady decrease in the percentage of children with conduct problems between 4 and 12 years of age. Conduct problems were present in 26% of 4 to 5 year olds, 23% of 6 to 7 year olds, 21% of 8 to 9 year olds, and 19% of 10 to 12 year olds.<sup>ix</sup> When compared with 4 to 5 year olds, the older age groups had reduced odds of conduct problems. For 6 to 7 year olds, the odds were reduced by 16% (-32% to 4%), for 8 to 9 year olds there was a 24% (-39% to 4%) reduction in odds and for 10 to 12 year olds, a 31% (-64% to -10%) reduction in odds.

Hyperactivity/inattention did not show a consistent pattern by age. A comparison between S2 and S4 pupils in 2010 showed hyperactivity/inattention to be higher in the older age group being present in 29% of S2 pupils compared with 34% of S4 pupils, increased odds of 26% (21% to 32%).<sup>v</sup> In 2008 to 2011 combined, there was no obvious pattern of change for 4 to 12 year olds by age with the first three age groups remaining fairly stable, being 21% for 4 to 5 year olds, 22% for 6 to 7 year olds, and 21% for 10 to 12 year olds. A decrease was observed in 10 to 12 year olds with 16% showing hyperactivity/inattention.<sup>ix</sup> Compared with 4 to 5 year olds, there was little change in the two older age groups. Six to 7 year olds had slightly reduced odds of 3% (-18% to 1.29) and 8 to 9 year olds showed no change in odds, 0% (-21% to 25%). A decline was observed for 10 to 12 year olds with a 28% (-41% to -11%) reduction in odds.

In 2010, sadness was found to increase steadily with age being lowest for P7 pupils (27%), increasing to 31% for S2 pupils, and 36% for S4 pupils. In 2008 to 2011, possible alcohol dependency increased with age being 6% in 16 year olds, rising to 7% in 17 year olds, 10% in 18 year olds, and 15% in 19 year olds. Compared with C&YP aged 16 years, older children had increasing odds for possible alcohol dependency: 17 year olds had odds that were 12% (-38% to 101%) higher, 18 years, 1.6 (0.9 to 2.8) and 19 years, 2.6 (1.5 to 4.3).

#### Table 3.4. Mental health outcomes: by age

Statistically significant difference across the age range<sup>1</sup> No statisticaly significant difference across the age range<sup>1</sup>

						Age (years)						School year					
Construct	Indicator	Measure	School year / age	Unit	Year(s)	4-5	6-7	8-9	10-12	16	17	18	19	P7	S2	S4	P-valu
Mandal wellbaire	Mean WEMWBS score*	16 to 17	Mean	2010-11					50.5	50.9						0.35	
	Mental wellbeing	Mean WEMWBS score*	S2, S4	Mean	2010										50.4	49.7	<0.01
being		Mean score of how satisfied with life nowadays	16 to 17	Mean	2010-11					8.0	8.0						0.98
Mental wellbeing	Life satisfaction	Mean score on adapted Cantril ladder	P7, S2, S4	Mean	2010									8.1	7.6	7.3	<0.01
Menta	Happiness	Feel very happy with their life at present	P7, S2, S4	%	2010							.1.2.1		55	43	33	<0.01
	and the second sec	Normal score on the pro-social scale of the SDQ**	S2, S4	%	2010										73	70	<0.01
	Pro-social behaviour	Normal score on the pro-social scale of the SDQ**	4 to 12	%	2008-11	89	92	93	94								0.00
	Common mental health problems	Score of 4 or more on the GHQ-12***	16 to 19	%	2008-11					15	9	13	14				0.08
	Emotional & behavioural problems	Borderline or abnormal total difficulties score on the SDQ**	S2, S4	%	2010										23	26	<0.01
		Borderline or abnormal total difficulties score on the SDQ**	4 to 12	%	2008-11	12	15	15	16								0.01
su	Alexandra De Santa	Borderline or abnormal score on the emotional symptoms scale of the SDQ**	S2, S4	%	2010										15	19	<0.01
problems	Emotional symptoms	Borderline or abnormal score on the emotional symptoms scale of the SDQ**	4 to 12	%	2008-11	8	14	16	19								<0.01
	and to be seen to be the	Borderline or abnormal score on the conduct problems scale of the SDQ**	S2, S4	%	2010										24	24	0.92
Mental health	Conduct problems	Borderline or abnormal score on the conduct problems scale of the SDQ**	4 to 12	%	2008-11	26	23	21	19								0.00
		Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	S2, S4	%	2010					· · · · · · ·					29	34	<0.01
	Hyperactivity / inattention	Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	4 to 12	%	2008-11	21	22	21	16								0.00
	Sadness	Felt sad quite often, very often or always in the last week	P7, S2, S4	%	2010							10-1	1	27	31	36	<0.01
	Alcohol dependency	Score of 2 or more on the CAGE questionnaire	16 to 19	%	2008-11					6	7	10	15				<0.01

#### Footnotes

1 Shaded cells and P-values of <0.05 indicate a statistically significant difference across the age range, overall. 2 No data were available for two indicators, self-harm and eating disorders, as no suitable data source has yet been identified. 3 Where the age range available for a measure is discontinuous, data for each age group have been presented separately. 4 P7 - Primary seven (approx 11 years of age), S2 - Secondary 2 (approx 13 years of age), S4 - Secondary 4 (approx 15 years of age). 5 Data for measures for 4 to 12 year olds were collected by parental/guardian assessment. 6 Point estimates are for the most recent year of data available at the time of analysis, for some measures it has been necessary to aggregate years to increase the sample size. 7 Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator. 8 Only indicators with data disaggregated by school year/age have been included in the table, those without are noted in the table below. 9 SR = Standardised Rate (age-sex standardised to the 1976 European Standard Population); % = per cent.

Notes on indicators

\*WEMWBS - Warwick-Edinburgh Mental Well-being Scale. \*\*SDQ - Strengths and Difficulties Questionnaire. \*\*\*GHQ-12 - General Health Questionnaire -12.

Table 3.4a presents the slope coefficient (B) for the available continuous outcome variables and the odds ratios for each categorical measure. The youngest age for each comparison is the reference group and is compared against each of the older age groups available.

For the continuous measures, a negative slope coefficient signified a reduction in the outcome measure with age whereas a value greater than zero signified an increase with age. For the categorical measures, an odds ratio of less than one signified a reduction with age whereas a value greater than one signified an increase with age. A p-value of less than 0.05 signified a statistically significant difference between the youngest age group and the other age groups for each measure.

Continuous outcome variables	Slope coefficient (B)	95% CI <sup>xiv</sup>	P-value <sup>xvii</sup>
WEMWBS (S2 and S4)	-0.76	0.96 to -0.57	<0.01
WEMWBS (16 to 17 years)	0.64	0.70 to 1.98	0.35
Life satisfaction (16 to 17 years)	0.00	-0.24 to 0.25	0.98
Categorical outcome variables	Odds ratio	95% Cl <sup>xiv</sup>	P-value <sup>xvii</sup>
Pro-social behaviour			
S2 pupils	1		<0.01
S4 pupils	0.87	0.83 to 0.91	
Pro-social behaviour			
4 to 5 years	1		<0.01
6 to 7 years	1.46	1.06 to 2.00	
8 to 9 years	1.71	1.22 to 2.41	
10 to 12 years	1.80	1.34 to 2.42	
Common mental health problems			
16 years	1		0.08
17 years	0.58	0.38 to 0.88	
18 years	0.80	0.54 to 1.19	
19 years	0.86	0.58 to 1.25	
Emotional and behavioural problems			
S2 pupils	1		<0.01
S4 pupils	1.19	1.13 to 1.25	
Emotional and behavioural problems			
4 to 5 years	1		0.01
6 to 7 years	1.27	0.96 to 1.68	
8 to 9 years	1.35	1.01 to 1.79	
10 to 12 years	1.51	1.18 to 1.94	

Table 3.4a. Age differences in mental health outcomes, estimated slope and odds ratios with increasing age<sup>xvi</sup>

<sup>&</sup>lt;sup>xvi</sup> Factors included in the model: sex, age, SIMD and urban-rural classification. Alcohol dependency did not control for urban-rural classification due to small numbers.

<sup>&</sup>lt;sup>xvii</sup> P-value is for overall difference between the youngest age group in the comparison and all other age groups.

Emotional symptoms			
S2 pupils	1		<0.01
S4 pupils	1.41	1.33 to 1.49	
Emotional symptoms			
4 to 5 years	1		<0.01
6 to 7 years	1.96	1.44 to 2.67	
8 to 9 years	2.24	1.65 to 3.04	
10 to 12 years	2.92	2.21 to 3.85	
Conduct problems			
S2 pupils	1		0.92
S4 pupils	1.0	0.95 to 1.05	
Conduct problems			
4 to 5 years	1		0.02
6 to 7 years	0.84	0.68 to 1.04	
8 to 9 years	0.76	0.61 to 0.95	
10 to 12 years	0.69	0.56 to 0.84	
Hyperactivity/inattention			
S2 pupils	1		<0.01
S4 pupils	1.26	1.20 to 1.32	
Hyperactivity/inattention			
4 to 5 years	1		0.02
6 to 7 years	1.03	0.82 to 1.29	
8 to 9 years	0.99	0.78 to 1.25	
10 to 12 years	0.73	0.59 to 0.90	
Alcohol dependency			
16 years	1		<0.01
17 years	1.12	0.62 to 2.02	
18 years	1.59	0.91 to 2.78	
19 years	2.59	1.55 to 4.32	

#### 3.4.3 Mental health outcomes: by area deprivation

Area deprivation analysis, as measured using SIMD, was possible for 11 out of 15 indicators. Mental health outcomes by SIMD are presented in Table 3.5 and the average change across the quintiles is shown in Table 3.5a.

Inequalities by area deprivation were the most common out of all the equality analyses undertaken, with nine out of 11 indicators (21 out of 23 measures) worsening with deprivation. There was no difference (linear or non-linear) between SIMD quintiles for common mental health problems or alcohol dependency.

#### Mental wellbeing

All three reportable indicators of mental wellbeing (mental wellbeing assessed by WEMWBS, life satisfaction and pro-social behaviour), had an overall negative linear relationship by SIMD across all age groups analysed, being lowest in the most deprived quintile and increasing steadily towards the least deprived quintile.

In 2010 and 2011 combined, mental wellbeing in 16 and 17 year olds increased slightly between the most deprived quintile, mean score of 48.5 on the WEMWBS scale, and the least deprived quintile, mean score of 53.0, an average increase of 1.1 points (0.63, 1.54) for each quintile decrease in deprivation.<sup>iv</sup> In 2010, there was a slight increase in WEMWBS score for S2 pupils with a mean score of 49.5 in the most deprived quintile and 51.4 in the least deprived quintile, an average increase of 0.46 points (0.36 to 0.57) for each quintile decrease in deprivation.<sup>v</sup> For S4 pupils the mean score was 48.8 in the most deprived quintile and 50.3 in the least deprived quintile, an average increase of 0.32 points (0.22 to 0.42) for each quintile decrease in deprivation.<sup>v</sup>

Life satisfaction of 16 and 17 year olds in 2010 and 2011 combined decreased linearly with deprivation with a mean score of 7.7 in the most deprived quintile and 8.2 in the least deprived quintile, an average decrease of 0.12 points (0.04 to 0.21) on the scale for each one quintile increase in deprivation.<sup>vii</sup>

In 2010, pro-social behaviour showed a negative linear relationship with deprivation for S2 pupils, with 69% in the most deprived quintile and 77% in the least deprived quintile found to report it (an average increase in odds of 13% (10% to 16%) for each quintile decrease in deprivation), and for S4 pupils, with 68% in the most deprived quintile and 74% in the least deprived quintile (an increased odds of 9% (6% to 12%) for each quintile decrease in deprivation).<sup>v</sup> A similar trend was observed for 4 to 12 year olds in 2008 to 2011 combined, with 89% in the most deprived quintile and 95% in the least deprived quintile (an average increase in the odds of 24% (14% to 35%) for each quintile decrease in deprivation).<sup>ix</sup>

#### Mental health problems

Six of eight reportable indicators (14 of 16 reportable measures) for mental health problems showed the reverse trend, being most common in the most deprived quintile and falling to the lowest value in the least deprived quintile.

In 2010, the odds of S2 pupils having emotional and behavioural problems fell from 29% in the most deprived quintile to 19% in the least deprived quintile, an average reduction in odds of 12% (-15% to -10%) for each unit decrease in deprivation. The

odds for S4 pupils fell from 30% in the most deprived quintile to 23% in the least deprived quintile, an average reduction in odds of 10% (-12% to -8%).<sup>v</sup> In 2008 to 2011 combined, there was a similar linear decrease amongst 4 to 12 year olds, decreasing from 26% in the most deprived quintile to 7% in the least deprived quintile, a decrease in the odds of 34% (- 38% to -29%) with each quintile.<sup>ix</sup>

The odds of S2 pupils having emotional symptoms in 2010 fell from 17% in the most deprived quintile to 14% in the least deprived, an average linear reduction in odds of 5% (-8% to -2%) per quintile.<sup>v</sup> Similarly for S4 pupils, there was a reduction from 21% in the most deprived quintile to 17% in the least deprived, an average linear reduction in odds of 6% (-9% to -3%).<sup>v</sup> In 2008 to 2011 combined, emotional symptoms in 4 to 12 year olds fell from 20% in the most deprived quintile to 9% in the least deprived, an average reduction in odds of 21% per quintile (-26% to -16%).<sup>ix</sup>

In 2010, conduct problems in S2 pupils were lower in the less deprived areas, from 30% in the most deprived quintile to 19% in the least deprived quintile, an average reduction in odds of 14% (-17% to -12%) per quintile.<sup>v</sup> There was a similar decline for S4 pupils from 28% in the most deprived quintile to 20% in the least deprived quintile, an average reduction in odds of 12% (-14% to -10%) per quintile.<sup>v</sup> In 2008 to 2011 combined, 34% of 4 to 12 years olds living in the most deprived quintile and 13% in the least deprived quintile had conduct problems, an average reduction in odds of 26% (-30% to -22%) per quintile.<sup>ix</sup>

In 2010, hyperactivity/inattention in S2 pupils declined with deprivation from 37% in the most deprived quintile to 14% in the least deprived quintile, an average reduction in odds of 9% (-11% to -6%).<sup>v</sup> There was a similar decline for S4 pupils from 33% in the most deprived quintile to 25% in the least deprived quintile, an average reduction in odds of 7% (-9% to -5%) per quintile.<sup>v</sup> In 2008 to 2011 combined, 27% of 4 to 12 year olds living in the most deprived quintile, an average reduction compared with 14% in the least deprived quintile, an average reduction in odds of 21% (-26% to -17%) per quintile.<sup>ix</sup>

In the year 2011/12, C&YP aged 19 years and under were more likely to be admitted to hospital for drug-related disorders if they lived in a more deprived area: 42.3 per 100,000 C&YP in the most deprived SIMD quintile and 5.8 per 100,000 C&YP in the least deprived, an average decrease of 36% (-38% to -33%) for every one quintile reduction in deprivation. In the period 2007 to 2011 combined, 4.6 per 100,000 C&YP aged 19 years and under in the most deprived SIMD quintile completed suicide in the past year compared with 1.1 per 100,000 C&YP in the least deprived quintile, a reduced incident rate of 27% (-31% to -22%) per quintile.

#### Table 3.5. Mental health outcomes: by Scottish Index of Multiple Deprivation

Statistically significant deterioration across Scottish Index of Multiple Deprivation (SIMD) quintiles<sup>1</sup> No statistically significant difference across Scottish Index of Multiple Deprivation (SIMD) quintiles<sup>1</sup>

		across Scottish Index of Multiple Deprivation (SIMD) duintiles	I.			Sc	ottish Index	Scottish Index of Multiple Deprivation (SIMD) quintiles							
Construct	Indicator	Measure	School year / age (years)	Unit	Year(s)	1 (most deprived)	2	3	4	5 (least deprived)	P-value				
		Mean WEMWBS score*	16 to 17	Mean	2010-11	48.5	50.0	49.4	52.3	53.0	<0.01				
	Mental wellbeing		S2	Mean	2010	49.5	50.0	50.1	50.7	51.4	<0.01				
being		Mean WEMWBS score*	S4	Mean	2010	48.8	49.5	49.4	49.9	50.3	<0.01				
Mental wellbeing	Life satisfaction	Mean score of how satisfied with life nowadays	16 to 17	Mean	2010-11	7.7	7.9	7.9	8.1	8.2	<0.01				
Menta		Normal score on the pro-social scale of the SDQ**	S2	%	2010	69	71	73	74	77	<0.01				
	Pro-social behaviour		S4	%	2010	68	68	70	70	74	<0.01				
		Normal score on the pro-social scale of the SDQ**	4 to 12	%	2008-11	89	93	90	94	95	<0.01				
	Common mental health problems	Score of 4 or more on the GHQ-12***	16 to 19	%	2008-11	14	13	18	9	11	0.09				
	Emotional & behavioural problems	Borderline or abnormal total difficulties score on the SDQ**	S2	%	2010	29	25	23	21	19	<0.01				
		Bordenine of abnormal total diriculties score on the SDQ	S4	%	2010	30	29	28	24	23	<0.01				
		Borderline or abnormal total difficulties score on the SDQ**	4 to 12	%	2008-11	26	17	15	8	7	<0.01				
	Emotional symptoms	Readerline or obnormal score on the amotional symptoms coals of the SDO***	S2	%	2010	17	15	15	14	14	<0.01				
		Borderline or abnormal score on the emotional symptoms scale of the SDQ***	S4	%	2010	21	21	20	18	17	<0.01				
health problems		Borderline or abnormal score on the emotional symptoms scale of the SDQ***	4 to 12	%	2008-11	20	17	16	13	9	<0.01				
th prol		Perderline as showned every an the senduct methods and a state SDOtt	S2	%	2010	30	27	25	22	19	<0.01				
I healt	Conduct problems	Borderline or abnormal score on the conduct problems scale of the SDQ**	S4	%	2010	28	27	25	21	20	<0.01				
Mental		Borderline or abnormal score on the conduct problems scale of the SDQ**	4 to 12	%	2008-11	34	26	23	14	13	<0.01				
~			S2	%	2010	33	30	28	28	25	<0.01				
	Hyperactivity / inattention	Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	S4	%	2010	37	35	35	31	31	<0.01				
		Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	4 to 12	%	2008-11	27	24	20	14	14	<0.01				
	Alcohol dependency	Score of 2 or more on the CAGE questionnaire	16 to 19	%	2008-11	10	8	9	11	9	0.92				
	Drug-related disorders	Hospital patients: mental and behavioural disorders due to psychoactive drug use <sup>†</sup>	19 and under	SR	2011/12	42.3	24.6	17	9.9	5.8	<0.01				
	Suicide	Deaths from intentional self-harm and undetermined intent <sup>††</sup>	19 and under	SR	2007-11	4.6	3.6	3.2	1.7	1.1	<0.01				

Footnotes

1 Shaded cells and P-values of <0.05 indicate a statistically significant linear trend across SIMD quintiles. 2 No data were available for two indicators, self-harm and eating disorders, as no suitable data source has yet been identified. 3 Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall population estimate. Instead data for each discrete age group have been presented separately. 4 P7 - Primary seven (approx 11 years of age), S2 - Secondary 2 (approx 13 years of age), S4 - Secondary 4 (approx 15 years of age). 5 Data for measures for 4 to 12 year olds was collected by parental/guardian assessment. 6 Point estimates are for the most recent year of data available at the time of analysis, for some measures it has been necessary to aggregate years to increase the sample size. 7 Multiple measures have been included in the table, those without are noted in the table below. 9 SR = Standardised Rate (age-sex standardised to the 1976 European Standard Population); % = per cent. Notes on indicators

\*WEMWBS - Warwick-Edinburgh Mental Well-being Scale.\*\*SDQ - Strengths and Difficulties Questionnaire. \*\*\*GHQ-12 - General Health Questionnaire -12 <sup>†</sup>Drug -related disorders - hospital patients per 100,000 C&YP aged 19 years and under in the past year from mental and behavioural disorders due to psychoactive substance use - general acute and psychiatric hospitals (age-standardised rate). <sup>††</sup>Suicide - deaths per 100,000 C&YP aged 19 years and under in the past year from intentional self-harm or by events of undetermined intent (age standardised rate). Coding applied reflects definition of suicide prior to changes introduced by the World Health Organization in 2011.

Dataless indicators/measures

Construct	Indicator	Measure	School year / age (years)	Unit
Mental	Life satisfaction	P7, S2, S4	Mean	
wellbeing	Happiness	Feel very happy with their life at present	P7, S2, S4	%
Mental health problems	Sadness	Felt sad quite often, very often or always in the last week	P7, S2, S4	%

#### How big is the deprivation gap in mental health?

Linear trends in continuous outcome measures (mean scores) are described using the slope coefficient (B) in Table 3.5a below. Regression co-efficients (B) show the mean change in each variable for every one quintile decrease in deprivation. Poorer outcomes with deprivation were observed where the slope coefficient is greater than zero and where the p-value was <0.05.

Continuous outcome variables	slope coefficient (B)	95%CI	P-value
Mental wellbeing (S2 pupils)	1.08	0.63 to 1.54	<0.01
Mental wellbeing (S4 pupils)	0.46	0.36 to 0.57	<0.01
Mental wellbeing (16 to 17 years)	0.32	0.22 to 0.42	<0.01
Life satisfaction (16 to 17 years)	0.12	0.04 to 0.21	<0.01

Table 3.5a. Inequalities in mental health outcomes by SIMD, continuous variables

Table 3.5b illustrates the extent of the difference for each categorical mental health outcome variable as the odds of change for each deprivation quintile, where one is the most deprived and 5 is the least deprived quintile. The change in incident rates for suicide and drug-related disorders are given as the incident rate ratio (IRR). Red shading has been used to indicate where there is a linear gradient between the most deprived and least deprived SIMD quintiles. Amber shading indicates that the mental health outcomes showed no obvious pattern by SIMD.

#### Table 3.5b. Inequalities in mental health outcomes by SIMD, average change per quintile

- Statistically significant deterioration with increasing deprivation
  No statistically significant change with deprivation

		Relative	95%	<u>6 CI</u>	%						
Construct	Indicator	change per quintile (OR/IRR)		Upper	change in OR/IRR	Time period	P-value	0.50 0.75	1.00	1.25	1.50
Mental wellbeing	Pro-social (4 to 12)	1.240	1.140	1.350	24%	2008-2011	<0.01			н	
Mental /ellbeinç	Pro-social (S2 pupils)	1.130	1.100	1.160	13%	2010	<0.01			њ	
≥ ĕ	Pro-social (S4 pupils)	1.090	1.060	1.120	9%	2010	<0.01			<b>⊢</b> ●−−1	
	Common mental health problems (16 to 19 years)	0.920	0.830	1.010	-8%	2008-2011	0.09	1	-		
	Emotional & behavioural problems (4 to 12 years)	0.663	0.620	0.710	-34%	2008-2011	<0.01	H	'		
	Emotional & behavioural problems (S2 pupils)	0.880	0.850	0.900	-12%	2010	<0.01				
	Emotional & behavioural problems (S4 pupils)	0.900	0.880	0.920	-10%	2010	<0.01	H			
Mental health problems	Emotional symptoms (4 to 12 years)	0.790	0.740	0.840	-21%	2008-2011	<0.01		н		
ble	Emotional symptoms (S2 pupils)	0.950	0.920	0.980	-5%	2010	<0.01		•		
bro	Emotional symptoms (S4 pupils)	0.940		0.970	-6%	2010	<0.01	<b>⊢●</b> −1			
臣	Conduct problems (4 to 12 years)	0.740	0.700	0.780	-26%	2008-2011	<0.01	H			
Jee	Conduct problems (S2 pupils)	0.860	0.830	0.880	-14%	2010	<0.01	•	'		
a l	Conduct problems (S4 pupils)	0.880	0.860	0.900	-12%	2010	<0.01	н <del>о</del> н			
eut	Hyperactivity/inattention (4 to 12 years)	0.790	0.740	0.830	-21%	2008-2011	<0.01		<b>H</b>		
Σ	Hyperactivity/inattention (S2 pupils)	0.910	0.890	0.940	-9%	2010	<0.01		•		
	Hyperactivity/inattention (S4 pupils)	0.930	0.910	0.950	-7%	2010	<0.01	H			
	Alcohol dependency (16 to 19 years)	0.990	0.880	1.120	-1%	2008-2011	0.92	٠	-		
	Drug-related disorders (19 years and under)	0.640	0.620	0.670	-36%	2011/2012	<0.01	H			
	Suicide (19 years and under)	0.730	0.690	0.780	-26%	2007-2011	<0.01	ļ			

Factors included in the model: sex, age, SIMD and urban-rural classification. Alcohol dependency did not control for urban-rural classification due to small numbers. All charted values are for odds ratios (OR) with the exception of drug-related disorders and suicide which are incident rate ratios (IRR). Odds ratios are for decreasing deprivation where 1= most deprived and 5 = least deprived.

# 3.4.4 Mental health outcomes: by urban-rural classification

Analysis by the Scottish Government 6-fold urban–rural classification was possible for seven out of 15 mental health outcome indicators. Of these, two were mental wellbeing indicators (mental wellbeing and pro-social behaviour) and five were mental health problem indicators (emotional and behavioural problems, emotional symptoms, conduct problems, hyperactivity/inattention and alcohol dependency).

A concise description of the pattern of mental health outcomes by urban-rural classification is given below and details are presented fully in Table 3.6<sup>xviii</sup>. The relative difference between large urban areas and each of the five other areas is shown in Table 3.6a.

No obvious pattern by urban-rural classification was identified for the following indicators:

- Mental wellbeing (S2 pupils, S4 pupils)
- Pro-social behaviour (S2 pupils, S4 pupils and 4 to 12 year olds)
- Emotional and behavioural problems (4 to 12 year olds)
- Emotional symptoms (S2 pupils, S4 pupils and 4 to 12 year olds)
- Conduct problems (4 to 12 year olds)
- Hyperactivity/inattention (S4 pupils and 4 to 12 year olds)
- Alcohol dependency (16 to 19 year olds).

#### Mental wellbeing

No obvious pattern by urban-rural classification was identified for any of the mental wellbeing indicators.

#### Mental health problems

In 2010, emotional and behavioural problems in S2 pupils slightly increased with increased rurality and inaccessibility, rising from 22% in group one (large urban areas) to 25% in groups two (other urban) and three (accessible small) before declining to 21% in group six (remote rural). There was a non-linear association for S4 pupils, fluctuating across the six groups being lowest in group one, 25% rising to a high of 30% in group four (remote small) and declining to 26% in groups five (accessible rural) and six.

In 2010, conduct problems in S2 pupils showed a slight increase from 24% in group one to 27% in group four and declining to 24% in groups five and six. In contrast, the distribution of conduct problems in S4 pupils was non-linear rising from a low of 23% in group one to a high of 27% in group four and declining to 24% in groups five and six. Hyperactivity/inattention fluctuated across the six urban-rural groups for S2 pupils in 2010 from a low of 26% in group 4 to a high of 30% in groups two and three.

<sup>&</sup>lt;sup>xviii</sup> The 6 points of the urban-rural classification do not follow a strict ordinal scale and have therefore been treated as categorical variables to identify non-linear differences that may exist between groups.

						6-fold urban-rural classification							
Construct	Indicator	Measure	School year / age (years)	Unit	Year(s)	1 (large urban)	2 (other urban)	3 (Accessible small)	4 (Remote small)	5 (Accessible rural)	6 (Remote rural)	P-valu	
	Mentel welle size	Mean WEMWBS score*	S2	Mean	2010	50.6	50.2	50.0	50.4	50.9	50.3	0.65	
being	Mental wellbeing		S4	Mean	2010	49.7	49.7	49.4	49.2	49.9	49.6	0.47	
Mental wellbeing			S2	%	2010	73	72	74	76	74	73	0.4	
Menta	Pro-social behaviour	Normal score on the pro-social scale of the SDQ**	S4	%	2010	70	71	69	68	72	69	0.18	
		Normal score on the pro-social scale of the SDQ**	4 to 12	%	2008-11	92	92	95	92	93	90	0.0	
	Emotional & behavioural problems	Borderline or abnormal total difficulties score on the SDQ**	S2	%	2010	22	25	25	22	21	21	0.0	
		Bordenine or abnormal total difficulties score on the SDQ""	S4	%	2010	25	27	26	30	26	26	0.0	
		Borderline or abnormal total difficulties score on the SDQ**	4 to 12	%	2008-11	15	16	14	14	11	12	0.79	
	Emotional symptoms	Borderline or abnormal score on the emotional symptoms scale of the SDQ**	S2	%	2010	15	15	16	13	15	13	0.4	
lems			S4	%	2010	19	20	19	22	19	18	0.0	
Mental health problems		Borderline or abnormal score on the emotional symptoms scale of the SDQ**	4 to 12	%	2008-11	16	15	14	15	14	13	0.9	
Il healt			S2	%	2010	24	26	26	23	22	22	0.0	
Menta	Conduct problems	Borderline or abnormal score on the conduct problems scale of the SDQ**	S4	%	2010	23	24	25	27	24	24	0.04	
		Borderline or abnormal score on the conduct problems scale of the SDQ**	4 to 12	%	2008-11	23	25	22	19	16	19	0.1	
			S2	%	2010	28	30	30	26	28	26	0.0	
	Hyperactivity / inattention	Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	S4	%	2010	33	34	31	34	33	36	0.1	
		Borderline or abnormal score on the hyperactivity/inattention scale of the SDQ**	4 to 12	%	2008-11	19	21	23	18	17	15	0.1	

#### Table 3.6. Mental health outcomes: by Scottish Government 6-fold urban-rural classification

Statistically significant difference across the Scottish Government 6-fold urban/rural classification<sup>1</sup> No statistically significant difference across the Scottish Government 6-fold urban/rural classification

#### Footnotes

1 Shaded cells and p-values of <0.05 indicate a statistically significant difference across the Scottish Government 6 urban - rural categories. 2 No data were available for two indicators, self-harm and eating disorders, as no suitable data source has yet been identified. 3 Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall population estimate. Instead data for each discrete age group have been presented separately. 4 P7 - Primary seven (approx 11 years of age), S2 - Secondary 2 (approx 13 years of age), S4 - Secondary 4 (approx 15 years of age). 5 Data for measures for 4 to 12 year olds were collected by parental/guardian assessment. 6 Point estimates are for the most recent year of data available at the time of analysis, for some measures it has been necessary to aggregate years to increase the sample size. 7 Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator. 8 Only indicators with data disaggregated by urban-rural classification have been included in the table, those without are noted in the table below. 9 SR = Standardised Rate (age-sex standardised to the 1976 European Standard Population); % = per cent.

\*WEMWBS - Warwick-Edinburgh Mental Well-being Scale. \*\*SDQ - Strengths and Difficulties Questionnaire. \*\*\*GHQ-12 - General Health Questionnaire -12.

#### **Dataless indicators/measures**

Construct	Indicator	Measure	School year / age (years)	Unit
eing	Mental wellbeing	Mean WEMWBS score*	16 to 17	Mean
Mental wellbeing	Life satisfaction	Mean score of how satisfied with life nowadays	16 to 17	Mean
		Mean score on adapted Cantril ladder	P7, S2, S4	Mean
Me	Happiness	Feel very happy with their life at present	P7, S2, S4	%
÷	Common mental health problems	Score of 4 or more on the GHQ-12***	16 to 19	%
ental health problems	Sadness	Felt sad quite often, very often or always in the last week	P7, S2, S4	%
Mental	Drug-related disorders	Hospital patients: mental and behavioural disorders due to psychoactive drug use	19 and under	SR
Ž –	Suicide	Deaths from intentional self-harm or by events of undertermined intent	19 and under	SR

# How big is the urban-rural gap in mental health?

Of all the equality dimensions examined, inequalities in mental health outcomes by urban-rural classification were the least common, being present in only three out of seven indicators:

- Emotional and behavioural problems in S2 and S4 pupils, 2010
- Conduct problems in S2 and S4 pupils, 2010
- Hyperactivity/inattention in S2 pupils, 2010.

Table 3.6a presents the slope coefficient (B) for the available continuous outcome variables and the odds ratios for each categorical measure. The group one large urban classification has been used as the reference group and is compared against each of the other urban-rural classifications. For the continuous measures, a negative slope coefficient signified a reduction in the outcome measure with age whereas a value greater than zero signified an increase with age. For the categorical measures, an odds ratio of less than one signified a reduction across the 6 categories whereas a value greater than 0.05 signified where there were statistically significant differences across the 6 urban-rural groups.

Continuous outcome variables	Slope Coefficient (B)	95% CI	P- value <sup>xix</sup>
WEMWBS (S2 pupils)			
Large urban	1		0.65
Other urban	-0.43	-0.78 to -0.74	
Accessible small	-0.67	-1.22 to 0.12	
Accessible rural	0.02	-0.45 to 0.49	
Remote rural	-0.36	-0.97 to 0.25	
WEMWBS (S4 pupils)			
Large urban	1		0.47
Other urban	0.01	-0.32 to 0.35	
Accessible small	-0.43	-0.94 to 0.08	
Remote small	-0.43	-1.10 to 0.24	
Accessible rural	0.56	-0.38 to 0.49	
Remote rural	-0.21	-0.75 to 0.34	
Categorical outcome variables	Odds ratio	95% CI	P-value
Pro-social behaviour (4 to 12 years)			
Large urban	1		0.09
Other urban	0.90	0.68 to 1.19	
Accessible small	1.40	0.86 to 2.28	
Remote small	0.80	0.41 to 1.58	
Accessible rural	0.92	0.64 to 1.33	
Remote Rural	0.59	0.38 to 0.91	
Pro-social behaviour (S2 pupils)			
Large urban	1		0.49
Other urban	0.96	0.88 to 1.05	

Table 3.6a. Urban-rural differences in mental health outcomes

<sup>&</sup>lt;sup>xix</sup> P-value is for overall difference between large urban areas and all other areas.

Accessible small	1.00	0.87 to 1.14	
Remote small	1.16	0.97 to 1.38	
Accessible rural	0.99	0.89 to 1.12	
Remote rural	0.98	0.84 to 1.13	
Pro-social behaviour (S4 pupils)	0.00		
Large urban	1		0.15
Other urban	1.05	0.97 to 1.14	0.10
Accessible small	0.93	0.82 to 1.06	
Remote small	0.89	0.75 to 1.05	
Accessible rural	1.01	0.92 to 1.13	
Remote Rural	0.93	0.81 to 1.06	
Emotional & behavioural problems (4 to 12 years)	0.00	0.01 to 1.00	
Large urban	1		0.79
Other urban	1.13	0.92 to 1.39	0.10
Accessible small	1.10	0.80 to 1.51	
Remote small	1.04	0.60 to 1.80	
Accessible rural	0.93	0.68 to 1.26	
Remote rural	1.08	0.72 to 1.60	
Emotional & behavioural problems (S2 pupils)	1.00	0.72 10 1.00	
Large urban	1		0.01
Other urban	1.15	1.05 to 1.26	0.01
Accessible small	1.19	1.03 to 1.36	
Remote small	1.19	0.83 to 1.20	
Accessible rural	1.03	0.91 to 1.17	
Remote rural	0.97	0.83 to 1.14	
Emotional & behavioural problems (S4 pupils)	0.97	0.03 10 1.14	
	1		0.02
Large urban Other urban	1.12	1.03 to 1.22	0.02
Accessible small	1.12	0.96 to 1.25	
Remote small	1.10	1.07 to 1.49	
Accessible rural	1.20	1.07 to 1.49	
	1.13		
Remote rural	1.12	0.98 to 1.29	
Emotional symptoms (4 to 12 years)	1		0.06
Large urban		0 77 to 1 17	0.96
Other urban	0.95	0.77 to 1.17	
Accessible small	0.93	0.67 to 1.27	
Remote small	0.96	0.57 to 1.64	
Accessible rural	1.04	0.79 to 1.37	
Remote rural	0.88	0.60 to 1.29	
Emotional symptoms (S2 pupils)	4		0.40
Large urban	1	0.00 to 1.10	0.42
Other urban	1.06	0.96 to 1.18	
Accessible small	1.10	0.93 to 1.29	
Remote small	0.92	0.73 to 1.14	
Accessible rural	1.05	0.91 to 1.21	
Remote rural	0.92	0.76 to 1.11	
Emotional symptoms (S4 pupils)	4		0.00
Large urban	1		0.09
Other urban	1.09	0.99 to 1.20	
Accessible small	1.10	0.95 to 1.27	
Remote small	1.27	1.05 to 1.52	
Accessible rural	1.04	0.92 to 1.18	
Remote rural	0.96	0.82 to 1.13	

Conduct problems (4 to 12 years)			
Large urban	1		0.14
Other urban	1.17	0.98 to 1.39	
Accessible small	1.07	0.82 to 1.41	
Remote small	0.89	0.55 to 1.44	
Accessible rural	0.83	0.65 to 1.07	
Remote rural	0.98	0.71 to 1.37	
Conduct problems (S2 pupils)			
Large urban	1		<0.01
Other urban	1.13	1.04 to 1.23	
Accessible small	1.23	1.08 to 1.41	
Remote small	0.99	0.83 to 1.19	
Accessible rural	0.99	0.87 to 1.11	
Remote rural	0.97	0.83 to 1.13	
Conduct problems (S4 pupils)			
Large urban	1		0.04
Other urban	0.94	0.87 to 1.03	
Accessible small	0.88	0.77 to 1.00	
Remote small	0.81	0.68 to 0.96	
Accessible rural	0.87	0.78 to 0.97	
Remote rural	0.95	0.83 to 1.10	
Hyperactivity/inattention (4 to 12 years)			
Large urban	1		0.15
Other urban	1.16	0.96 to 1.39	
Accessible small	1.39	1.06 to 1.82	
Remote small	1.05	0.65 to 1.72	
Accessible rural	0.99	0.77 to 1.28	
Remote rural	0.91	0.64 to 1.31	
Hyperactivity/inattention (S2 pupils)			
Large urban	1		0.01
Other urban	1.12	1.03 to 1.21	
Accessible small	1.16	1.02 to 1.32	
Remote small	0.93	0.78 to 1.10	
Accessible rural	1.08	0.97 to 1.21	
Remote rural	0.95	0.82 to 1.10	
Hyperactivity/inattention (S4 pupils)			
Large urban	1		0.11
Other urban	1.06	0.98 to 1.15	
Accessible small	0.97	0.86 to 1.09	
Remote small	1.03	0.88 to 1.20	
Accessible rural	1.04	0.94 to 1.15	
Remote rural	1.18	1.04 to 1.34	

# 4. Contextual constructs

# 4.1 Introduction

The contextual constructs and indicators cover the risk and protective factors for, and the consequences of, mental health, which may be at the following domain levels: individual, family, learning environment, community and structural.<sup>5</sup> Each domain is divided into constructs to categorise the various dimensions of each domain. Full details of these are given below:

Table 4.1. Framework for the contextual indicators (number of indicators shown in brackets)

	Contextual facto	ors associated wi	th mental health	
Individual	ividual Family Learning Environmen		Community	Structural
Learning and development (2)			Participation (4)	Equality (4)
Healthy living Family Peer & friend		Peer & friend relationships (7)	Social networks (1)	Social inclusion (8)
General health (3)	healthy living		Social support (1)	Discrimination (3)
Spirituality (1)	Parental health Pressure		Trust (3)	Physical environment (5)
Emotional intelligence (1)			Safety (1)	Violence (3)
Life events (2)				Culture (3)

This chapter provides a descriptive account of these contextual influences associated with the mental health of children and young people (C&YP) in Scotland. The following information is presented for each of the five contextual domains, where data are available:

- The most recent point estimate for each indicator measure for the respective population of C&YP
- Patterns and trends over time for each indicator measure
- Differences in contextual indicator measures by age and gender for the most recent year or years.

An accompanying Excel document presents charts for each measure across time and by gender and age (<u>www.scotpho.org.uk/publications/reports-and-papers/1159-</u><u>Scotlands-mental-health-children-and-young-people-2013</u>)</u>. More information on the establishment of the national indicator set and the development of the contextual construct indicators can be found on the NHS Health Scotland website at <u>www.healthscotland.com/scotlands-health/population/mental-health-indicators.aspx</u>.

# 4.2 Individual domain

#### 4.2.1 Individual domain and mental health

The individual domain is composed of six constructs; two of which have data sources identified (healthy living and general health) and four of which have yet to be defined or have data sources identified (learning and development, spirituality, emotional intelligence and life events) (Appendix 1). For more information, especially on the evidence behind these constructs see *Establishing a core set of national, sustainable mental health indicators for children and young people in Scotland: Final Report.*<sup>5</sup>

This section provides a descriptive account of the contextual indicators associated with the mental health of children and young people (C&YP) at the individual domain. Where data are available, the most recently available point estimate for each indicator measure is presented along with trends over time. Breakdowns by gender and age are also reported. Data are descriptive only and no statistical significance is implied, although 95% confidence intervals (lower and upper values) are provided in brackets after estimates, where available, to show their precision.

The indicators for which data were available are:

- Physical activity
- Healthy eating
- Obesity
- Alcohol consumption
- Drug use
- Smoking
- Sexual health
- Self-reported health
- Long-standing physical condition or disability
- Limiting long-standing physical condition or disability.

The indicators for which no data were available are:

- Play
- Readiness for school
- Spirituality
- Emotional intelligence
- Stressful life events
- Adverse childhood experiences.

#### 4.2.2 Most recent point estimates

Point estimates were available for nine (14 measures) out of 16 indicators (27 measures) (Table 4.1).<sup>xx</sup>

Of the healthy living indicators, in 2011, 74% (71% to 77%) of 5 to 15 year olds met the recommended physical activity guidelines in the previous week.<sup>xxi</sup> Healthy eating was reported by 12% (9% to 16%) of 16 to 17 year olds in 2008 to 2011 combined and for 78% (76% to 80%) of 2 to 15 year olds in 2011.<sup>xxi</sup> In 2011, 16% (13% to 18%) of 2 to 15 year olds were classified as obese.

Three per cent (2% to 4%) of P7 pupils reported alcohol consumption every week in 2010. In 2010, 12% (7% to 17%) of 16 to 17 year olds smoked cigarettes. In 2010 there were 7.1 pregnancies per 1,000 females aged 15 years and under.<sup>xxii</sup> Of those who had sexual intercourse, 72% (68% to 75%) of S4 pupils in 2010 reported using a condom on the last occasion.

In relation to general health, the health of 96% (95.3% to 97%) of C&YP aged 15 years and under was good or very good in  $2011^{xxi}$  compared with 94% (92% to 96%) of 16 to 17 year olds in 2008 to 2011 combined.

In 2008 to 2011 combined, 16% (12% to 19%) of 16 to 17 year olds had a longstanding physical condition or disability compared with 13% (11% to 14%) of those aged 15 years and under in 2011.<sup>xxi</sup> In 2008 to 2011 combined, 6% (4% to 8%) of 16 to 17 year olds reported a limiting long-standing physical condition or disability compared with 5% (4% to 6%) of those aged 15 years and under in 2011.<sup>xxi</sup>

<sup>&</sup>lt;sup>xx</sup> Indicators based on measures with discontinuous age groups were not readily combined into a summary estimate. Estimates for each age group are discussed separately in the age breakdown section of the equalities analysis.

<sup>&</sup>lt;sup>xxi</sup> Data include parent/guardian assessment for those aged 12 years and under and self-assessment for those aged 13 years and above.

<sup>&</sup>lt;sup>xxii</sup> 95% confidence intervals were not available for these data as they are based on administrative data which covers the population as a whole.

Table 4.1. Individual domain contextual factors: current point estimates and differences by gender and school year/age

						All		Ge	nder		Age
Construct	Indicator	Measure	Unit	Year(s)	School year / age (years)		School year / age (years)	Boys	Girls	School year / age (years)	
										5 to 7	80
	Physical activity	Met recommended level of physical activity in previous week	%	2011	5 to 15	74	5 to 15	78	69	8 to 11	80
										12 to 15	62
			%	2008-11	16 to 17	12	16 to 17	10	15	N/A	N/A
					2 to 15					2 to 4	17
		Ate five or more portions of fruit and vegetables in previous day								5 to 7	9
		Ate live of more portions of nuit and vegetables in previous day	%	2011		13	2 to 15	13	12	8 to 10	14
	Healthy eating									11 to 12	12
										13 to 15	12
							P7	79	77	P7	78
		Usually eat breakfast every weekday	%	2010	P7, S2, S4	N/A	S2	66	50	S2	58
							S4	61	47	S4	54
										2 to 7	14
p	Obesity	Classified as obese or morbidly obese	%	2011	2 to 15	16	2 to 15	18	14	8 to 11	18
, Livir										12 to 15	16
Healthy Living		Drack clockel in the last week	%	2010	S2,S4	N/A	S2	15	14	S2	14
H		Drank alcohol in the last week	%	2010	52,54	N/A	S4	35	34	S4	34
	consumption	Drink anything alcoholic every week	%	2010	P7	3	P7	4	2	N/A	N/A
		Units of alcohol drunk in the last week*	Maan	2010	00.04	NIA	S2	15.0	15.0	S2	15.0
			Mean	2010	S2, S4	N/A	S4	22.0	18.0	S4	20.0
	Drug		0/	2010	00.04	N1/A	S2	1	0	S2	0
	Drug use	Usually take illicit drugs at least once a month	%	2010	S2, S4	N/A	S4	7	3	S4	6
		Smoke cigarettes nowadays	%	2011***	16 to 17	12	16 to 17	12	16	N/A	N/A
	Omakina		0/	0040	00.04	62, S4 N/A	S2	3	3	S2	3
	Smoking	Usually smoke at least one cigarette a week	%	2010	S2, S4		S4	11	14	S4	13
		Usually smoke at least once a week	%	2010	P7	N/A	P7	0	0	P7	0
										<14	0.7
	0	Pregnancies in the past year**	CR	2010	15 and under	7.1	15 and under	N/A	7.1	14	4.3
	Sexual health									15	16.2
		Used a condom on last occasion they had sexual intercourse	%	2010	S4	72	S4	74	70	N/A	N/A
			%	2008-11	16 to 17	94	16 to 17	95	93	N/A	N/A
										0 to 3	96
	Self-reported health	Health perceived to be good or very good	0/	2044	15 and	00	15 and	00	00	4 to 7	97
			%	2011	under	96	under	96	96	8 to 11	95
										12 to 15	96
			%	2008-11	16 to 17	16	16 to 17	15	16	N/A	N/A
ealth	Long standing									0 to 3	7
General Health		Long-standing physical condition or disability			15 and		15 and			4 to 7	13
Benel	or disability		%	2011	under	14	under	13	12	8 to 11	14
0					under					12 to 15	17

									12 to 15	17
		%	2008-11	16 to 17	6	16 to 17	4	7	N/A	N/A
Limiting long-									0 to 3	2
standing physical condition or	Long-standing physical condition or disability that limits daily activities	0/	0011	15 and	F	15 and	-		4 to 7	3
disability		%	2011	under	Э	under	Э	4	8 to 11	5
									12 to 15	7

#### Footnotes

1 No data were available for six indicators: play, readiness for school, spirituality, emotional intelligence, stressful life events and adverse childhood experiences as no suitable data source has yet been identified. 2 Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall population estimate. Instead data for each discrete age group have been presented separately. 3 P7 - Primary seven (approx 11 years of age), S2 - Secondary 2 (approx 13 years of age), S4 - Secondary 4 (approx 15 years of age). 4 Data for 2 to 12 year olds were collected by parental/guardian assessment. 5 Point estimates are for the most recent year of data available at the time of analysis, for some measures it has been necessary to aggregate years to increase the sample size. 6 Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator. 7 Values of zero are due to rounding of percentages to whole numbers. 8 CR = crude rate; % = per cent; N/A = data are not available or cannot be calculated.

#### Notes on indicators

\*Alcohol consumption: estimates based on revised conversion factors. \*\*Pregnancies: by age at conception. Crude rate per 1,000 women in each age group. \*\*\*Equalities analysis by age and gender was undertaken for 2010 and 2011 combined.

#### 4.2.3 Time trends

Presentation of time trends was possible for 10 indicators (16 measures) out of 26 (Table 4.1).<sup>xxiii</sup> The longest time series spanned 13 years (1998 to 2010) with a minimum of four data points (smoking and alcohol consumption in P7 pupils). The shortest time series had only three data points and was reported for two indicators (healthy eating (three measures) and sexual health (one measure)).

Of the healthy living indicators, there has been a steady increase in the percentage of 5 to 15 year olds meeting the recommended physical activity guidelines from 71% (67% to 74%) in 2008 to 74% (71% to 77%) in 2011.<sup>xxi</sup> The percentage of 2 to 15 year olds eating five or more fruit or vegetables in the previous day showed little variation between 13% (11% to 16%) in 2008 and 13% (11% to 15%) in 2011.<sup>xxi</sup> There was an overall increase in the percentage of school pupils usually eating breakfast every weekday: for P7 pupils an increase of 8% from 70% (67% to 73%) in 2002 to 78% (75% to 80%) in 2010; for S2 pupils an increase of 2% from 56% (54% to 59%) in 2002 to 58% (55% to 61%) in 2010; and for S4 pupils an increase of 3% from 51% (48% to 55%) in 2002 to 54% (51% to 56%) in 2010. In 2011, 16% (13% to 18%) of 2 to 15 year olds were obese or morbidly obese, which despite some stabilisation in 2008 and 2009, represents a slight overall increase of 2% over the time period since 2003 (14% (12% to 16%)).

The percentage of S2 pupils who reported alcohol consumption in the last week showed a downward trend from 23% in 2002 to 14% in 2010, as did that for S4 pupils decreasing from 46% in 2002 to 34% in 2010.<sup>v, xxiv</sup> The percentage of P7 pupils who reported drinking alcohol every week steadily declined between 1998 and 2010, from 8% (7% to 10%) to 3% (2% to 4%).<sup>xxv</sup> The mean number of units of alcohol drunk fluctuated over time for both S2 and S4 pupils; for S2 pupils there was an overall average increase of 6 units from 9 units in 2000 to 15 units in 2010.<sup>v, xxvi</sup>

The percentage of C&YP reporting drug use at least once a month reduced over time for both S2 and S4 pupils; for S2 pupils drug use reduced from 4% in 2002 to 0% in 2010 and for S4 pupils it reduced from 14% in 2002 to 6% in 2010.<sup>xxiv</sup> The percentage of 16 and 17 year olds smoking cigarettes fluctuated from 16% (10% to 22%) in 2002 to 12% (7% to 17%) in 2011 with no obvious pattern or trend. <sup>xxvii</sup> Smoking decreased linearly over time for both S2 and S4 pupils; for S2 pupils from 8% in 2002 to 3% in 2010, a reduction of 5% across the whole time period, and for S4 pupils from 20% in 2002 decreasing to 13% in 2010, a reduction of 7% over the time period.<sup>v, xxiv</sup> The percentage of P7 pupils who reported smoking at least once a week reduced slightly from 2% (2% to 3%) in 1998 to 0% (0% to 1%) in 2010.<sup>xxv</sup> Pregnancies in the past year to girls aged 15 years and under showed some fluctuation but remained broadly stable overall across the time period from 6.4 per

<sup>&</sup>lt;sup>xxiii</sup> This included trends for the separate school years.

<sup>&</sup>lt;sup>xxiv</sup> 95% confidence intervals are unavailable for these data.

<sup>&</sup>lt;sup>xxv</sup> Data taken from the Health Behaviour in School-aged Children Survey (HBSC).

<sup>&</sup>lt;sup>xxvi</sup> 95% confidence intervals are unavailable for these data and 2008 and 2010 values for number of alcohol units drunk in the last week are based on the revised alcohol strengths and values between 2000 and 2006 are based on the old conversion factors.

xxvii Data taken from Scottish Household Survey.

1,000 girls in 2001 to 7.1 in 2010.<sup>xxii</sup> Condom use on the last occasion of sexual intercourse was broadly stable over time ranging from 70% (64% to 75%) in 2001 to 72% (68% to 75%) in 2010.

The percentage of C&YP aged 15 years and under whose health was good or very good increased 3% overall between 2003 (93% (92% to 94%)) and 2011 (96% (95% to 97%)).<sup>xxi</sup> There was a 4% reduction over this period 2003 to 2011 in the percentage of C&YP aged 15 years and under with a long-standing physical condition or disability falling from 17% (16% to 19%) to 13% (11% to 14%).<sup>xxi</sup> Similarly, the percentage of C&YP with a limiting long-standing physical condition or disability reduced by 3% over this period from 7% (6% to 8%) to 4% (3% to 5%).<sup>xxi</sup>

Table	4.2. Individual domain	contextual factors: trends over time	1								Ye	ear						
Construct	Indicator	Measure	School year / age (years)	Unit	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
	Physical activity	Met recommended level of physical activity in previous week	5 to 15	%											71	71	73	74
		Ate five or more portions of fruit and vegetables in previous day	2 to 15	%											13	15	12	13
			P7	%					70				77				78	
		Usually have breakfast every weekday	S2	%					56				58				58	
			S4	%					51				51				54	
	Obesity	Classified as obese or morbidly obese	2 to 15	%						14					15	15	14	16
		Drank alcohol in the last week**	S2	%					23		20		14		11		14	
			S4	%					46		43		36		31		34	
ving	Alcohol consumption	Drink anything alcoholic every week	P7	%	8				6				5				3	
Healthy Living		Units of alcohol drunk in the last week*	S2	Mean					10.0		9.0		13.0		16.0		15.0	
Неа			S4	Mean					13.0		12.0		16.0		18.0		20.0	
	Drug use	I levally take illicit drugs at least once a month**	S2	%					4		4		2		1		0	
		Usually take illicit drugs at least once a month**	S4	%					14		13		8		7		6	
		Smoke cigarettes nowadays	16 to 17	%					16	26	16	14	17	21	11	12	16	12
	Smoking	Usually smoke at least one cigarette a week**	S2	%					8		6		4		4		3	
	Smoking		S4	%					20		19		15		15		13	
		Usually smoke at least once a week	P7	%	2				1				1				0	
	Sexual health	Pregnancies in the past year***	15 and under	CR				6.4	7.2	6.9	7.3	7.0	8.0	7.8	7.8	7.1	7.1	
		Used a condom on last occasion they had sexual intercourse	S4	%					70				79				72	
	Self-reported health Health perceived to be good or very good		15 and under	%						93					95	95	94	96
	Long-standing physical condition or disability	Long-standing physical condition or disability	15 and under	%						17					13	13	13	13
	Limiting long-standing physical condition or disability	Long-standing physical condition or disability that limits daily activities	15 and under	%						7					5	5	5	4

#### Table 4.2 Individual domain ontaxtual factora, tranda . . .

#### Footnotes

1 Six indicators are yet to be fully defined: play, readiness for school, spirituality, emotional intelligence, stressful life events and adverse childhood experiences. 2 Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall population estimate, instead, data for each discrete age group have been presented separately. 3 P7 - Primary seven (approx 11 years of age), S2 - Secondary 2 (approx 13 years of age), S4 - Secondary 4 (approx 15 years of age), been reported for some indicators where one measure does not adequately cover the scope of the indicator. 6 Values of zero are due to rounding of percentages to whole numbers. 7 CR = crude rate; % = per cent. Notes on indicators

\*Alcohol consumption: 2008 and 2010 estimates are based on new alcohol strength conversion factors and data prior to 2008 are based on original strength conversion factors. Without recalculating the 2002, 2004 and 2006 estimates using appropriately revised conversion factors, it is not possible to be definitive about drinking trends in Scotland. \*\*The 2002 and 2004 cohorts were older than 2006, 2008 and 2010 due to later fieldwork period. This should be taken into account when looking at long-term trends as age is an important factor when looking at the incidence of smoking, drinking and drug use. \*\*\*Pregnancies: by age at conception. Crude rate per 1,000 women in each age group.

#### **Dataless indicators/measures**

Construct	Indicator	Measure	School year / age (years)	Unit
Healthy living	Healthy eating	Ate five or more portions of fruit and vegetables in previous day	16 to 17	%
	Self reported health	Health perceived to be good or very good	16 to 17	%
General health	Long-standing physical condition or disability	Long-standing physical condition or disability	16 to 17	%
	Limiting long-standing physical condition or disability	Long-standing physical condition or disability that limits daily activities	16 to 17	%

# 4.2.3 Equalities analysis

#### 4.2.3.1 Individual domain: by gender

All indicators and their measures that have an associated data source could be looked at by gender, Table 4.1.

In the healthy living construct, 78% (75% to 82%) of boys and 69% (65% to 73%) of girls aged 5 to 15 years met the recommended level of physical activity in the previous week.<sup>xxi</sup> In 2008 to 2011 combined, 10% (6% to 14%) of boys and 15% (11% to 20%) of girls aged 16 to 17 years ate five or more portions of fruit and vegetables the previous day and in 2011, 13% (11% to 16%) of boys and 12% (10% to 15%) of girls aged 2 to 15 years ate 'five a day'.<sup>xxi</sup> In 2010, boys were more likely than girls to usually eat breakfast every weekday: for P7 pupils this was 79% (76% to 81%) of boys compared with 77% (73% to 80%) of girls; for S2 pupils 66% (63% to 69%) of boys compared with 47% (44% to 53%) of girls. In 2011, 18% (14% to 21%) of boys and 14% (11% to 17%) of girls aged 2 to 15 years were classified as obese or morbidly obese.

The percentage of boys and girls in S2 and S4 who drank alcohol in the last week was broadly similar within each age group: for S2 boys the percentage was 15% (14% to 16%) and for S2 girls 14% (13% to 15%); and for S4 boys the percentage was 35% (33% to 36%) and for S4 girls 34% (33% to 35%).<sup>v, xxiv</sup> In 2010, 4% (3% to 5%) of P7 boys and 2% (1% to 3%) of P7 girls reported drinking anything alcoholic every week.<sup>xxv</sup> The mean number of units of alcohol drunk in the last week was the same for boys and girls in S2 (15 units) and varied for S4 pupils with boys drinking an average of 22 units in the last week and girls 18 units.<sup>v, xxiv</sup>

In 2010, 1% of S2 boys and 0% of S2 girls reported usually taking illicit drugs at least once a month compared with 7% of S4 boys and 3% of S4 girls.<sup>xxiv</sup> In 2010 to 2011 combined, 12% (6% to 18%) of boys and 16% (10% to 22%) of girls aged 16 and 17 years reported smoking cigarettes.<sup>xxvii</sup> In 2010, 3% of S2 boys and S2 girls reported usually smoking at least one cigarette a week compared with 11% of S4 boys and 14% of S4 girls.<sup>v, xxiv</sup> In 2010, 0% (0% to 1%) of P7 boys and girls reported usually smoking at least once a week.<sup>xxv</sup> Of those who reported having had sexual intercourse in 2010, 74% (69% to 79%) of S4 boys and 70% (65% to 74%) of S4 girls reported using a condom on the last occasion.

In 2008 to 2011 combined, 95% (92% to 98%) of boys and 93% (90% to 96%) of girls aged 16 and 17 years old perceived their health to be good or very good. In 2011, 96% (92% to 98%) of boys and 96% (95% to 97%) of girls aged 15 years also had good or very good health.<sup>xxi</sup> The percentage of boys and girls with a long-standing physical condition or disability was broadly similar across all age groups; this was 13% (11% to 15%) for boys and 12% (10% to 15%) for girls aged 15 years and under in 2011;<sup>xxi</sup> and 15% (10% to 21%) for boys and 16% (11% to 21%) for girls aged 16 to 17 years in 2008 to 2011 combined. A higher percentage of girls (8% (4% to 11%)) had a limiting long-standing physical condition or disability than boys (4% (2% to 7%)) in 16 and 17 year olds but was broadly similar amongst C&YP aged 15 years and under (5% (3% to 6%) of boys and 4% (3% to 5%) of girls).<sup>xxi</sup>

#### 4.2.3.2 Individual domain: by age

Presentation of data by age was possible for 10 indicators (13 measures) out of the possible 16 indicators (27 measures) (Table 4.2).

In the healthy living construct, the percentage of C&YP meeting the recommended level of physical activity in the previous week in 2011 remained stable between 5 to 7 years and 8 to 11 years (80% (76% to 85%) for both age groups) but decreased by 18% in 12 to 15 year olds (62% (57% to 67%)).<sup>xxi</sup> In 2011, the percentage of 2 to 15 year olds who ate five or more portions of fruit and vegetables in the previous day fluctuated across age groups being highest in 2 to 4 year olds (17%) and lowest in 5 to 7 years (14%) and 11 through to 15 year olds (12%).<sup>xxi</sup> In 2010, the percentage of C&YP who usually ate breakfast every weekday decreased linearly with age from 78% (75% to 80%) of P7 pupils to 54% (51% to 56%) of S4 pupils.

Obesity in 2 to 15 year olds fluctuated slightly with age in 2011 being lowest in 2 to 7 year olds (14% (11% to 17%)), highest in 8 to 11 year olds (18% (14% to 23%)) and decreasing slightly in 12 to 15 year olds (16% (12% to 20%)).

The percentage of C&YP who drank alcohol in the last week more than doubled with age being 14% in S2 pupils and 34% in S4 pupils in 2010.<sup>xxiv</sup> The mean number of units of alcohol drunk in the last week was also higher for S4 pupils (20 units) compared with S2 pupils (15 units).<sup>xxiv</sup> In 2010 the percentage of C&YP who reported usually taking illicit drugs at least once a month was 6% in S4 pupils and negligible in S2 pupils (0%).<sup>xxiv</sup> In 2010, the percentage of C&YP who reported usually smoking at least one cigarette a week was over four times higher in S4 pupils (13%) than S2 pupils (3%).<sup>xxiv</sup>

Pregnancies in girls aged 15 years and under in 2010 varied with age being lowest in girls aged 13 years and under at 0.7 pregnancies per 1,000 per year, increasing to 4.3 per 1,000 per year in 14 year olds and peaking at 16.2 per 1,000 per year in 15 year old girls, a four-fold increase between each incremental age group.<sup>xxii</sup>

In the general health construct, the percentage of C&YP aged 15 years and under in 2011 whose health was good or very good remained broadly stable across the age groups with a low of 95% (93% to 97%) in 8 to 11 year olds and a high of 97% (95% to 99%) in 4 to 7 year olds.<sup>xxi</sup> In 2011, the percentage of C&YP aged 15 years and under with a long-standing physical condition or disability increased with age from 7% (5% to 10%) for 0 to 3 year olds to 17% (13% to 20%) in 12 to 15 year olds.<sup>xxi</sup> There was a similar increase with age for those C&YP with a limiting long-standing physical condition or disability from 2% (1% to 3%) in 0 to 3 year olds to 7% (5% to 10%) in 12 to 15 year olds.<sup>xxi</sup>

# 4.3 Family domain

#### 4.3.1 Family domain and mental health

The family domain is composed of four constructs; family relations, <sup>xxviii</sup> family structure, parental healthy living<sup>xxix</sup> and parental health, <sup>xxx</sup> all of which contain indicators with associated data sources as well as some for which no suitable data source has been identified (Appendix 1). For more information, especially on the evidence behind these constructs see *Establishing a core set of national, sustainable mental health indicators for children and young people in Scotland: Final Report.*<sup>5</sup>

This section provides a descriptive account of the contextual constructs associated with the mental health of children and young people (C&YP) in Scotland at the family domain level. Where data are available, the most recently available point estimates for each measure are presented along with trends over time. Breakdowns by gender and age are also reported. Data are descriptive only and no statistical significance is implied, although 95% confidence intervals (lower and upper values, where available) are provided in bracket after estimates to show their precision.

The indicators for which data are available are:

- Family meals
- Talking to parents
- Treatment by parent(s)
- Lone parent family
- Teenage parents
- Parental imprisonment
- Maternal smoking in pregnancy
- Parental mental wellbeing
- Parental common mental health problems
- Parental alcohol dependency
- Parental limiting long-standing physical condition or disability.

The indicators for which no suitable data source has been identified:

- Parent-child relationship
- Nurturing adult
- Parental discord
- Caring for a family member
- Contact with non-resident birth parent
- Maternal alcohol use in pregnancy
- Maternal drug use in pregnancy
- Parental problematic alcohol consumption
- Parental problematic drug use
- Postnatal depression.

xxviii A parent is the person acting as father, mother or guardian.

<sup>&</sup>lt;sup>xxix</sup> This construct covers problematic alcohol and drug use but there is overlap with more severe alcohol and drug misuse i.e. dependency syndromes that are classified as mental health problems. The latter are covered under the parental health construct.

<sup>&</sup>lt;sup>xxx</sup> This construct covers severe alcohol and drug misuse, which are classified as mental health problems when they meet the criteria in the WHO International Classification of Diseases (ICD-10) under 'mental and behavioural disorders due to psychoactive substance use'. This covers dependency syndromes.

#### 4.3.2 Most recent point estimates

Point estimates were available for eight indicators (eight measures) out of 21 indicators (29 measures) (Table 4.3).<sup>xxxi</sup>

Of the family structure indicators, in 2011, 22% (21% to 23%) of C&YP aged 17 years and under were living in lone parent households; there were 0.9 (0.7 to 1.1) live births per 1,000 females aged 15 years and under in the past year, and 7 C&YP per 1,000<sup>xxiv</sup> aged 17 years and under had a parent in prison in the past year.

Turning to parents of C&YP, 19% of mothers smoked during pregnancy in the past year in 2011.<sup>xxii</sup> In 2010-11, parents of C&YP aged 15 years and under had a mean score on WEMWBS<sup>vi</sup> of 49.9 (49.5, 50.2) for mental wellbeing, 19% (17% to 20%) had a common mental health problem (GHQ-12 score of 4 or more), 10% (8% to 11%) had alcohol dependency (score of 2 or more on the CAGE questionnaire) and 17% (16% to 19%) had a limiting long–standing physical condition or disability.

<sup>&</sup>lt;sup>xxxi</sup> As the indicators of the family relations construct are all based on measures with discontinuous age groups that could not be readily combined, ie school years P7, S2 and S4, these point estimates are discussed separately for each age group in the age breakdown section of the equalities analysis, see section 4.3.4.2.

ie 4	5. ranny domain contextual factors: cu	rrent point estimates and differences by gender and school	year/a	ge		All			Gender		A
nstruct	Indicator	Measure	Unit	Year(s)	School year / age (years)		School year / age (years)	Boys	Girls	School year / age (years)	
							P7	74	77	P7	7
	Family meals	Eat a meal with one or both parents 4 or more times a week	%	2010	P7, S2, S4	N/A	S2	73	72	S2	1.58
							S4	67	68	S4	
							P7	88	86	P7	
Ě		Find it easy to talk to their mother about things that really bother them	%	2010	P7, S2, S4	N/A	S2	76	81	S2	
	Talking to Parents						S4	72	77	S4	
							P7	79	66	P7	
		Find it easy to talk to their father about things that really bother them	%	2010	P7, S2, S4	N/A	S2	74	54	S2	
							S4	62	55	S4	
							P7	87	85	P7	
	Treatment by parent(s)	Felt their parents treated them fairly often/always in the last week	%	2010	P7, S2, S4	N/A	S2	76	69	S2	
							S4	61	57	S4	
										0 to 4	
	Lone parent family	Living in lone parent households	%	2011 17 and und	17 and under	22	17 and under	22	22	5 to 9	
										10 to 14	
								_		15 to 17	
	Teenage parents	Live births to females	CR	2011	15 and under	0.9	15 and under	N/A	N/A	15 and under	
	Parental imprisonment	Had a parent in prison in the past year	CR	2011	17 and under	7.0	17 and under	N/A	N/A	17 and under	
										19 and under	
										20 to 24	
	Maternal smoking in pregnancy	Mothers who smoked during pregnancy in the past year	%	2011	Child-bearing	19	Child-bearing	N/A	N/A	25 to 29	
					age	-	age			30 to 34	
										35 to 39	
										40 plus	
	Parental mental wellbeing	WEMWBS score for parents*	Mean	2010-11	15 and under	49.9	15 and under	N/A	N/A	15 and under	
[a]	Parental common mental health problems	Have a parent scoring 4 or more on the GHQ-12**	%	2010-11	15 and under	19	15 and under	18	19	15 and under	
	Parental alcohol dependency	Have a parent scoring 2 or more on the CAGE questionnaire	%	2010-11	15 and under	10	15 and under	11	9	15 and under	
	Parental limiting long-standing physical condition or disability	Have a parent with a long-standing physical condition or disability that limits daily activities	%	2010-11	15 and under	17	15 and under	17	17	15 and under	

Footnotes

1 No data were available for ten indicators: parent-child relationship, nurturing adult, parental discord, caring for a family member, contact with non-resident birth parent, maternal alcohol use in pregnancy, maternal drug use in pregnancy, parental problematic alcohol consumption, parental problematic drug use and postnatal depression as no suitable data source has yet been identified. 2 Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall population estimate, instead, data for each discrete age group have been presented separately. 3 P7 = Primary seven (approx 11 years of age); S2 = Secondary 2 (approx 13 years of age); S4 = Secondary 4 (approx 15 years of age). 4 Point estimates are for the most recent year of data available at the time of analysis, for some measures it has been necessary to aggregate years to increase the sample size. 5 Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator. 7 CR = crude rate; % = per cent; N/A - data are not available or cannot be calculated. Notes on indicators

\*WEMWBS - Warwick-Edinburgh Mental Well-being Scale. \*\*GHQ-12 - General Health Questionnaire -12.

# 4.3.3 Time trends

Presentation of time trends was possible for eight indicators (nine measures) out of 21 indicators (29 measures) (Table 4.4).<sup>xxiii</sup> The longest time series spanned 13 years with a total of four data points (family meals between 1998 and 2010) and the shortest over eight years with only three data points (talking to parents between 2002 and 2010, parental common mental health problems, parental alcohol dependency and parental limiting long-standing physical condition or disability all spanning 2003 to 2010-11).

Of the family relations indicators, there was a 3% fall in the percentage of S2 and S4 pupils eating a meal with one or both parents 4 or more times a week between 1998 and 2010: for P7 pupils there was no change from 76% (74% to 78%) over this period; for S2 pupils a decrease from 76% (74% to 78%) to 73% (70% to 74%); and for S4 pupils a reduction from 71% (69% to 74%) to 68% (66% to 70%). The percentage of pupils finding it easy to talk to their mother or stepmother (or father's partner) remained stable between 2002 and 2010 for S2 and S4 pupils but fell slightly in recent years for P7 pupils: for P7 pupils it was 91% (88% to 94%) in 2002 and 87% (82% to 91%) in 2010, a 4% difference; for S2 pupils 79% (71% to 85%) and 78% (74% to 82%); and for S4 pupils 74% (66% to 80%) to 75% (69% to 79%). For the percentage finding it easy to talk to their father or stepfather (or mother's partner), there was a 3% fall for both P7 and S4 pupils between 2002 and 2010: for P7 pupils a decrease from 76% (70% to 80%) to 73% (67% to 78%) over this period: for S2 pupils no change from 65% (58% to 72%) to 65% (60% to 70%): and for S4 pupils a reduction from 62% (55% to 68%) to 59% (53% to 64%).

Continuous trend data were available from 2002 to 2011 for both the lone parent family and teenage parents indicators of the family structure construct and for the maternal smoking in pregnancy indicator of the parental healthy living construct. For these indicators there was no change over this time in the percentage of C&YP living in lone parent households (22% (21% to 23%) in both 2002 and 2011), a decrease in teenage parents from 1.2 live births per 1,000 females aged 15 years and under in 2002 to 0.9 in 2011, although this fall largely occurred since 2009.<sup>xxii</sup> But there was a large decrease of 7% in the percentage of mothers who smoked during pregnancy (26% in 2002 to 19% in 2011).<sup>xxii</sup>

The remaining indicators for which trend data were available relate to parental health between 2003 and 2010-11. Parental common mental health problems continually rose over this period by 3% from 16% (14% to 18%) to 19% (17% to 20%), while parental alcohol dependency remained constant with only a 1% difference from 9% (7% to 10%) to 10% (8% to 11%) and parental limiting long-standing physical condition or disability also remained stable at 17% (15% to 19%) in 2003 and 17% (16% to 19%) in 2010-11.

# Table 4.4. Family domain contextual factors: trends over time (continued on next page)

1						-		-		Year	1	-			
Construct	Indicator	Measure	School year / age (years)	Unit	1998	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
			P7	%	76	75				75				76	
	Family meals	Eat a meal with one or both parents 4 or more times a week	S2	%	76	75				73				73	
			S4	%	71	65				68				68	
su			P7	%		91				91				87	
Family relations		Find it easy to talk to their mother about things that really bother them	S2	%		79				79				78	
Fan			S4	%		74				74				75	
	Talking to Parents		P7	%		76				77				73	
		Find it easy to talk to their father about things that really bother them	S2	%		65				63				65	
_			S4	%		62				60				59	
structure	Lone parent family	Living in lone parent households	17 and under	%		22	22	23	22	21	22	21	22	21	22
Family s	Teenage parents	Live births to females	15 and under	CR		1.2	1.1	1.0	1.1	1.2	1.1	1.0	1.1	0.9	0.9
Parental healthy living	Maternal smoking in pregnancy	Mothers who smoked during pregnancy in the past year	Child-bearing age	%		26	25	24	23	22	21	19	18	19	19
ŧ	Parental common mental health problems	Have a parent scoring 4 or more on the GHQ-12*	15 and under	%			16					← 1	6 →	÷ .	19 →
Parental health	Parental alcohol dependency	Have a parent scoring 2 or more on the CAGE questionnaire	15 and under	%			9					← 1	0 →	<	10 →
Par	Parental limiting long-standing physical condition or disability	Have a parent with a long-standing physical condition or disability that limits daily activities	15 and under	%			17					← 1	6 →	«	17 →

#### Table 4.4. Family domain contextual factors: trends over time (continued)

#### Footnotes

1 No data were available for ten indicators: parent-child relationship, nurturing adult, parental discord, caring for a family member, contact with non-resident birth parent, maternal alcohol use in pregnancy, maternal drug use in pregnancy, parental problematic alcohol consumption, parental problematic drug use and postnatal depression as no suitable data source has yet been identified. **2** Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall population estimate, instead, data for each discrete age group have been presented separately. **3** P7 = Primary seven (approx 11 years of age); S2 = Secondary 2 (approx 13 years of age); S4 = Secondary 4 (approx 15 years of age). 4 For some measures it has been necessary to aggregate years to increase the sample size. **5** Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator. **6** Only indicators with time series data have been included in the table, those without time trend data are noted in the table below. **7** CR = crude rate; % = per cent. **Notes on indicators** 

\*GHQ-12 - General Health Questionnaire -12. \*\*WEMWBS - Warwick-Edinburgh Mental Well-being Scale.

#### **Dataless indicators/measures**

Construct	Indicator	Measure	School year / age (years)	Unit
Family relations	Treatment by parents	Felt parent(s) treat them fairly in the last week	P7, S2, S4	%
Family	Parental imprisonment	Had a father in prison	17 and under	CR
structure		Had a mother in prison	17 and under	CR
Parental health	Parental mental wellbeing	WEMWBS score for parents**	15 and under	Mean

# 4.3.4 Equalities analysis

#### 4.3.4.1 Family domain indicators: by gender

Just four indicators (four measures), teenage parents, parental imprisonment, maternal smoking in pregnancy and parental mental wellbeing, could not be looked at by gender out of the indicators (measures) for which data were available. Presentation of data by age was therefore possible for seven indicators (eight measures) out of the possible 21 indicators (29 measures) (Table 4.3).<sup>xxxii</sup>

In the family relations construct, 3% more P7 girls (77% (74% to 80%)) than boys (74% (71% to 77%)) ate a meal with one or both parents 4 or more times a week in 2010, while levels were broadly similar for boys and girls of both S2 and S4 school years: for S2 pupils 73% (70% to 75%) of boys and 72% (69% to 75%) of girls; and for S4 pupils 67% (64% to 71%) of boys and 68% (66% to 71%) of girls.

The difference in genders for the family domain indicators was most marked in the indicator/measure of ease of talking to a father or stepfather (or mother's partner), where boys found it a lot easier than girls of all school years assessed in 2010. The difference was greatest for S2 pupils at 20% (boys 74% (67% to 80%) and girls 54% (44% to 63%)), for P7 pupils the difference was 13% (boys 79% (70% to 86%) and girls 66% (57% to 74%)) and for S4 pupils the difference was 7% (boys 62% (54% to 69%) and girls 55% (47% to 64%)). Gender differences in ease of talking to a mother or stepmother (or father's partner) in 2010 were smaller in comparison with those for talking to fathers. For S2 and S4 pupils, girls found it easier than boys, a difference: for P7 pupils values were for boys 88% (81% to 93%) and girls 86% (78% to 92%); for S2 pupils values were for boys 76% (70% to 81%) and girls 81% (73% to 87%); and for S4 pupils values were for boys 72% (65% to 79%) and girls 77% (69% to 84%).

For all pupil years assessed, more boys than girls felt that their parent(s) treated them fairly in the last week in 2010. This difference was most noticeable for S2 pupils and least for P7 pupils: for P7 pupils the difference was 2% (boys 87% (84% to 89%) and girls 85% (82% to 87%)); for S2 pupils the difference was 7% (boys 76% (73% to 78%) and girls 69% (66% to 73%)); and for S4 pupils the difference was 4% (boys 61% (58% to 64%) and girls 57% (54% to 60%)).

There was no difference in the percentage of boys (22% (20% to 24%)) and girls (22% (20% to 24%)) who lived in lone parent households in 2011.

Of the indicators in the parental health construct in 2010-11, there were essentially no differences between the percentage of boys and girls whose parents exhibited the health issue. Eighteen per cent (16% to 21%) of boys and 19% (16% to 21%) of girls had a parent with a common mental health problem, 11% (9% to 13%) of boys and 9% (7% to 11%) of girls a parent with alcohol dependency and 17% (15% to 19%) of boys and 17% (15% to 20%) of girls a parent with a limiting long-standing physical condition or disability.

<sup>&</sup>lt;sup>xxxii</sup> This included gender breakdown for the separate school years for the indicators of the family relations construct.

#### 4.3.4.2 Family domain: by age

Presentation of data by age was possible for five indicators (six measures) out of the possible 21 indicators (29 measures) (Table 4.3).<sup>xxxiii</sup>

In the family relations construct in 2010 all indicators showed a noticeable decrease with age. This was greatest for treatment by parent(s) where there was a 27% difference in the percentage of P7 and S4 pupils who felt that their parent(s) treated them fairly in the last week: for P7 pupils the value was 86% (84% to 87%); for S2 pupils it was 73% (70% to 75%); and for S4 pupils it was 59% (57% to 61%). The smallest decrease with age was for family meals where the difference between P7 and S4 pupils was 8%: 76% (74% to 78%) of P7 pupils ate a meal with one or both parents 4 or more times a week; 73% (70% to 74%) of S2 pupils; and 68% (66% to 70%) of S4 pupils. For all ages of pupils assessed, a greater percentage found it easier to talk to their mother or stepmother (or father's partner) than their father or stepfather (or mother's partner). The decrease with age for both these measures was marginally larger for the latter; 87% (82% to 91%) of P7 pupils found it easy to talk to their mother or stepmother, 78% (74% to 82%) of S2 pupils and 75% (69% to 79%) of S4 pupils, a difference of 12% between P7 and S4 pupils; while 73% (67% to 78%) of P7 pupils found it easy to talk to their father or stepfather, 65% (60% to 70%) of S2 pupils and 59% (53% to 64%) of S4 pupils, a difference of 14% between P7 and S4 pupils.

The lone parent family indicator was the only indicator where there was no decrease in value with age. In 2011, there was a rise of 5% in the percentage of C&YP in lone parent families from those aged 0 to 4 years up until those aged 10 to 14 years and thereafter the value was steady, 19% (17% to 21%), 22% (20% to 24%), 24% (22% to 26%) and 24% (21% to 27%) for those aged for 0 to 4 years, 5 to 9 years, 10 to 14 years and 15 to 17 years, respectively.

The final indicator for which an age breakdown was possible was maternal smoking in pregnancy, which showed a marked decrease with age of 27% between those aged under 20 years (40%) and those aged 40 years and above (13%) in 2011.<sup>xxii</sup> This was the largest change with age out of all the indicators in the family domain.

<sup>&</sup>lt;sup>xxxiii</sup> This included age breakdown point estimates for the separate school years for the indicators of the family relations construct.

# 4.4 Learning environment domain

# 4.3.1 Learning environment domain and mental health

The learning environment domain is composed of four constructs; engagement with learning, peer and friend relationships, educational environment and pressures and expectations, all of which contain indicators with associated data sources as well as some for which no suitable data source has been identified (Appendix 1). For more information, especially on the evidence behind these constructs see *Establishing a core set of national, sustainable mental health indicators for children and young people in Scotland: Final Report.*<sup>5</sup>

This section provides a descriptive account of the contextual constructs associated with the mental health of children and young people (C&YP) in Scotland at the learning environment domain level. Where data are available, the most recently available point estimates for each measure are presented along with trends over time. Breakdowns by gender and age are also reported. Data are descriptive only and no statistical significance is implied, although 95% confidence intervals (lower and upper values, where available) are provided in bracket after estimates to show their precision.

The indicators for which data are available are:

- School attendance
- Liking of school
- Close friends
- Relationship with best friend
- Peer relationship problems
- Acceptance by peers
- Experience of bullying
- Participation in bullying
- Treatment by teachers
- Relationship with teachers
- Control at school
- School ethos
- Time pressure
- Choice of how to spend free time
- Pressure of school work.

The indicators for which no suitable data source has been identified:

- Pre-school home learning environment
- Early years friendships
- Relationship with all school staff
- Pressure to succeed in life
- Pressure to fit in.

#### 4.4.2 Most recent point estimates

Point estimates were available for five indicators (five measures) out of 20 indicators (26 measures) (Table 4.5).<sup>xx</sup>

Concerning engagement with school, school attendance for all pupils was 93% in 2010/11 and 83% (81% to 85%) of P7 pupils liked school in 2010.<sup>xxxiv</sup>

For peer and friend relationships, in 2010 96% (94% to 97%) of P7 pupils had at least three or more close friends and according to parental report 18% (15% to 21%) of 4 to 12 year olds had peer relationship problems (assessed by the Strengths and Difficulties Questionnaire (SDQ)) in 2011.

Finally, in 2011, 87% (85% to 89%) of parents with school-aged children agreed that the school kept them informed about their child's progress.

<sup>&</sup>lt;sup>xxxiv</sup> 95% confidence interval values are identical to point estimates. Attendance data are from mainstream grant-aided schools and do not include grant-aided special schools, independent schools or pre-school establishments. Point estimate, time trend and gender analysis include primary, secondary and special schools, whereas special schools are omitted from the age breakdown analysis.

# Table 4.5. Learning environment domain contextual factors: current point estimates and inequalities: by gender and school year/age (continued on next page)

(contin	ueu on next page)					All		Ger	nder		Age
Construct	Indicator	Measure	Unit	Years	School year / age (years)		School year / age (years)	Boys	Girls	School year / age (years)	
										P1	95
										P2	95
										P3	95
										P4	95
										P5	95
b					Primary		Primary			P6	95
Engagement with Learning	School Attendance	School attendance in the past year	%	2010/11*	and secondary pupils	93	and secondary pupils	93	93	P7	95
t with I					pupils		pupils			S1	93
gemen										S2	91
Enga										S3	90
										S4	90
										S5	91
								70	77	S6	92
	Liking of School	Like school a lot or a bit at the moment	%	2010	S2, S4	N/A	S2 	72 64	77 62	S2 S4	74 63
		Like school a lot or a bit at present	%	2010	P7	83	P7	78	88	P7	83
			70	2010	. ,	00	S2	84	87	S2	85
	Close Friends	Have at least 3 or more close friends	%	2010	S2, S4	N/A	S4	84	85	S4	84
		Have at least 3 or more close friends	%	2010	P7	96	P7	95	96	P7	96
							P7	81	90	 P7	86
	Relationship with Best Friend		%	2010	P7, S2, S4	N/A	S2	83	92	S2	88
							S4	87	96	S4	92
							S2	18	12	S2	15
S		Borderline or abnormal score on the peer relationship problems scale of the SDQ**	%	2010	S2, S4	N/A	S4	17	12	S4	15
onship	Peer Relationship Problems									4 to 6	15
and Friend Relationships		Borderline or abnormal score on the peer relationship problems scale of the SDQ**	%	2011	4 to 12	18	4 to 12	20	17	7 to 9	18
Friend										11 to 12	22
er and							P7	81	79	P7	80
Peer	Acceptance by Peers	Agree that othe pupils accept them as they are	%	2010	P7, S2, S4	N/A	S2	72	68	S2	70
							S4	73	70	S4	72
							P7	75	68	P7	71
	Experience of Being Bullied	Haven't been bullied at school in the past couple of months	%	2010	P7, S2, S4	N/A	S2	74	74	S2	74
							S4	79	85	S4	82
							P7	79	86	P7	83
	Participation in Bullying	Haven't taken part in bullying another pupil(s) at school in the past couple of months	%	2010	P7, S2, S4	N/A	S2	75	85	S2	80
							S4	74	89	S4	82

# Table 4.5. Learning environment domain contextual factors: current point estimates and inequalities: by gender and school year/age (continued)

•	illicity					All		Ger	nder		Age
Construct	Indicator	Measure	Unit	Years	School year / age (years)		School year / age (years)	Boys	Girls	School year / age (years)	
							P7	64	71	P7	67
	Treatment by Teachers	Agree that their teachers listen to how they would like to do things	%	2010	P7, S2, S4	N/A	S2	45	40	S2	42
							S4	39	37	S4	38
							P7	78	85	P7	82
÷	Relationship with Teachers	Agree that their teachers care about them as a person	%	2010	P7, S2, S4	N/A	S2	55	53	S2	54
Educational Environment							S4	49	50	S4	49
l Envir							P7	74	80	P7	77
ationa	Control at School	Agree that their teachers provide them with choice and options	%	2010	P7, S2, S4	N/A	S2	63	60	S2	61
Educ							S4	60	58	S4	59
		Agree that the students in their class(es) treat each other with respect					P7	62	66	P7	64
			%	2010	P7, S2, S4	N/A	S2	45	43	S2	44
	School Ethos						S4	40	41	S4	40
		Parents agree that the school keeps them informed about their child's progress		2011	School- aged	87	School- aged	86	88	4 to 11 12 to 18	90 83
							P7	63	55	P7	59
ß	Time Pressure	Felt that they had enough time for themselves in the last week	%	2010	P7, S2, S4	N/A	S2	55	47	S2	51
ctation							S4	55	47	S4	37
d Expe							P7	68	61	P7	65
Pressures and Expectations	Choice of how to Spend Free Time	Felt that they were able to do the things that they want to do in their free time in the last week	%	2010	P7, S2, S4	N/A	S2	65	54	S2	60
ressu							S4	49	39	S4	44
ш	Pressure of School Work	Feel they have more school work than they can handle	%	2010	S2, S4	N/A	S2	12	10	S2	11
					,		S4	18	22	S4	20

#### Footnotes

1 No data were available for five indicators: pre-school home environment, early years relationships, relationship with teachers, pressure to succeed in life, pressure to fit in as no suitable data source has yet been identified. 2 Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall population estimate. Instead data for each discrete age group have been presented separately. 3 P7 - Primary seven (approx 11 years of age), S2 - Secondary 2 (approx 13 years of age), S4 - Secondary 4 (approx 15 years of age). 4 Data for measures for 4 to 12 year olds were collected by parental/guardian assessment. 5 Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator, in the case of the school ethos indicator no suitable data source has yet been identified for some of its associated measures. 6 N/A - data are not available or cannot be calculated.

#### Notes on indicators

\*School attendance in last year - Year refers to the first year in the academic year e.g. 2010 = 2010/11. \*\*SDQ - Strengths and Difficulties Questionnaire.

# 4.4.3 Time trends

Presentation of time trends was possible for nine indicators (12 measures) out of 20 indicators (26 measures) (Table 4.6).<sup>xxxv</sup> The longest time series spanned 13 years, with a total of four data points (liking of school, <sup>xxxvi</sup> experience of being bullied and participation in bullying between 1998 and 2010) and the shortest five years; some with only three data points over non-consecutive years covering 2006 to 2010 (liking of school, <sup>xxxvii</sup> close friends, <sup>xxxviii</sup> peer relationship problems<sup>xxxix</sup>) but others covering five consecutive years 2007 to 2011 (school attendance and school ethos<sup>xI</sup>).

Among the engagement with learning indicators, school attendance remained stable between 2006/07 and 2010/11 at 93%.<sup>xxxiv</sup> The percentage of P7 pupils who reported liking school increased in more recent years from 80% (78% to 82%) in 1998 and 2002 to 83% (81% to 85%) in 2010,<sup>xxv</sup> a difference of 3%, increased for S2 pupils from 70% in 2006 to 74% in 2010,<sup>v, xxiv</sup> a difference of 4%, and increased slightly but with fluctuation for S4 pupils from 61% in 2006 to 63% in 2010, a difference of 2%.<sup>v, xxiv</sup>

For peer and family relationships, the percentage of P7 pupils who had three or more close friends increased by 3% from 93% (91% to 94%) in 2002 to 96% (94% to 97%) in 2010,<sup>xxv</sup> remained essentially unchanged for S2 pupils from 86% in 2006 to 85% in 2010,<sup>v, xxiv</sup> and decreased by 3% for S4 pupils between 2006 and 2010 from 87% to 84%.<sup>v, xxiv</sup>

There was an overall reduction for all school years assessed in the percentage who found it easy to talk to their best friend about things that really bother them between 2002 and 2010: for P7 pupils it fell 5% from 91% (89% to 92%) to 86% (84% to 87%); for S2 pupils it fell 4% from 92% (90% to 93%) to 88% (86% to 89%); and for S4 pupils it fell 4% from 96% (94% to 97%) to 92% (90% to 93%).

Peer relationship problems fell slightly by 2% for S2 pupils from 17% in 2006 to 15% in 2010 but fluctuated for S4 pupils with no real overall change over this period from 14% to 15%.<sup>v, xxiv</sup> For children aged 4 to 12 years old peer relationship problems fell gradually by 5% between 2003 and 2011 from 23% (21% to 26%) to 18% (15% to 21%).<sup>ix</sup>

Acceptance by peers remained essentially unchanged going from 81% (79% to 83%) in 2002 to 80% (78% to 82%) in 2010 and from 73% (71% to 76%) in 2002 to 72% (70% to 74%) in 2010, for P7 and S4 pupils, respectively. S2 pupils in contrast noted a drop in acceptance by their peers of 8% from 78% (75% to 80%) in 2002 to 70% (68% to 72%) in 2010, with the greatest decline after 2006.

<sup>xxxv</sup> This includes trends for the separate school years for indicators whose measures cover discontinuous age groups that could not be readily combined, eg P7, S2 and S4 pupils. <sup>xxxv</sup> This is the measure for liking of school for P7 pupils from HBSC.

xxxvii This is the measure for liking of school for S2 and S4 pupils from SALSUS.

xxxviii This is the measure for close friends for S2 and S4 pupils from SALSUS.

<sup>xxxix</sup> This is the measure for peer relationship problems for S2 and S4 pupils from SALSUS.

<sup>xi</sup> This is the measure for school ethos for school-aged children from the Scottish Household Survey.

Experience of bullying decreased for P7 and S2 pupils from 1998 to 2010, with most of the decrease in more recent years.<sup>xli</sup> For P7 pupils the percentage who had not been bullied in the past couple of months increased from 68% (65% to 70%) in 1998 to 71% (68% to 74%) in 2010, a rise of 3%, and for S2 pupils it increased from 68% (65% to 70%) to 74% (72% to 76%), a rise of 6%. Experience for S4 pupils fluctuated but remained essentially unchanged over this time period overall, rising just 1% from 81% (79% to 83%) to 82% (80% to 84%). Participation in bullying decreased for all pupils, again more so for P7 and S2 pupils.<sup>xli</sup> For P7 pupils over the period 1998 and 2010 the percentage who had not taken part in bullying in the past couple of months amounted to a 6% rise from 77% (74% to 79%) to 83% (80% to 85%), for S2 pupils this increase mainly occurred between 2006 and 2010 but again amounted to a 6% rise from 74% (71% to 77%) to 80% (77% to 82%) over the period 1998 to 2010 and for S4 pupils the increase was 2% from 80% (77% to 82%) to 82% (79% to84%) over this same period.

Time trends were only possible for the school ethos measure of the percentage of parents with school-aged children who agreed that the school keeps them informed about their child's progress within the educational environment construct; with insufficient data for the indicators of the pressures and expectations construct. For this ethos measure, it remained at 87% (85% to 89%) in 2007 and 2011.

<sup>&</sup>lt;sup>xli</sup> Care is required in interpretation of the direction of the data for experience of bullying and participation in bullying as the measures for both relate to not having been bullied or taken part in bullying behaviour.

					Year										
Construct	Indicator	Measure	School year / age (years)	Unit	1998	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Engagement with Learning	School Attendance	School attendance in the past year*	Primary and secondary	%						93	93	93	93	93	
meni		Like school a lot or a bit at the moment	S2	%						70		74		74	
gage Lea	Liking of School		S4	%						61		64		63	
Ē		Like school a lot or a bit at present	P7	%	80	80				84				83	
		Have at least 3 or more close friends	S2	%						86		86		85	
	Close Friends		S4	%						87		88		84	
		Have at least 3 or more close friends	P7	%		93				94				96	
			P7	%		91				83				86	
	Relationship with Best Friend	Find it easy to talk to their best friends about things that really bother them	S2	%		92				85				88	
SC			S4	%		96				91				92	
nship		Borderline or abnormal score on the peer relationship problems scale of the SDQ**	S2	%						17		16		15	
elatio	Peer Relationship Problems		S4	%						14		12		15	
and Friend Relationships		Borderline or abnormal score on the peer relationship problems scale of the SDQ**	4 to 12	%			23					20	21	21	18
Frier			P7	%		81				85				80	
and	Acceptance by Peers	Agree that other pupils accept them as they are	S2	%		78				77				70	
Peer			S4	%		73				73				72	
			P7	%	68	67				71				71	
	Experience of Being Bullied	Haven't been bullied at school in the past couple of months	S2	%	68	69				71				74	
			S4	%	81	80				78				82	
			P7	%	77	77				80				83	
	Participation in Bullying	Haven't taken part in bullying another pupil(s) at school in the past couple of months	S2	%	74	72				74				80	
			S4	%	80	76				75				82	
EE	School Ethos	Parents agree that the school keeps them informed about their child's progress	School-aged	%							87	88	88	87	87

# Table 4.6. Learning environment domain contextual factors: trends over time (continued on next page)

#### Footnotes

**1** No data were available for five indicators: pre-school home environment, early years relationships, relationship with teachers, pressure to succeed in life, pressure to fit in as no suitable data source has yet been identified. **2** Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall population estimate; instead, data for each discrete age group have been presented separately. **3** P7 = Primary seven (approx. 11 years of age), S2 = Secondary 2 (approx. 13 years of age), S4 = Secondary 4 (approx. 15 years of age). **4** Data for measures for 4 to 12 year olds were collected by parental/guardian assessment. **5** Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator, in the case of the school ethos indicator no suitable data source has yet been identified for some of its associated measures. **6** Only indicators with time series data have been included in the table, those without time trend data are noted in the table below. **7** EE = Educational Environment. **8** % = per cent.

#### **Notes on indicators**

\*School attendance in last year - Year refers to the first year in the academic year e.g. 2010 = 2010/11. \*\*SDQ - Strengths and Difficulties Questionnaire.

Construct	Indicator	Measure	School year / age (years)	Unit
	Treatment by teachers	Agree that their teachers listen to how they would like to do things	P7, S2 S4	%
ationa nmen	Relationship with Teachers	Agree that their teachers care about them as a person	P7, S2 S4	%
Educational environment	Control at School	Agree that their teachers provide them with choice and options	P7, S2 S4	%
- •	School ethos	Agree that the students in their class(es) treat each other with respect	P7, S2 S4	%
and ion	Time pressure	Felt that they had enough time for themselves in the last week	P7, S2 S4	%
ressures an expectation	Choice of how to spend free time	Felt that they were able to do the things that they want to do in their free time in the last week	P7, S2 S4	%
Pres	Pressure of school work	Feel they have more school work than they can handle	\$2, \$4	%

#### Dataless indicators/measures

# 4.4.4 Equalities analysis

All indicators and their measures that have an associated data source could be looked at by both gender and age i.e. 15 indicators (19 measures) out of 20 indicators (26 measures) (Table 4.5).<sup>xlii</sup>

#### 4.4.4.1 Learning environment domain: by gender

For engagement with learning, while there was no difference in the percentage school attendance of boys and girls in 2010/11, both being 93%,<sup>xxxiv</sup> differences were seen between boys and girls in their liking of school in 2010. For both P7 and S2 pupils, girls liked school more than boys but for S4 pupils slightly more boys did than girls: for P7 pupils there was a 10% difference between boys (78% (75% to 81%)) and girls (88% (85% to 91%));<sup>xxv</sup> for S2 pupils a 5% difference between boys (72%) and girls (77%);<sup>v, xxiv</sup> and for S4 pupils a 2% difference between boys (64%) and girls (62%).<sup>v, xxiv</sup>

There were differences between boys and girls for all the indicators in the peer and friend relationship construct, although some were minimal. Three per cent more S2 girls (87%) than boys (84%) had three or more close friends in 2010, <sup>v, xxiv</sup> but for P7 and S4 pupils there were essentially no differences between boys and girls, with 95% (93% to 96%) of boys and 96% (95% to 97%) of girls<sup>xxv</sup> and 84% of boys and 85% of girls, <sup>v, xxiv</sup> in P7 and S4 respectively. Girls also found it noticeably easier than boys in 2010 to talk to their best friend about things that bother them. The gender difference was 9% for all ages: for P7 pupils the values were 81% (78% to 84%) for boys and 90% (88% to 92%) for girls; for S2 pupils the values were 83% (81% to 86%) for boys and 92% (90% to 94%) for girls; and for S4 pupils the values were 87% (85% to 89%) for boys and 96% (95% to 97%) for girls. Conversely, boys had more peer relationship problems than girls in 2011. Three per cent more boys (20% (16% to 24%)) than girls (17% (13% to 20%)) aged 4 to 12 years old had peer relationship problems,<sup>ix</sup> 6% more S2 boys (18%) than girls (12%),<sup>v, xxiv</sup> and 5% more S4 boys (17%) than girls (12%).<sup>v, xxiv</sup>

S2 and S4 boys also felt slightly more acceptance by their peers than girls in 2010, although the difference was minimal for P7 pupils (boys 81% (78% to 84%) and girls 79% (76% to 82%)). For S2 pupils this was 4% more boys (72% (68% to 75%)) than girls (68% (65% to 71%)) and for S4 pupils 3% more boys (73% (70% to 76%)) than girls (70% (68% to 73%)). The gender differences in the experience of being bullied at school in the past couple of months differed with age in 2010 with 7% more P7 boys than girls (boys 75% (72% to 78%) and girls 68% (64% to 72%)) not having been bullied, the same percentage of S2 boys and girls (74% (71% to 77%)) but 6% more S4 girls than boys (boys 79% (76% to 82%) and girls 85% (83% to 87%)).<sup>xli</sup> However, more girls consistently hadn't taken part in bullying behaviour than boys in 2010: for P7 pupils this was 7% more girls (boys 75% (72% to 78%) and girls (boys 75% (72% to 78%)) and girls 85% (82, 88%)); and for S4 pupils this was 15% more girls (boys 74% (70% to 78%) and girls 89% (87% to 91%)).<sup>xli</sup>

Within the educational environment construct, more P7 girls than boys answered favourably than boys for all indicators. For treatment by teachers, 7% more P7 girls

xiii This included gender and age breakdown for the separate school years.

than boys agreed that their teachers listen to how they would like to do things (boys 64% (59% to 68%) and girls 71% (67% to 75%)), 5% more S2 boys than girls (boys 45% (41% to 49%) and girls 40% (37% to 43%)) but essentially the same percentage of S4 boys and girls (boys 39% (36% to 42%) and girls 37% (34% to 40%), a 2% difference). There was a clear gender difference of 7% in favour of girls in the percentage of P7 pupils who agreed that their teachers cared for them in 2010 (boys 78% (74% to 81%) and girls 85% (82% to 88%)), but basically no differences for S2 (boys 55% (52% to 59%) and girls 53% (49% to 56%)) and S4 pupils (boys 49% (46% to 51%) and girls 50% (46% to 53%)). Six per cent more P7 girls than boys felt that they had more control at school in 2010 (boys 74% (71% to 78%) and girls 80% (77% to 84%)), slightly more S2 boys than girls (boys 63% (60% to 67%) and girls 60% (56% to 64%), 3% more boys) and girls 58% (55% to 61%)).

The only clear gender difference for the school ethos indicator was seen for P7 pupils. Four per cent more P7 girls than boys felt that students in their class(es) treated each other with respect in 2010 (boys 62% (58% to 66%) and girls 66% (62% to 70%)), but there was essentially no difference between S2 boys and girls (boys 45% (41% to 49%) and girls 43% (39% to 48%)) and between S4 boys and girls (boys 40% (37% to 43%) and girls 41% (37% to 44%)). There was also broadly no difference for boys (86% (84% to 88%)) and girls (88% (86% to 90%)) in whether their parents agreed that the school kept them informed about their child's progress in 2011.

Of the indicators in the pressures and expectations construct, clear differences were seen between boys and girls for all school years assessed for time pressure and choice of how to spend free time in 2010, the percentage of boys was higher than girls for both indicators at all ages. For all ages, 8% more boys than girls felt that they had enough time for themselves (P7 boys 63% (59% to 66%) vs girls 55% (52% to 59%), S2 boys 55% (52% to 58%) vs girls 47% (44% to 51%) and S4 boys 55% (52% to 58%) vs girls 47% (44% to 51%)). Between 7% and 11% more boys than girls felt that they were able to do the things that they wanted to do in their free time in the last week: a difference of 7% for P7 pupils (boys 68% (65% to 71%) and girls 61% (58% to 64%)); a difference of 11% for S2 pupils (boys 65% (62, 68%) and girls 54% (51% to 58%)); and a difference of 10% for S4 pupils (boys 49% (46% to 52%) and girls 39% (36% to 42%)). Smaller gender differences were seen for S4 pupils for pressure of school work (boys 18% (16% to 20%) girls 22% (20, 25%) a difference in favour of boys of 4%), whilst for S2 pupils the difference were minimal (boys 12% (10% to 14%) girls 10% (8% to 13%), a difference of 2%).

#### 4.4.4.2 Learning environment domain: by age

School attendance in 2010/11 remained constant at 95% for primary school pupils but fluctuated slightly with a downward trend during secondary school from 93% for S1 pupils to 90% for S3 and S4 pupils and 92% for S6 pupils.<sup>xxxiv</sup> Liking of school also reduced with age, in 2010; 83% (81% to 85%) of P7 pupils liked school<sup>xxv</sup> as did 74% of S2 pupils and 63% of S4 pupils, a difference of 10% between S2 and S4 pupils.<sup>v, xxiv</sup>

For peer and friend relationships in 2010, 96% (94% to 97%) of P7 pupils had three or more close friends in 2010<sup>xxv</sup> and there was essentially no difference between S2 (85%) and S4 pupils (84%).<sup>v, xxiv</sup> Older pupils found it easier to talk to their best friend

about things that really bother them in 2010, for P7, S2 and S4 pupils this was 86% (84% to 87%), 88% (86% to 89%) and 92% (90% to 93%) of pupils, respectively, an increase of 6% from P7 to S4 pupils. Peer relationship problems also increased with age for 4 to 12 year olds in 2011 from 15% (11% to 19%) for 4 to 6 year olds and 18% (13% to 23%) for 7 to 9 year olds to 22% (17% to 27%) for 10 to 12 year olds, a difference of 7% across the years,<sup>ix</sup> but was 15% for both S2 and S4 pupils.<sup>v, xxiv</sup> In 2010, P7 pupils felt more accepted by their peers than S2 and S4 pupils; 80% (78%) to 82%) of P7 pupils compared to 70% (68% to 72%) of S2 pupils and 72% (70% to 74%) of S4 pupils, a difference of 8% between P7 and S4 pupils. However, experience of bullying decreased with age from 71% (68% to 74%) of P7 pupils not having experienced bullying to 74% (72% to 76%) of S2 pupils and further to 82% (80% to 84%) of S4 pupils, a difference of 11% from P7 to S4 pupils.<sup>xii</sup> Participation in bullving behaviour, however, fluctuated with no clear difference with age, the percentage of pupils not having participated in bullying falling from 83% (80% to 85%) for P7 pupils, to 80% (77% to 82%) for S2 pupils and increasing to 82% (79% to 84%) for S4 pupils.<sup>xii</sup>

Noticeable differences with age were evident in the educational environment indicators, with clear trends existing across the school years and younger pupils responding more favourably than older pupils. The difference in 2010 for treatment by teachers was 29% across the years P7 to S4: for P7, S2 and S4 pupils the percentage who agreed that their teachers listen to how they would like to do things was 67% (64% to 71%), 42% (40% to 45%) and 38% (35% to 40%), respectively. For relationship with teachers the difference across the years P7 to S4 in 2010 was larger at 33%: for P7, S2 and S4 pupils the percentage who agreed that their teachers care about them as a person was 82% (78% to 84%), 54% (51% to 57%) and 49% (47% to 51%), respectively. And the difference for control at school was not quite as marked but still sizeable at 18% across the years P7 to S4 in 2010: for P7, S2 and S4 pupils the percentage who agreed that their teachers provide them with choice and options was 77% (74% to 80%), 61% (59% to 64%), and 59% (57% to 61%), respectively. For the school ethos indicator, differences across the years P7 to S4 were large at 24% for the percentage who agreed that students in their class(es) treated each other with respect in 2010, percentages for P7, S2 and S4 pupils were 64% (60% to 68%), 44% (41% to 48%), and 40% (38% to 43%), respectively; but smaller at 7% between the percentage of parents of 4 to 11 year olds (90% (88% to 92%)) and those of 12 to 18 year olds (83% (80% to 86%)) who agreed that the school kept them informed about their child's progress in 2011.

Differences with age were also apparent in the pressure and expectations construct in 2010, with younger pupils responding more favourably again. Fifty nine per cent (56% to 62%) of P7 pupils felt that they had enough time for themselves. This fell to 51% (49% to 54%) for S2 pupils and then markedly to 37% (35% to 39%) for S4 pupils, a 22% reduction from P7 pupils. Choice of how to spend free time also showed a drop in the percentage of pupils from 65% (62% to 67%) for P7 pupils to 60% (57% to 62%) for S2 pupils and then a larger drop to 44% (42% to 46%) for S4 pupils, a difference of 21% from P7 pupils. The difference in pressure of school work was not so large between S2 (11% (10% to 13%)) and S4 (20% (19% to 22%)) pupils but was still 9%, with younger pupils responding more favourably with fewer feeling they have more school work than they can handle.

# 4.5 Community domain

## 4.5.1 Community domain and mental health

The community domain is composed of five constructs; participation, social networks, social support,<sup>xiiii</sup> trust and safety, all of which apart from social networks contain indicators with associated data sources. The participation and trust constructs also contain some indicators for which no suitable data source has been identified (Appendix 1). For more information, especially on the evidence behind these constructs see *Establishing a core set of national, sustainable mental health indicators for children and young people in Scotland: Final Report.*<sup>5</sup>

This section provides a descriptive account of the contextual constructs associated with the mental health of children and young people (C&YP) in Scotland at the community domain level. Where data are available, the most recently available point estimates for each measure are presented along with trends over time. Breakdowns by gender and age are also reported. Data are descriptive only and no statistical significance is implied, although 95% confidence intervals (lower and upper values, where available) are provided in bracket after estimates to show their precision.

The indicators for which data are available are:

- Influencing local decisions
- Participation in clubs, groups or organisations
- Social support
- Neighbourhood trust
- Community cohesion
- Neighbourhood safety.

The indicators for which no suitable data source has been identified:

- Sense of agency
- Respect of children's rights
- Contact with peers
- Informal social control.

x<sup>iiii</sup> Although social networks and social support overlap, social networks (e.g. contacts, number of contacts, frequency, network density) are distinguished here from social support i.e. the functional aspects of support (e.g. type of support – emotional, practical and quality – negative or positive).

#### 4.5.2 Most recent point estimates

Point estimates were available for three indicators (three measures) out of ten indicators (13 measures) (Table 4.7).<sup>xx</sup>

In the area of participation, in 2011, 3% (2% to 4%) of households containing a child aged 8 to 17 years old reported having a child who regularly takes part in representing young people's views or involvement in youth politics and 80% (78% to 82%) of such households that a child regularly takes part in clubs, groups or organisations.

Also in 2011, 88% (82% to 94%) of 16 and 17 year olds felt safe walking alone in their neighbourhood after dark.

Table 4.7. Community domain contextual factors: current point estimates and differences by gender and school year/age

						All		Ger	nder		Age
Construct	Indicators	Measures	Unit	Years	School year / age (years)		School year / age (vears)	Boys	Girls	School year / age (years)	
pation	Influencing local decisions	Households with at least one child who regularly takes part in representing young people's views or involvement in youth politics	%	2011	8 to 17	3	N/A	N/A	N/A	N/A	N/A
Participation	Participation in clubs, groups or organisations	Households with at least one child who regularly takes part in clubs, groups or organisations	%	2011	8 to 17	80	N/A	N/A	N/A	N/A	N/A
Social support	Social support	Agree they can ask for help from neighbours in the area where they live	%	2010	S2, S4	N/A	S2	74	72	S2	73
ราย							S4	67	70	S4	68
		Agree they can trust people in the area where they live	%	2010	S2, S4	N/A	S2	68	67	S2	68
	Neighbourbood trust						S4	62	57	S4	60
Trust	Neighbourhood trust	Neighbourhood trust       Disagree that most people in the area where they live would try to take       % 2010       S2, S4	S2, S4	N/A	S2	57	60	S2	58		
F		advantage of them					S4	59	58	S4	58
	Community cohesion	Agree that people say 'hello' and stop to talk to each other in the street in	%	2010	S2, S4	N/A	S2	75	77	S2	76
	Community concision	the areas where they live	70	2010	02, 04		S4	67	77	S4	72
		Feel safe walking alone in their neighbourhood after dark	%	2011*	16 to 17	88	16 to 17	90	74	N/A	N//
		Concrelly feel acts in the cree they live	0/	2010	62.64	NI/A	S2	54	51	S2	52
Safety	Neighbourhood safety	Generally feel safe in the area they live	%	2010	S2, S4	N/A	S4	53	46	S4	49
0		Agree that it is safe for younger children to play outside during the day in	%	2010	S2 S4	N/A	S2	82	80	S2	8
		the area where they live	70	2010	S2, S4	IN/A	S4	77	78	S4	78

#### Footnotes

1 No data were available for four indicators: sense of agency, respect of children's rights, contact with peers and informal social control as no suitable data source has yet been identified. 2 Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall population estimate, instead data for each discrete age group have been presented separately. 3 P7 - Primary seven (approx 11 years of age), S2 - Secondary 2 (approx 13 years of age), S4 - Secondary 4 (approx 15 years of age). 4 Data for measures for 8 to 17 year olds were collected by parental/guardian assessment. 5 Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator, in the case of the participation and trust indicators no suitable data source has yet been identified for some of its associated measures. 7 N/A - data are not available or cannot be calculated.

#### Notes on indicators

\*Neighbourhood safety (Feeling safe walking alone in their neighbourhood after dark) - equalities analysis by gender and age was undertaken with data for 2010 and 2011 combined.

#### 4.5.3 Time trends

Presentation of time trends was possible for all six indicators and their nine measures for which data are available (Table 4.8).<sup>xxiii</sup> The longest time series spanned 13 years, with a total of four data points (neighbourhood safety between 1998 and 2010<sup>xliv</sup>), and the shortest with only three data points over three years (influencing local decisions and participation in clubs, groups or organisations from 2009 to 2011).

Children's participation remained unchanged overall from 2009 to 2011: the percentage of households containing a child aged 8 to 17 years old reporting having a child who regularly takes part in representing young people's views or involvement in youth politics remained at 3% (2% to 4%); and the percentage of households containing a child aged 8 to 17 years old that reported having a child who regularly takes part in clubs, groups or organisations was 81% (79% to 83%) in 2009 and 80% (78% to 82%) in 2011.

Social support for C&YP fell gradually by 5% between 2002 and 2010 for both S2 (from 78% (76% to 80%) to 73% (71% to 75%)) and S4 pupils (from 73% (70% to 76%) to 68% (66% to 70%)).

Neighbourhood trust felt by C&YP between 2002 and 2010 remained virtually unchanged or fell depending on the measure. Trust of people in the area where they lived changed minimally, if at all, for S2 pupils (from 70% (68% to 73%) to 68% (65% to 70%)) and S4 pupils (from 61% (57% to 65%) to 60% (58% to 62%)). While disagreement that most people in the area where they live would try to take advantage of them if they got the chance fell by 6% for S2 pupils from 66% (63% to 68%) to 58% (55% to 61%) and by 4% for S4 pupils from 62% (58% to 66%) to 58% (56% to 61%).

Community cohesion fell for both S2 and S4 pupils between 2002 and 2010: for S2 pupils by 3% from 79% (77% to 82%) to 76% (74% to 77%); and for S4 pupils linearly by 8% from 80% (76% to 82%) to 72% (70% to 74%).

Trends in neighbourhood safety depended on the measure. The percentage of 16 and 17 year olds who felt safe to walk alone in their neighbourhood after dark fluctuated over the consecutive years between 2002 (82% (76% to 88%)) and 2010 (79% (71% to 87%)) and then rose markedly in 2011 by 9% to 88% (82% to 94%). For both S2 and S4 pupils there was a clear increase in the percentage who felt safe in the area they live between 1998 and 2010: for S2 pupils this was an increase of 14% from 38% (35% to 42%) to 52% (49% to 55%) with 10% of this rise occurring between 1998 and 2002; and for S4 pupils this was a steady increase of 7% from 42% (38% to 45%) to 49% (47% to 52%). But despite feelings of safety in the area increasing, S2 and S4 pupils reported essentially no change in feeling that it was safer for younger children to play outside during the day in the area where they live between 2002 and 2010; for S2 pupils the value remained at 81% (79% to 83%) and for S4 it fluctuated between 79% (76% to 81%) and 78% (76% to 79%).

<sup>&</sup>lt;sup>xliv</sup> This is the measure for 16 and 17 year olds from the Scottish Household Survey.

aDIC 4.0		textual factors: trends over time			Year												
onstruct	Indicators	Measures	School year / age (years)	Unit	1998	2002	2003	2004	2005	2006	2007	2008	2009	2010	201		
pation	Influencing local decisions	Households with at least one child who regularly takes part in representing young people's views or involvement in youth politics	8 to 17	%									3	3	3		
Participation	Participation in clubs, groups or organisations	Households with at least one child who regularly takes part in clubs, groups or organisations	8 to 17	%									81	76	80		
Social support	Social support	Agree they can ask for help from neighbours in the area where they live	S2	%		78				75				73			
So		Agree they can ask for help from heighbours in the area where they live	S4	%		73				67				68			
		A great they ago truct meanly in the area where they live	S2	%		70				69				68			
	Neighbourhood trust	Agree they can trust people in the area where they live	S4	%		61				63				60			
ist	Neighbournood trust	Disagree that most people in the area where they live would try to take	S2	%	Ē.	66				64							
Trust		advantage of them	S4	%	-	62	2 01			63				58			
	Community askession	Agree that people say 'hello' and stop to talk to each other in the street in	S2	%		79				76		Provide state		76			
	Community cohesion	the areas where they live	S4	%		80				76				72			
		Feel safe walking alone in their neighbourhood after dark	16 to 17	%		82	78	75	79	81	84	80	74	79	88		
		Concernity feed and a in the area they live	S2	%	38	48				50				52			
Safety	Neighbourhood safety	Generally feel safe in the area they live	S4	%	42	45				47				49			
		Agree that it is safe for younger children to play outside during the day in	S2	%		81				82				81			
		the area where they live	S4	%		79				82				78			

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#### Footnotes

1 No data were available for four indicators: sense of agency, respect of children's rights, contact with peers and informal social control as no suitable data source has yet been identified. 2 Where the age range available for a measure is discontinuous, data for each age group have not been combined to give an overall population estimate, instead, data for each discrete age group have been presented separately. **3** P7 - Primary seven (approx 11 years of age), S2 - Secondary 2 (approx 13 years of age), S4 - Secondary 4 (approx 15 years of age). **4** Data for measures for 8 to 17 year olds were collected by parental/guardian assessment. **5** Multiple measures have been reported for some indicators where one measure does not adequately cover the scope of the indicator, in the case of the participation and trust indicators no suitable data source has yet been identified for some of its associated measures.

## 4.5.4 Equalities analysis

#### 4.5.4.1 Community domain indicators: by gender

All indicators and their measures that have an associated data source could be looked at by gender apart from the two indicators of the participation construct i.e. four indicators (seven measures) out of the possible six indicators (nine measures) (Table 4.7).<sup>xiv</sup>

Gender differences were minimal for social support in 2010. For S2 pupils 2% more boys (74% (71% to 77%)) than girls (72% (69% to 75%)) agreed that they could ask for help or a favour from neighbours but for S4 pupils 3% more girls (70% (67% to 72%)) than boys (67% (65% to 70%)) agreed.

Roughly the same percentage of S2 boys (68% (65% to 71%)) and girls (67% (64% to 71%)) agreed that they could trust people in the area they live in 2010 whereas 5% more S4 boys (62% (59% to 66%)) than girls (57% (55% to 60%)) agreed. While 3% more S2 girls (60% (56% to 63%)) than boys (57% (53% to 60%)) disagreed that most people in the area where they live would try to take advantage of them if they got the chance in 2010 but similar percentages of S4 girls (58% (55% to 61%)) and boys (59% (56% to 62%)) disagreed.

Ten per cent more S4 girls (77% (74% to 79%)) than boys (67% (64% to 70%)) felt that people say hello and stop to talk to each other in the street in the area they live in 2010 but essentially the same percentage of S2 girls (77% (74% to 79%)) and boys (75% (72% to 77%)) felt this.

For neighbourhood safety, 16% more 16 and 17 year old boys (90% (84% to 96%)) than girls (74% (66% to 82%)) felt safe walking alone in their neighbourhood after dark in 2010-11 and 3% more S2 boys (54% (50% to 58%)) than girls (51% (47% to 54%)) and 7% more S4 boys (53% (50% to 56%)) than girls (46% (43% to 49%)) felt safe in the area they live in 2010. There was essentially no gender difference in 2010 between S2 boys (82% (79% to 84%)) and girls (80% (78% to 83%)) and between S4 boys (77% (73% to 79%)) and girls (78% (76% to 81%)) who agreed that it is safe for younger children to play outside during the day in the area where they live.

#### 4.5.4.2 Community domain indicators: by age

Presentation of data by age was possible for four indicators (six measures) out of the possible ten indicators (13 measures) (Table 4.7).<sup>xivi</sup> As for gender, the two indicators of the participation construct could not be analysed by age, nor could one measure of neighbourhood safety (the percentage of 16 and 17 year olds who felt safe to walk alone in their neighbourhood after dark).

There was a difference with age in 2010 for all indicators (measures), with S2 pupils answering more favourably than S4 pupils, apart from one measure of the neighbourhood trust indicator, for which S2 and S4 pupils were the same.

<sup>&</sup>lt;sup>xiv</sup> This included gender breakdown for the separate school years.

xivi This included age breakdown point estimates for the separate school years.

The percentage of those reporting a sense of social support fell with age with 73% (71% to 75%) of S2 pupils agreeing that they could ask for help or a favour from neighbours but 5% fewer S4 pupils (68% (66% to 70%)). There was a similar sized difference of 4% between S2 pupils (76% (74% to 77%)) and S4 pupils (72% (70% to 74%)) who agreed that people say hello and stop to talk to each other in the street in the area they live.

Neighbourhood trust showed an 8% difference between S2 (68% (65% to 70%)) and S4 pupils (60% (58% to 62%)) for the percentage who agreed that you can trust people in the area where they live, but no difference for the percentage of S2 and S4 pupils (58% (55% to 61%)) who disagreed that most people in the area where they live would try to take advantage of them if they got the chance.

For neighbourhood safety, the difference between S2 and S4 pupils was 3% for both the percentage who felt safe in the area they live (S2 pupils 52% (49% to 55%) and S4 pupils 49% (47% to 52%)) and the percentage who agreed that it is safe for younger children to play outside during the day in the area where they live (S2 pupils 81% (79% to 83%) and S4 78% (76% to 79%)).

# 4.6 Structural domain

#### 4.6.1 Structural domain and mental health

The structural domain is composed of six constructs; equality, <sup>xivii</sup> social inclusion, physical environment, discrimination, violence and culture. The discrimination and violence constructs only contain indicators for which no suitable data source has been identified (Appendix 1). The inclusion of structural constructs recognises the need to take account of wider fiscal, economic and legislative factors that impact on the mental health of people in Scotland. For more information, especially on the evidence behind these constructs see *Establishing a core set of national, sustainable mental health indicators for children and young people in Scotland: Final Report.*<sup>5</sup>

This section provides a descriptive account of the contextual constructs associated with the mental health of children and young people (C&YP) in Scotland at the structural domain level. Where data are available, the most recently available point estimates for each measure are presented along with trends over time. Breakdowns by gender and age are also reported. Data are descriptive only and no statistical significance is implied, although 95% confidence intervals (lower and upper values, where available) are provided in bracket after estimates to show their precision.

The indicators for which data are available are:

- Absolute poverty
- Income inequality
- Relative poverty
- Persistent poverty
- Workless households
- Positive and sustained destinations
- Education
- School exclusion
- Homelessness
- Feeling lonely
- Children looked after
- Additional support needs
- Neighbourhood satisfaction
- Free time places
- House condition
- Overcrowding
- Perception of looks
- Body image.

The indicators for which no suitable data source has been identified:

- Discrimination and harassment
- Perception of attitude of adults towards children and young people

xIvii This construct is confined to an overall assessment of inequality in the form of poverty and income inequality, which are indicators and determinants of the scale of socio-economic stratification in society and assess how equal a society is. For wider coverage of equality the other indicators in the indicator set have been analysed, where data allow, by important dimensions of equality.

- Stigma towards children and young peopleGreenspace
- Domestic abuse
- Child protection
- Neighbourhood violenceCulture and values.

#### 4.6.2 Most recent point estimates

Point estimates were available for 14 indicators (16 measures) out of 26 indicators (31 measures) (Table 4.9).<sup>xx</sup>

For the equality indicators, in 2010/11, 10% (8% to 11%) of C&YP were living in absolute poverty, 17% (15% to 19%) in relative poverty and income inequality (assessed by the Gini coefficient) was 0.30 (0.29 to 0.32).<sup>xlviii</sup> Fifteen per cent of C&YP lived in persistent poverty over the period 2005-08.<sup>xxiv</sup>

Concerning social inclusion, in 2011 14% (13% to 15%) of C&YP aged 15 years and under were living in workless housholds and in 2012, 87% (86% to 88%) of school leavers were in positive and sustained destinations 9 months after leaving school. In 2011/12, 15.2 (14.5 to 15.9) 16 and 17 year olds per 1,000 applied and were assessed as homeless or potentially homeless cases and 18.5 (18.2 to 18.8) C&YP<sup>xlix</sup> per 1,000 were in household cases assessed as homeless or potentially homeless. In 2012, 15.5 (15.3 to 15.8) C&YP were looked after per 1,000 aged 17 years and under.

For education, 87% (85% to 89%) of 16 and 17 year olds had at least one academic or vocational educational qualification in 2011 and of the cohort that started S4 in 2009/10, 95%<sup>xxiv</sup> had achieved a qualification in English and Maths at Scottish Credit and Qualifications Framework (SCQF) level 3 by 2011/12. In 2010/11, 40.0 (39.5 to 40.4) C&YP per 1,000 pupils were excluded from school and in 2012 there were 175.9 (174.8 to 176.9) pupils classified as having additional support needs (ASN) per 1,000 pupils.

Finally, in the physical environment construct in 2011, 90% (85% to 95%) of 16 and 17 year olds rated their neighbourhood as a good place to live, 73% (70% to 75%) of households with children aged 17 years and under rated the condition of their house or flat as good and 27% (24% to 30%) of such households felt that their home had too few rooms.

<sup>&</sup>lt;sup>xiviii</sup> Gini coefficient is an inequality index which measures income inequality between the richest and the poorest deciles of a population. It varies between 0 and 1, where 0 corresponds with perfect equality (everyone has the same income) and 1 with perfect inequality (one person has all the income).

<sup>&</sup>lt;sup>xlix</sup> C&YP were aged 15 years and under, or aged 16 to 18 years (who are either receiving or about to begin full-time education or training, or are, from some other reasons unable to support themselves).

 Table 4.9. Structural domain contextual factors: current point estimates and differences by gender and school year/age (continued on next page)

 All
 Gender

(contin	ntinued on next page)					All		Ger	nder		Age					
Construct	Indicator	Measures	Unit	Years	School year / age (years)		School year / age (years)	Boys	Girls	School year / age (years)						
>	Absolute poverty	Living in absolute poverty (before housing costs)*	%	2010/11 <sup>§</sup>	19 and under	10	19 and under	N/A	N/A	19 and under	N/A					
Equality	Income inequality	GINI coefficient for households with children	Gini		17 and under	0.30	17 and under	N/A	N/A	17 and under	N/A					
Ш	Relative poverty	Living in relative poverty (before housing costs)**	%	2010/11 <sup>§</sup>	19 and under	17	19 and under	N/A	N/A	19 and under	N/A					
-	Persistent poverty	Living in persistent poverty (before housing costs)***	%	2005-08	18 and under	13	18 and under	N/A	N/A	18 and under	N/A					
	Workless households	Living in workless households	%	2011	15 and under	14	15 and under	14	10	0 to 5	14					
	WORKIESS HOUSEHOIDS		70	2011		14		14	13	6 to 10 11 to 15	14 13					
										16	76					
	Positive and sustained destinations	In positive and sustained destinations 9 months after leaving school	%	2012	School	87	School leavers	86	89	17	93					
		· · · · · · · · · · · · · · · · · · ·			leavers	_				18	94					
			0/	0044	40 1. 47	07	40 1. 47	07		16	81					
		Has at least one academic or vocational educational qualification	%	2011	16 to 17	87	16 to 17	87	88	17	93					
		Leaving school with a qualification in English and Maths at least at SCQF Level 3	%	2011/12 <sup>¤</sup>	All leavers (S4 to S6)	95	All leavers (S4 to S6)	94	95	N/A	N/A					
							P4	79	74	P4	76					
	Education	Well established or better skills at the expected levels for their stage in numeracy <sup>†, ††</sup>	%	2011	P4, P7, S2	N/A	P7	75	69	P7	72					
							S2	43	41	S2	42					
							P4	82	85	P4	83					
		Well established or better skills at the expected levels for their stage in reading <sup>††</sup>	%	2012	P4, P7, S2	N/A	P7	88	92	P7	90					
							S2	82	86	S2	84					
										P1	2.7					
										P2	4.1					
										P3	7.4					
	School exclusion		CR 2010/11" Primary and secondary 40.0 pupils					P4 P5	10.6 14.9							
							P5	14.9								
		Exclusions from local authority schools in the past year		Primary and secondary	60.8	18.3		23.2								
						40.0	pupils				63.9					
										S2	102.5					
										S3	130.2					
c						pupils S1 S2 S3 S4 S5 S6 16	S4	80.6								
Social Inclusion											13.0					
Incl											4.0					
ocial		Cases assessed as homeless or potentially homeless in the past year	CR	2011/12 <sup>‡</sup>	16 to 17	15.2	16 to 17	11.0	19.5		13.7					
ŭ										17 0 to 4	16.6 28.0					
	Homelessness				18 and under										5 to 11	16.1
		C&YP in cases assessed as homeless or potentially homeless in the past year <sup>‡‡</sup>	CR	2011/12 <sup>‡</sup>		18.5	18 and under	18.5	18.5	12 to 15	11.1					
										16 to 18	15.1					
							P7	49	40	P7	45					
	Feeling lonely	Never felt lonely in the last week	%	2010	P7, S2, S4	N/A	S2	42	37	S2	40					
							S4	38	33	S4	36					
										0-4	11.7					
	Children looked after	Looked after by local authorities in the past year	CR	2012	17 and under	15.5	17 and under	16.4	14.6	5-11	16.3					
		Looked alter by local automics in the past year		2012		10.0		10.4	14.0	12-15	21.4					
										16-17	11.5					
										5	82.3					
										6	135.1					
										7	167.5					
										8	190.0					
										10	198.5 210.4					
					Drimon cond		Drimon card			10	210.4					
	Additional support needs	Classified as having additional support needs in the past year	CR	2012	Primary and secondary	175.9	Primary and secondary	215.9	134.2	12	191.9					
					pupils		pupils	-		13	191.6					
										14	189.4					
										15	186.5					
										16	165.1					
										17	125.3					
									18	294.0						
										19	661.3					

Ħ		Rate their neighbourhood as a very or fairly good place to live	%	2011 <sup>α</sup>	16 to 17	90	16 to 17	91	94	16 to 17	N/A
Iment	Neighbourhood satisfaction	Feel that the area they live is a really good or good place to live	%	2010	S2, S4	N/A	S2	73	71	S2	72
/iron			70	2010	02, 04		S4	65	62	S4	63
Envin	Free time places	Agree that there are good places to spend their free time in the area that they live	s to spend their free time in the area that they live %		60 GA	N/A	S2	63	57	S2	60
ical	Free time places		70	2010	2010 S2, S4		S4	45	41	S4	43
Physical	House condition	Households with children rating the condition of their house/flat as $good^{\star}$	%	2011	17 and under	73	17 and under	N/A	N/A	17 and under	N/A
Ľ.	Overcrowding	Households with children who feel their home has too few rooms <sup>++</sup>	ms <sup>++</sup> % 2011 17 a	17 and under	27	17 and under	N/A	N/A	17 and under	N/A	
							P7	80	81	P7	81
	Perception of looks	Think they are average, quite or very good looking	%	2010	P7, S2, S4	N/A	S2	76	62	S2	69
ture							S4	73	64	S4	68
Culture							P7	64	64	P7	64
	Body image	nage Think their body is about the right size %	%	2010	P7, S2, S4	N/A	S2	56	46	S2	51
							S4	51	41	S4	46

#### Footnotes

1 Gini = Gini coefficient; CR = crude rate; % = per cent. 2 N/A - data are not available or cannot be calculated.

#### Notes on indicators

\*Includes children and young people aged 15 years and under, or aged 16 to 19 years (but not married nor in a civil partnership nor living with a partner and living with their parents and in full-time non-advanced education or in unwaged government training); absolute poverty is defined as living in households whose equivalised income is below 60% of the (inflation adjusted) great Britain median income in 1998/99. \*\*Includes children and young people age 15 years and under, or aged 16 to 19 years (but not married nor in a Civil Partnership nor living with a partner and living with their parents and in full-time non-advanced education or in unwaged government training); relative poverty is defined as living in households whose equivalised income is below 60% of UK median income in the same year. §Absolute poverty, relative poverty and Gini - Years refers to a financial year. \*\*\*Includes children and young people aged 15 years and under, or aged 16 to 18 years (but in school or non-advanced further education, not married and living with their parents) living in households which have spent three or more years out of any four-year period in relative poverty. "Education (Leaving school with a qualification in English and Maths at least at SCQF level 3) and School exclusion - Year refers to a financial year. <sup>†</sup>This measure has been changed from mathematics to numeracy. <sup>††</sup>The data source for this measure has changed from Scottish Survey of Achievement (SSA) to the Scottish Survey of Literacy and Numeracy (SSLN). The data presented here are from SSLN. <sup>‡</sup>Homelessness - Year refers to a financial year. <sup>‡‡</sup>Children and young people in cases assessed as homeless or potentially homeless per 1,000 aged 15 years and under, or aged 16 to 18 years (who are either receiving or about to begin full-time education or training, or are, for some other reason unable to support themselves in the past year). <sup>®</sup>Neighbourhood satisfaction (Rate their neighbourhood as a very or fairly good place to live) - equalities analysis by gend

### 4.6.3 Time trends

Presentation of time trends was possible for 17 indicators (22 measures), which covered all the structural indicators for which data are available except for feeling lonely (Table 4.10).<sup>xxiii</sup> The longest time series spanned 14 years of continuous data (education between 1998 and 2011)<sup>I</sup> and the shortest over four consecutive years (positive and sustained destinations 2009 to 2012). Trends are included below for several indicators which rely on administrative data; however, caution is required in interpretation as trends may be due to changes in recording practices.

All the equality indicators improved over the time periods available. The percentage of C&YP living in absolute poverty fell 6% from 16% in 2001/02 to 10% (8% to 11%) in 2010/11,<sup>II</sup> the percentage living in relative poverty over this period also fell by 10% from 27% in 2001/02 to 17% (15% to 19%) in 2010/11<sup>II</sup> and the percentage living in persistent poverty fell by 6% from 19% over 1999-02 to 13% over 2005-08.<sup>xxiv</sup> Income inequality also dropped, the Gini coefficient falling from 0.31 (0.30 to 0.33) in 2002/03 to 0.30 (0.29 to 0.32) in 2010/11.<sup>III</sup>

The percentage of children in workless households fluctuated slightly between 2004 and 2011 but decreased overall by 2% from 16% (15% to 17%) to 14% (13% to 15%) and school leavers in positive and sustained destinations increase by 3% from 84% (84% to 84%) in 2009 to 87% (86% to 88%) in 2012.

For education, the percentage of 16 and 17 year olds with at least one academic or vocational educational gualification remained stable between 2004 (85% (83% to 87%)) and 2011 (87% (85% to 89%)), while the percentage of C&YP leaving school with a qualification in English and Maths at least at SCQF Level 3 increased by 3% from 92% in 2002/03 to 95% in 2011/12, the increase was essentially linear from 2008/09.<sup>xxii</sup> Between 2005 and 2008, there was essentially no change in numeracy for P3 and S2 pupils estimated to have 'well-established' or better skills at the expected levels for their stages in numeracy: percentages in 2005 and 2008 being 91% (89% to 93%) and 92% (91% to 93) and 45% (42% to 48%) and 43% (41% to 45%), respectively.<sup>IIII</sup> While for P7 pupils the percentage decreased by 12% from 68% (66% to 70%) to 56% (54% to 58%). For reading between 2005 and 2009, there was broadly no change overall for P3 and P7 pupils estimated to have 'well-established' or better skills at the expected levels for their stages in reading, percentages in 2005 and 2009 being 75% (73% to 77%) and 77% (75% to 79%) and 49% (47% to 52%) and 49% (47% to 51%), respectively. But for S2 pupils the percentage fell steadily by 8% from 49% (47% to 52%) to 41% (39% to 43%).

School exclusion from local authority schools decreased by 9.5 per 1,000 pupils from 49.5 (49.0 to 50.0) in 2002/03 to 40.0 (39.5 to 40.4) in 2010/11, although exclusions increased from 2002/03 to 2006/07 before subsequently declining.<sup>liv</sup> Cases of 16 and 17 year old applicants assessed as homeless or potentially homeless per 1,000 in the past year fell from 20.5 (19.8 to 21.3) in 2002/03 to 15.2

<sup>&</sup>lt;sup>1</sup>This is the measure of leaving school with a qualification in English and Maths at least at SCQF Level 3.

<sup>&</sup>lt;sup>1</sup>95% confidence intervals were unavailable for this data for 2001/02 and 2002/03.

<sup>&</sup>lt;sup>iii</sup> Caution for year on year changes, it is only really in the last year has the change been significant.

Data are from SSA. SSA was replaced by the SSLN from 2010, trends from SSLN are not yet possible.

<sup>&</sup>lt;sup>liv</sup> Caution is required in interpreting trends due to changes in reporting systems.

(14.5 to 15.9) in 2011/12, a difference of 5.4, this fall occurred steadily since 2007/08.<sup>Iv</sup> C&YP<sup>xlix</sup> in household cases assessed as homeless or potentially homeless per 1,000 in the past year fluctuated over the period 2004/05 to 2010/11 and then fell in 2011/12 to give an overall difference of 2.8 from 21.3 (21.0 to 21.6) in 2004/05 to 18.5 (18.2 to 18.8) in 2011/12.

There was a steady increase in the number of looked after children per 1,000 aged 17 years and under from 10.6 (10.4 to 10.8) in 2003 to 15.5 (15.3 to 15.8) in 2012, a 4.9 difference<sup>IVI</sup> and the number of pupils classified as having ASN per 1,000 pupils increased steadily from 42.3 (41.8 to 42.7) in 2002 to 65.3 (64.7 to 65.9) in 2008 and then dramatically and steadily to 175.9 (174.8 to 176.9) in 2011.<sup>IVII</sup>

In the physical environment construct, neighbourhood satisfaction for 16 and 17 year olds fluctuated with no change overall from 89% (84% to 94%) in 2002 to 90% (85% to 95%) in 2011,<sup>xxvii</sup> while it increased for both S2 and S4 pupils; for S2 pupils it increased by 6% from 66% (63% to 68%) in 2002 to 72% (69% to 74%) in 2010, and for S4 pupils it increased by 8% from 55% (52% to 59%) to 63% (61% to 66%).<sup>xxv</sup> Agreement that there are good places to spend their free time also increased for both S2 and S4 pupils between 2002 and 2010; for S2 pupils a steady increase of 12% from 48% (45% to 51%) to 60% (57% to 63%) and for S4 pupils an increase of 5% from 35% (32% to 38%) to 43% (41% to 46%), although the increase occurred after 2006.

Both the house condition and overcrowding indicators of the physical environment construct fluctuated over the years 2003/4 to 2011.<sup>Iviii</sup> For house condition, the overall difference was a 6% fall in the percentage of households with children aged 17 years and under rating the condition of their house or flat as good (79% (77% to 82%) to 73% (70% to 75)) and for overcrowding, there was a 3% fall (30% (27% to 33%) to 27% (24% to 30%)) in such households for feeling that their home has too few rooms.

For the culture indicators, those who perceived that they were average, quite or very good looking between 1998 and 2010 increased by 11% for P7 pupils from 70% (68% to 72%) to 81% (78% to 83%), remained unchanged for S2 pupils from 68% (66% to 71%) to 69% (66% to 71%) and decreased by 5% for S4 pupils from 73% (71% to 76%) to 68% (66% to 70%). The percentage of pupils thinking that their body was about the right size also increased for P7 pupils from 2002 to 2010 by 5% from 59% (56% to 61%) to 64% (61% to 66%) and remained essentially unchanged for both S2 and S4 pupils, S2 pupils 50% (47% to 52%) to 51% (48% to 54%), S4 pupils 48% (45% to 51%) to 46% (44% to 48%).

<sup>&</sup>lt;sup>Iv</sup> Trends can be affected by legislative changes, changes in interpretation of legislation or guidance and by changes in local authority recording practice.

<sup>&</sup>lt;sup>Ivi</sup> Until 2009 the year end reporting date was 31st March, from 2010 it was 31st July. Changes over the years are partly due to improved recording. <sup>Ivii</sup> Caution is required in interpreting trends due to changes in recording practices, processes and

<sup>&</sup>lt;sup>VII</sup> Caution is required in interpreting trends due to changes in recording practices, processes and categorisation. For example, the marked increase between 2008 and 2009 was largely driven by changes in recording practices and efforts to improve processes around data capture by Glasgow City. Increases since 2010 are partly due to improved recording and the introduction of a 'Child plans' category in 2011. <sup>VIII</sup> In 2007 there was a change to calendar collection from financial year, creating a small collection gap

between mid-2006 and the beginning of 2007. This is viewed by the Scottish House Condition Survey team as approximately continuous with no obvious discontinuity in the outputs that would cause concern.

# Table 4.10. Structural domain contextual factors: trends over time (continued on next page)

												Year							
onstruct	Indicator	Measures	School year / age (years)	Unit	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	20
	Absolute poverty	Living in absolute poverty (before housing costs)*.§	19 and under	%				16	16	15	13	12	12	12	11	11	10		
ality	Income inequality	GINI coefficient for households with children <sup>§</sup>	17 and under	Gini					0.31	0.31	0.30	0.31	0.32	0.33	0.34	0.35	0.30		
Equality	Relative poverty	Living in relative poverty (before housing costs)**. ${}^{\$}$	19 and under	%				27	25	24	21	21	21	20	21	20	17		
	Persistent poverty	Living in persistent poverty (before housing costs)***	18 and under	%					19	18	17	13	12	13	13				
	Workless households	Living in workless households	15 and under	%							16	16	15	15	13	14	15	14	
	Positive and sustained destinations	In positive and sustained destinations 9 months after leaving school	School leavers	%												84	85	85	
		Has at least one academic or vocational educational qualification	16 to 17	%							85	85	85	85	88	85	87	87	
		Leaving school with a qualification in English and Maths at least at SCQF Level $3^{\circ}$	All leavers (S4 to S6)	%					92	92	92	92	91	92	92	93	94	95	
			P3	%								91	90		92			76	ſ
	Education	Well established or better skills at the expected levels for their stage in numeracy <sup>†, ††</sup>	P7	%								68	67		56			72	Ī
Ision	Education		S2	%								45	46		43			42	ſ
Social Inclusion			P3	%								75	79			77			ſ
Socia		Well established or better skills at the expected levels for their stage in reading $^{*, \dagger \dagger}$	P7	%								49	48			49			
			S2	%								49	43			41			ſ
	School exclusion	Exclusions from local authority schools in the past year <sup>*</sup>	Primary and secondary	CR					49.5	53.3	58.1	60.4	63.9	57.5	49.9	44.7	40.0		ſ
	Heredeauer	Cases assessed as homeless or potentially homeless in the past year <sup>‡, ‡‡</sup>	16 to 17	CR					20.5	20.4	21.1	22.1	20.5	20.8	19.5	19.1	18.3	15.2	ĺ
	Homelessness	C&YP in cases assessed as homeless or potentially homeless in the past year <sup>‡‡</sup>	18 and under	CR							21.3	22.2	22.1	22.5	22.5	23.0	21.8	18.5	ſ
	Children looked after	Looked after by local authorities in the past year	17 and under	CR						10.6	11.0	11.5	12.2	13.1	14.0	14.5	15.1	15.5	I
	Additional support needs	Classified as having additional support needs in the past year	Primary and secondary	CR						42.3	45.3	48.6	51.4	52.8	56.8	65.3	103.4	146.9	ſ

#### Table 4.10. Structural domain contextual factors: trends over time (continued)

										1		Year							
Construct	Indicator	Measures	School year / age (years)	Unit	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
		Rate their neighbourhood as a very or fairly good place to live	16 to 17	%					89	91	89	89	89	91	88	91	94	90	
ŧ	Neighbourhood satisfaction	Fact that the error they live is a really good or good place to live	S2	%					66	1.1.1			70				72		
onme		Feel that the area they live is a really good or good place to live	S4	%					55				62				63		
Physical Environment	Free American Income		S2	%					48				54				60		
ysical	Free time places	Agree that there are good places to spend their free time in the area that they live	S4	%					35				35				43		
РЧ	House condition	Households with children rating the condition of their house/flat as $good^{+, \alpha}$	17 and under	%						79	74	78		76	78	79	77	73	
	Overcrowding	Households with children who feel their home has too few rooms**, a	17 and under	%						30	31	29		32	27	28	30	27	
			P7	%	70				71				74				81		
	Perception of looks	Think they are average, quite or very good looking	S2	%	68				71				69				69		
ure			S4	%	73				76				71				68		
Culture			P7	%					59				62				64		
	Body image	Think their body is about the right size	S2	%					50				51				51		
			S4	%					48	1			50				46		

#### Footnotes

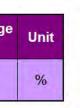
1 Gini = Gini coefficient; CR = crude rate; % = per cent.

#### Notes on indicators

\*Includes children and young people aged 15 years and under, or aged 16 to 19 years (but not married nor in a civil partnership nor living with a partner and living with their parents and in full-time non-advanced education or in unwaged government training); absolute poverty is defined as living in households whose equivalised income is below 60% of the (inflation adjusted) great Britain median income in 1998/99. \*\*Includes children and young people age 15 years and under, or aged 16 to 19 years (but not married nor in a Civil Partnership nor living with a partner and living with their parents and in full-time non-advanced education or in unwaged government training); relative poverty is defined as living in households whose equivalised income is below 60% of UK median income in the same year. <sup>§</sup>Absolute poverty, relative poverty and Gini - Year refers to the first year in the financial year e.g. 2010 = 2010/11. \*\*\*Includes children and young people aged 15 years and under, or aged 16 to 18 years (but in school or non-advanced further education, not married and living with their parents) living in households which have spent three or more years out of any four-year period in relative poverty. The data are entered under the last year of the four year period of assessment. "Education (Leaving school with a qualification in English and Maths at least at SCQF level 3) and School exclusion - Year refers to the first year in the academic year e.g. 2010 = 2010/11. <sup>†</sup>This measure has been changed from mathematics to numeracy. The data source for this measure for stanged from the SSA while that for 2012 from the SSLN includes P4 in place of P3, in addition to P7 and S2. <sup>\*</sup>The data source for this measure has changed from the SSLN. <sup>‡</sup>Children and young people in cases assessed as homeless or potentially homeless per 1,000 aged 15 years and under, or aged 16 to 18 years (who are either receiving or about to begin full-time education or training, or are, for some other reason unable to support themselves in the past y

#### Dataless indicators/measures

Construct	Indicator	Measure	School year / age (years)
Social inclusion	Feeling lonely	Never felt lonely in the last week	P7, S2, S4



### 4.6.4 Equalities analysis

None of the indicators in the equality construct had data available to facilitate analysis separately by gender or age.

#### 4.6.4.1 Structural domain: by gender

Twelve indicators (17 measures) could be looked at by gender, out of the possible 26 indicators (31 measures) (Table 4.9).<sup>xlv</sup>

For the indicators of the social inclusion construct, there was no gender difference for C&YP living in workless households in 2011 (14% (13% to 15%) of boys and 13% (12% to 15%) of girls). Three per cent more girls than boys (86% (86% to 86%) of boys and 89% (88% to 89%) of girls) were in positive and sustained destinations 9 months after leaving school in 2012. In 2011/12, 8.4 more 16 and 17 year old girls than boys per 1,000 applied and were assessed as homeless or potentially homeless cases (boys 11.0 (10.2 to 11.9) and girls 19.5 (18.4 to 20.6)) but there was no difference between the number of boys and girls in household cases assessed as homeless or potentially homeless per 1,000 C&YP<sup>xlix</sup> (both 18.5 (18.1 to 18.9)). There were 1.4 more boys (16.4 (16.0 to 16.7)) than girls (14.6 (14.3 to 15.0)) looked after per 1,000 aged 17 years and under in 2012 and a higher percentage of boys than girls of all school ages assessed had never felt lonely in the last week in 2010: for P7 pupils 9% more boys (49% (46% to 53%)) than girls (40% (36% to 43%)); for S2 pupils 5% more boys (38% (35% to 41%)) than girls (33% (30% to 36%)).

For the education indicators of social inclusion, gender differences varied considerably between the measures. There was no gender difference in the percentage of 16 and 17 year olds with at least one academic or vocational educational gualification in 2011 (boys 87% (83% to 90%) and girls 88% (85% to 91%)) or between boys (94%) and girls (95%) in the percentage leaving school with a qualification in English and Maths at least at SCQF Level 3 in 2011/12.<sup>xxii</sup> For younger pupils of P4, P7 and S2 school years, there were gender differences in favour of boys in numeracy in 2011 for P4 (girls 74% (72% to 77%) and boys 79% (77% to 81%), a difference of 5%) and P7 pupils (girls 69% (66% to 72%) and boys 75% (72% to 78%), a difference of 6%) but essentially no difference between S2 boys and girls for numeracy in 2011 (girls 41% (39% to 44%) and boys 43% (41% to 46%), a 2% difference). lix For reading in 2012, girls of all school years assessed did better than boys: for P4 pupils 3% more girls than boys were estimated to have 'well-established' or better skills at the expected level for their stages (boys 82% (79% to 85%) and girls 85% (83% to 87%)), for P7 4% more girls (boys 88% (86% to 90%) and girls 92% (90% to 94%)) and for S2 pupils 4% more girls (boys 82% (80% to 84%) and girls 86% (84% to 88%)).<sup>IIX</sup> Difference between boys and girls were stark for school exclusion and ASN with values for boys being higher for both of these indicators: in 2010/11, 60.8 (60.0 to 61.6) boys compared to girls 18.3 (17.8 to 18.7) per 1,000 pupils were excluded from school, a difference of 42.5 pupils per 1,000; and in 2012, 215.9 (214.4 to 217.5) boys compared to 134.2 (132.9 to 135.4) girls per 1,000 pupils had an ASN, a difference of 81.7 pupils per 1,000.

Concerning the physical environment in 2010-11, there was a 3% difference in favour of girls between 16 and 17 year old boys (91% (86% to 96%)) and girls (94% (90% to 98%)) who rated their neighbourhood as a good place to live<sup>xxvii</sup> and in 2010, a 3% difference in

<sup>&</sup>lt;sup>lix</sup> Data are from the SSLN which replaced the SSA in 2011. There was a change in years assessed with P4 replacing P3 of the SSA.

favour of boys between S4 boys (65% (61% to 68%)) and girls (62% (59% to 65%)) who felt that the area they live is a good place to live but essentially no difference between S2 boys (73% (69% to 76%)) and girls (71% (67% to 74%)).<sup>xxv</sup>

More boys of both S2 and S4 school years felt that there were good places to spend their free time in the area they live in 2010, for S2 pupils this was 63% (59% to 67%) amongst boys compared to 57% (53% to 61%) in girls, a difference of 6%, and for S4 pupils this was 45% (42% to 49%) in boys compared to 41% (38% to 44%) in girls, a difference of 4%.

Finally, for both the culture indicators of perception of looks and body image in 2010 there were no gender differences for P7 pupils but both S2 and S4 boys responded more favourably than girls. For perception of looks 80% (77% to 83%) of P7 boys and 81% (78% to 84%) of girls thought that they were average, quite or very good looking, for S2 pupils this was 76% (73% to 79%) of boys and 62% (58% to 65%) of girls, a 6% difference, and for S4 pupils 73% (70% to 76%) of boys and 64% (61% to 67%) of girls, a 9% difference. For body image, 64% (61% to 67%) of P7 boys and 64% (60% to 67%) of girls thought that their body is about the right size, while for S2 boys it was 56% (53% to 59%) and girls 46% (43% to 50%), a 10% difference, and for S4 boys 51% (48% to 54%) and girls 41% (38% to 44%), a 10% difference.

#### 4.6.4.2 Structural domain indicators: by age

Presentation of data by age was possible for 12 indicators (15 measures) out of the possible 26 indicators (31 measures) (Table 4.9).<sup>xlvi</sup>

Age appeared to influence the percentage of school leavers in positive and sustained destinations in 2012 with 18% more 18 year olds than those aged 16 years and under in such destinations: 16 year olds and under 76% (75% to 77%); 17 year olds 93% (92% to 93%); and 18 year olds 94% (94% to 95%). Age also favoured achievement of at least one academic or vocational educational qualification in 2011 with 12% more 17 year olds (93% (91% to 96%)) achieving this than 16 year olds (81% (77% to 84%)).

The percentage of pupils estimated to have 'well-established' or better skills at the expected levels for their stages in numeracy in 2011 decreased with age; the difference between P4 and S2 pupils was 34%, most of this difference being between P7 and S2 pupils: P4 pupils 76% (74% to 78%); P7 pupils 72% (70% to 74%); and S2 pupils 42% (40% to 44%).<sup>lix</sup> However, there was no clear age trend for reading in 2012: P4 pupils 83% (81% to 85%); P7 pupils 90% (89% to 91%); and S2 pupils 84% (82% to 86%).<sup>lix</sup>

School exclusions in 2010/11 increased steadily with age throughout primary school from 2.7 (2.3 to 3.1) per 1,000 pupils in P1 to 23.2 (21.9 to 24.5) in P7, a difference of 20.5, and then increased dramatically in S1 (63.9 (61.8 to 66.0)) and thereafter until S3 (130.2 (127.2 to 133.2)) before reducing to 4.0 (3.4 to 4.8) in S6.<sup>Ix</sup>

The rate of pupils classified as having ASN<sup>1xi</sup> per 1,000 pupils increased with age from 82.3 (79.9 to 84.8) for 5 year olds to 210.4 (206.4 to 214.4) for 10 year olds, an increase of

<sup>&</sup>lt;sup>Ix</sup> Data include publicly funded local authority schools only and do not include grant-aided schools. Point estimate, time trend and gender analysis include primary, secondary and special schools, whereas special schools are omitted from the age breakdown analysis.

<sup>&</sup>lt;sup>ixi</sup> Data include all publicly funded schools in Scotland (local authority and grant-aided), include mainstream and special schools and are presented by age of the child rather than school year of the child for this indicator as special school data, which are included here, are collected by age of the child only.

128.14, and then decreased steadily to 125.3 (121.6 to 129.1) for 17 year olds, a decrease of 85.1. Rates thereafter increased to 294 (272.4 to 316.9) for 18 year olds and dramatically to 661.3 (474.6 to 897.1) for 19 year olds.

The percentage of children living in workless households remained unchanged with age in 2011 from 14% (13% to 16%) for 0 to 5 year olds, 14% (13% to 15%) for 6 to 10 year olds to 13% (12% to 15%) for 11 to 15 year olds. Homelessness, however, altered with age. More 17 than 16 year olds (2.95 per 1,000) applied and were assessed as homeless or potentially homeless cases in 2011/12 (16 year olds 13.7 (12.7 to 14.6)) and 17 year olds 16.6 (15.6 to 17.6)); while the number of C&YP<sup>xlix</sup> in household cases assessed as homeless or potentially homeless per 1,000 decreased with age from 0 to 4 year olds (28.0 (27.4 to 28.6)) to 12 to 15 year olds (11.1 (10.7 to 11.6)) and then increased slightly to 16 to 18 year olds (15.1 (14.0 to 16.2), an overall difference of 12.9 per 1,000 from those aged 0 to 4 years to those aged 16 to 18 years.

The percentage of school pupils who never felt lonely in the last week decreased with age in 2010 from 45% (42% to 47%) of P7 pupils, 40% (37% to 42%) of S2 pupils to 36% (34% to 38%) of S4 pupils, a difference of 9% between P7 to S4 pupils.

In 2012, the number of children looked after per 1,000 increased with age until 15 years of age and then decreased: 0 to 4 year olds 11.7 (11.3 to 12.0); 5 to 11 year olds 16.3 (15.9 to 16.7); 12 to 15 year olds 21.4 (20.8 to 22.0); and 16 to 18 year olds 11.5 (10.9 to 12.1).

A greater percentage of S2 than S4 pupils, 9% more, in 2010 felt that the area they live is a good place to live (S2 pupils (72% (69% to 74%) and S4 pupils 63% (61% to 66%)) and 17% more that there are good places to spend their free time in the areas that they live (S2 pupils 60% (57% to 63%) and S4 pupils 43% (41% to 46%)).

Positive perception of their looks and body image decreased with age in 2010. Thirteen per cent more P7 than S4 pupils felt that they were average, quite or very good looking (P7 pupils 81% (78% to 83%), S2 pupils 69% (66% to 71%) and S4 pupils 68% (66% to 70%)) and 18% more that their body was about the right size (P7 pupils 64% (61% to 66%), S2 pupils 51% (48% to 54%) and S4 pupils 46% (44% to 48%)).

# 5. Discussion

Overall, the indicators provide a good comprehensive baseline picture of the mental health of children and young people (C&YP) in Scotland. Data were available for up to 13 out of 15 mental health outcome indicators and 60 out of 93 contextual indicators, giving an in-depth account of mental health and its context but leaving some gaps, mostly affecting the contextual domains. As some indicators are developed further and data become available for others, these gaps will reduce.

## Mental health outcomes

#### Trends over time

The picture over the past decade or so can be summed up as one of broad improvement for over half of the mental health outcome measures analysed (13 measures) and general stability over time for most others (11 measures). Of the mental wellbeing measures, over half (six measures) improved over the time period for which data were available, with the remainder staying relatively constant. There was a similar picture for mental health problems with approximately half improving (eight measures) and half remaining stable or showing no obvious pattern over time (six measures). Only one measure for an indicator of mental health problems (emotional symptoms for S4 pupils) deteriorated slightly.

Time trend data were available for all but five indicators of mental health (sadness, suicide, drug-related disorders, self-harm and eating disorders) leaving some uncertainty but still giving a good overview of how the mental health of C&YP has changed over recent years.

Although only one measure worsened over time, the data suggest that there is considerable scope for action amongst those measures which remained largely steady or improved over time but which are still at a relatively high or worrying level. Of those measures, hyperactivity/inattention stayed elevated over time for all age groups. Happiness was still only reported by around half of P7 pupils, less than half of S2 pupils and about a third of S4 pupils in 2010. Similarly, despite some improvement between 2006 and 2010, approximately a quarter of S2 and S4 pupils still suffered from emotional and behavioural problems and conduct problems in 2010.

### Inequalities

The report highlights clear inequalities across a wide range of mental health outcome indicators and measures across the C&YP population of Scotland. Equalities analysis was undertaken for between 11 and 13 out of 15 indicators depending on the equality grouping. Of these, poorer mental health outcomes were associated with gender for 28 out of 32 measures (88%), age for 14 out of 18 (78%), Scottish Index of Multiple Deprivation (SIMD) in 21 out of 23 measures (91%) and urban-rural classification in five out of 11 (45%).

### <u>Gender</u>

Mental wellbeing varied by gender with boys more likely to report happiness, satisfaction with life, and score slightly higher for mental wellbeing (as assessed by the Warwick-Edinburgh Mental Well-being Scale (WEMWBS)) than girls. Girls scored better for pro-social behaviour than boys. The extent of mental health problems varied by gender for all measures with the exception of emotional and behavioural problems in S2 pupils, emotional symptoms in 4 to 12 year olds and alcohol dependency in 16 to 19 year olds. Overall, boys were less likely to have common mental health problems, emotional symptoms or to report

sadness. Girls were less likely to have conduct problems or to suffer from drug-related disorders or to complete suicide. The direction of the gender difference was mixed for two indicators with multiple measures (emotional and behavioural problems and hyperactivity/inattention). The gender which fared better for these two indicators varied with age (girls fared better at a younger age and boys at an older age) and suggests that age may be a confounding factor when looking at gender differences in these indicators. As more data accumulate, this will be an important topic to explore for the insights it might provide for health improvement actions.

#### <u>Age</u>

For mental wellbeing, the majority of measures deteriorated with age. Life satisfaction and happiness decreased with age between P7, S2 and S4 pupils. Pro-social behaviour improved with age in younger children between 4 and 12 years but deteriorated with age in older children. Mental health problems generally increased with age with the exception of conduct problems and hyperactivity/inattention which decreased with age in children aged 4 to 12 years.

#### Area deprivation

Inequalities by area deprivation (SIMD) were common across both mental wellbeing and mental health problems. C&YP living in more deprived areas had poorer mental health outcomes than those living in less deprived areas. This was observed for all but two indicators, common mental health problems and alcohol dependency.

#### Urban-rural classification

Only five out of 11 mental health outcome measures (45%) fluctuated by urban-rural classification but showed no obvious pattern. All of these differences were observed for mental health problems. The overall picture of mental health by urban–rural classification is currently limited by data availability.

### **Contextual factors**

Of the 93 contextual indicators associated with the mental health of C&YP, time trend data were available for 50 indicators and equalities data for 60. Data were unavailable for four constructs in the individual domain, one in learning environment, one in community and two in the structural domain. These gaps leave a degree of uncertainty around how the contextual picture associated with mental health has changed over recent years and how it varies by age and gender.

#### Trends over time

There was an overall pattern of improvement in 27 of the 50 contextual indicators analysed over time with the majority being in the individual (eight indicators) and the structural domains (12 indicators). There was deterioration in 10 indicators, fluctuation with no obvious pattern for four indicators and no change/broad stability in nine indicators.

The individual and structural domains presented a picture of overall improvement. In the individual domain, there was improvement around general health and for most measures of healthy living with the exception of obesity and sexual health, which both showed no obvious trend. Alcohol consumption presented a mixed picture with an overall decrease in the percentage of C&YP drinking alcohol in the last week but a steady increase in the number of units being drunk by those who did report drinking alcohol. The Government recognises the need to tackle alcohol misuse as a priority<sup>10</sup> and continuing action will remain important. There was general improvement in the structural domain for all measures of

poverty, around half of social inclusion (including education and homelessness) and three quarters of physical environment measures (neighbourhood satisfaction, free time places and overcrowding). There is however scope for improvement around some measures which have improved or remained stable but are still a cause for concern such as poorer numeracy in older age groups, increases in looked after children,<sup>Ivii</sup> and poorer perceptions of house condition. There were also divergent trends for body image and perception of looks with younger children generally rating these aspects more highly and also being the only age range to improve over time.

The family, learning environment and community domains had variable trends over time. The family domain was largely constant across family relations and parental health, with some improvement in terms of parental healthy living (maternal smoking) and family structure (teenage parents) and some deterioration in two indicators (family meals and parental common mental health problems). There was broad improvement in the learning environment domain in terms of the engagement with learning construct, stability around parental views in the educational environment construct, and a mixed picture for the peer and friend relationships construct. The community domain was mixed over time with the participation construct remaining largely unchanged. Trust and social support showed some indication of worsening over time whereas safety in the neighbourhood improved.

#### Differences by age and gender

There was a mixed pattern by gender across the five contextual domains. Poorer outcomes were frequently observed for older children in comparison to younger children across all contextual domains.

The individual contextual outcomes varied by gender in approximately half of all measures with boys largely faring better for physical activity, healthy eating (breakfast), smoking and condom use. Girls fared better for healthy eating ('5-'a'day'), obesity and drug use. Outcomes largely deteriorated as children aged for most indicators in the healthy living construct and two-thirds of the general health construct indicators.

Family contextual outcomes were largely similar for boys and girls across family structure, parental healthy living and parental health. Differences by gender were observed in terms of most measures of family relations and were strongly patterned by age with all indicators deteriorating as children got older.

The pattern by gender across the learning environment domain was mixed. On average, girls were more likely to report liking school than boys and largely fared better for measures of peer and friend relationships. Boys reported more positively than girls across the pressures and expectations construct. Outcomes largely deteriorated with age as pupils moved from primary school into secondary school and this pattern was observed across all four constructs.

Community factors showed a mixed pattern by gender. Social support and trust were broadly stable by gender though there was some variation across the different age groups. Overall boys were more likely to report feeling safe in the area where they live than girls. In general, community factors were worse for older children with the exception of one measure of neighbourhood safety which remained stable across the age groups.

Structural factors were strongly patterned by gender with girls faring better than boys for more than half of all social inclusion indicators and boys faring better in terms of their views

on the physical environment where they live and culture. Structural factors showed diverging patterns with age.

To improve the mental health of Scotland's C&YP population, priority should be given to the mental health outcome and contextual measures where there is solid evidence of worsening over time or where the measure remains a concern despite improvement over time or stability.

#### Areas for action

The extensive inequalities across a wide range of mental health outcome indicators demonstrates the need for both targeted and population-wide strategies, to ensure more equal opportunities and outcomes between genders, ages and socio-economic groups. Consistent data are lacking on other dimensions of equality, which therefore remain largely uncharted territory. The wide-spread variation in the contextual factors associated with mental health by gender and age reinforces this need to ensure more equal opportunities and outcomes between genders age groups. Particular attention should be paid to the regularly occurring pattern of deterioration in many contextual measures as children get older and in the strong patterning of mental health outcomes by gender and socio-economic deprivation in particular.

#### Strengths and limitations of the report

#### Strengths

Drawing on a rigorously developed and sustainable set of indicators, these estimates and analyses provide a comprehensive and up-to-date insight into C&YP's mental health in Scotland (covering both mental wellbeing and mental health problems) and the contextual factors associated with it at the individual, family, learning environment, community and structural levels. Along with the accompanying chart file (www.scotpho.org.uk/publications/reports-and-papers/1159-Scotlands-mental-health-children-and-young-people-2013), they provide a robust reference point for organisations, partnerships, policy-makers and planners who have a role in creating a mentally flourishing Scotland.

As the first, this report provides a unique picture of where Scotland's C&YP mental health is improving and where attention needs to be focused at national level, both in terms of flatlining or worsening trends over time and inequalities between population subgroups.

During the course of the development of the indicator set, work was undertaken to enhance the quality of existing data sources and to embed new and sustainable measures of mental health in national surveys. A particularly important development has been the inclusion of WEMWBS in SALSUS from 2010 to cover mental wellbeing of S2 and S4 pupils and its inclusion in the Scottish Health Survey for 13 to 15 year olds from 2012, which will complement the SALSUS WEMWBS data. These changes will allow a more robust, rounded and consistent account of C&YP mental health in the future.

#### Limitations

These first analyses were constrained by a lack of recent data, relatively short time series, small sample sizes and the number of indicators and measures to be analysed. Both a lack of data and small sample sizes particularly limited the potential for equalities analysis.

Overall, time trend data were available for 50 out of 78 reportable indicators. Time series were most frequently absent for indicators in the structural and learning environment domains, leaving greater uncertainty about progress in these areas. Time trend analysis was further constrained by a large number of relatively short time series and small sample sizes, the latter often necessitating the aggregation of years to produce a single robust point estimate. The aim was to examine change in the last decade though data constraints (for example lack of data, changes to data recording and reporting methodologies) meant that sometimes shorter and slightly longer time trends were reported.

Where indicators were based on measures with discontinuous age groups these could not be readily combined (i.e. where data were available for P7, S2 and S4 pupils). This meant that for these indicators/measures a single overall point estimate could not be obtained, rather, point estimates were discussed separately for each age group in the age breakdown section of the equalities analysis (and similarly for gender analysis).

The increased number of indicators and associated measures for the C&YP indicator set over the adult set (108 Indicators/154 measures, for which data were available to allow some reporting on 78 indicators/104 measures compared to analyse for 51 indicators for adults) led to the pragmatic decision to restrict statistical analysis to the mental health outcome indicators. As a result, interpretation of time trends and equalities analysis for the contextual constructs relied on a degree of judgement combined with an assessment of the precision of estimates provided by 95% confidence intervals.

Interpretation of trends for the contextual factors was largely limited to consideration of the differences between the earliest time point and the latest or from the youngest to the oldest age group. The length of the time period or age gap reported for each measure needs therefore be taken into account when considering the magnitude of change over time.

Further work is required to complete the indicator set. The concept behind several indicators (spirituality, emotional intelligence, pre-school home learning environment and culture and values) have yet to be fully defined, suitable questions identified or developed and an appropriate data collection source(s) identified. A further 44 measures also require data source to be established (see Appendix 1).

Local use of the indicator set is limited by the very few data currently available at the required geographic levels. Recent changes to sample sizes and survey methodology for the national surveys further limits local use of national data. For some indicators and smaller geographies only boosts to national surveys or local surveys will be able to provide the necessary data.

# 6. Conclusion

Overall, the mental health of C&YP has improved or stayed broadly constant over the past decade or so. Improvement was seen across most domains, particularly around substance use (e.g. drug use and smoking – both in school pupils and during pregnancy), poverty and homelessness which have all shown steady improvement over the reportable time periods.

There remain, however, substantial opportunities to improve mental health and the conditions in which it can flourish to enable Scotland's C&YP population to reach its full potential. Alcohol consumption presents a paradox whereby the number of C&YP drinking alcohol reduced over the time period but the number of units being drank increased. The Government recognises the need to tackle alcohol misuse as a priority<sup>10</sup> and continuing action to address this issue will remain important.

The extensive inequalities in mental health outcomes by gender, age and SIMD and contextual factors by gender and age demonstrate the need for a range of national policies to give direction to and support this agenda. These include policies on nutrition and physical activity, drugs, alcohol, suicide prevention, poverty, inequality and also many others that less directly shape the context for mental health. Such an approach is consistent with the aspiration within Better Health, Better Care: 'to build a country in which we understand that there is no health without good mental health and know how to support and improve our own and others' mental health and wellbeing.'<sup>11</sup>

Internationally, the World Health Organization's recent comprehensive mental health action plan for 2013 – 2020 (<u>www.who.int/mental\_health/publications/action\_plan/en/index.html</u>)<sup>12</sup> recognises the essential role of mental health in achieving health for all people. The importance of indicators and the monitoring of trends to achieving this are highlighted by being one of the four objectives of the action plan.

Given the cross-cutting nature of mental health, this report is of relevance and value to policy areas and agendas beyond mental health improvement and also beyond health improvement. Indeed, the set was designed to align with key national outcome frameworks and indicators for other relevant Scottish policies and programmes (see *Establishing a core set of national, sustainable mental health indicators for children and young people in Scotland: Final Report*<sup>5</sup>).

Specifically, the findings presented here will be informative to those working towards advancing distinctive agendas for C&YP such as the Early Years Framework,<sup>13</sup> including the Early Years Collaborative, Getting it Right for Every Child (GIRFEC)<sup>14</sup> and Curriculum for Excellence.<sup>15, 16</sup>

We hope that this report will contribute to that process by adding to our understanding of C&YP mental health and its context in Scotland – where we stand today, what changes have occurred over the last decade or so, and where inequalities exist. In terms of application, we hope that the report's findings will enable evidence-informed decision making for mental health improvement policy and planning; that future mental health strategy will explicitly refer to and be driven by the priorities for action identified in the report.

# 7. References

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# Appendix 1: Children and young people's mental health indicators, measures and data sources

High Level Constructs									
Indicator	Measure	Data source							
	Mental wellbeing								
Mental wellbeing	<ul> <li>Mean score for 16 and 17 year olds on the Warwick-Edinburgh Mental Well-being Scale (WEMWBS)<sup>i</sup></li> <li>Mean score for S2 and S4 pupils on the Warwick-Edinburgh Mental Well-being Scale (WEMWBS)<sup>i, ii</sup></li> </ul>	<ul> <li>Scottish Health Survey</li> <li>Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS)</li> </ul>							
	<ul> <li>Assessment of mental wellbeing of children aged 8 to 13 years old <sup>Riii</sup></li> <li>Assessment of mental wellbeing of children at entry to P1 <sup>R, ii</sup></li> <li>Assessment of mental wellbeing of children aged from 24 to 30 months <sup>R</sup></li> </ul>	<ul> <li>No suitable data source identified</li> <li>No suitable data source identified</li> <li>No suitable data source identified</li> </ul>							
Life satisfaction	<ul> <li>Mean score of how satisfied 16 and 17 year olds are with their life as a whole nowadays<sup>i</sup></li> <li>Mean score for P7, S2 and S4 pupils on an adapted Cantril ladder (rating of whether an individual perceives they have the best or worst possible life for them at the moment)<sup>i, ii</sup></li> </ul>	<ul> <li>Scottish Health Survey</li> <li>Health Behaviour in School-aged Children Survey (HBSC)</li> </ul>							
Happiness	Percentage of P7, S2 and S4 pupils who feel very happy with their life at present <sup>ii</sup>	• HBSC							
Pro-social behaviour	<ul> <li>Percentage of S2 and S4 pupils with a 'normal' score on the pro-social scale of the Strengths and Difficulties Questionnaire (SDQ)<sup>ii</sup></li> <li>Percentage of 4 to 12 year olds with a 'normal' score on the pro-social scale of the Strengths and Difficulties Questionnaire (SDQ)<sup>iv</sup></li> </ul>	<ul><li>SALSUS</li><li>Scottish Health Survey</li></ul>							
	Mental health problems								
Common mental health problems	Percentage of 16 to 19 year olds who score 4 or more on the General Health Questionnaire-12 (GHQ- 12) (a score of 4 or more indicates a possible mental health problem over the past few weeks)	Scottish Health Survey							
Emotional and behavioural problems	<ul> <li>Percentage of S2 and S4 pupils with a 'borderline' or 'abnormal' total difficulties score on the Strengths and Difficulties Questionnaire (SDQ)<sup>ii</sup></li> <li>Percentage of 4 to 12 year olds with a 'borderline' or 'abnormal' total difficulties score on the Strengths and Difficulties Questionnaire (SDQ)<sup>iv</sup></li> <li>Assessment of emotional and behavioural problems of children aged from 24 to 30 months <sup>R</sup></li> </ul>	<ul> <li>SALSUS</li> <li>Scottish Health Survey</li> <li>No suitable data source identified</li> </ul>							

Indicator	Measure	Data source
	Mental health problems - continued	
Emotional	<ul> <li>Percentage of S2 and S4 pupils with a 'borderline' or 'abnormal' score on the emotional symptoms scale of the Strengths and Difficulties Questionnaire (SDQ)<sup>ii</sup></li> </ul>	• SALSUS
symptoms	<ul> <li>Percentage of 4 to 12 year olds with a 'borderline' or 'abnormal' score on the emotional symptoms scale of the Strengths and Difficulties Questionnaire (SDQ)<sup>iv</sup></li> </ul>	Scottish Health Survey
Conductorshipme	<ul> <li>Percentage of S2 and S4 pupils with a borderline' or abnormal' score on the conduct problems scale of the Strengths and Difficulties Questionnaire (SDQ)<sup>ii</sup></li> </ul>	• SALSUS
Conduct problems	<ul> <li>Percentage of 4 to 12 year olds with a 'borderline' or 'abnormal' score on the conduct problems scale of the Strengths and Difficulties Questionnaire (SDQ)<sup>iv</sup></li> </ul>	Scottish Health Survey
Hyperactivity/	<ul> <li>Percentage of S2 and S4 with a 'borderline' or 'abnormal' score on the hyperactivity/inattention scale of the Strengths and Difficulties Questionnaire (SDQ)<sup>ii</sup></li> </ul>	• SALSUS
inattention	<ul> <li>Percentage of 4 to 12 year olds with a 'borderline' or 'abnormal' score on the hyperactivity/inattention scale of the Strengths and Difficulties Questionnaire (SDQ)<sup>iv</sup></li> </ul>	Scottish Health Survey
Sadness	• Percentage of P7, S2 and S4 pupils who felt sad quite often, very often or always in the last week <sup>ii</sup>	• HBSC
Alcohol dependency	<ul> <li>Percentage of 16 to 19 year olds who score 2 or more on the CAGE questionnaire (a score of 2 or more indicates possible alcohol dependency in the previous 3 months)</li> </ul>	Scottish Health Survey
Drug-related disorders	<ul> <li>Hospital patients per 100,000 children and young people aged 19 years and under discharged in the past year for mental and behavioural disorders due to psychoactive substance use (general acute and psychiatric hospitals)<sup>v</sup></li> </ul>	ISD Scotland, SMR01/04
Suicide	<ul> <li>Deaths per 100,000 children and young people aged 19 years and under in the past year from intentional self-harm or by events of undetermined intent</li> </ul>	National Records of Scotland
Self-harm <sup>R</sup>	• Incidence rate of intentional self-harm (self-poisoning or self-injury irrespective of the apparent purpose of the act, excludes self-harm through substance misuse, accidental self-harm and self-harm related to eating disorders) in the past year in children and young people aged 17 years and under	• No suitable data source identified
Eating disorders <sup>R</sup>	Prevalence of eating disorders in children and young people aged 17 years and under	No suitable data source identified

	Contextual Constructs	
	Individual	_
Indicator	Measure	Data source
	Learning and development	
Play <sup>R</sup>	<ul> <li>Assessment of encouragement, support, and ability to access imaginative, spontaneous indoor and outdoor play</li> </ul>	No suitable data source identified
	Assessment of time spent in spontaneous play	No suitable data source identified
Readiness for school <sup>R</sup>	<ul> <li>Assessment of readiness for school in P1 pupils, which covers cognitive functioning, communication (ability to understand and to use spoken language) and development<sup>ii</sup></li> </ul>	No suitable data source identified
	Healthy living	
Physical activity	<ul> <li>Percentage of 5 to 15 year olds who met the recommended level of physical activity for children (at least 60 minutes of physical activity on all 7 days in the last week) in the previous week<sup>vi</sup></li> </ul>	Scottish Health Survey
	Percentage of 16 and 17 year olds who ate five or more portions of fruit and vegetables in the previous day	Scottish Health Survey
Healthy eating	Percentage of 2 to 15 year olds who ate five or more portions of fruit & vegetables in the previous day <sup>vi</sup>	<ul> <li>Scottish Health Survey</li> </ul>
	<ul> <li>Percentage of P7, S2 and S4 pupils who usually have breakfast every weekday<sup>ii</sup></li> </ul>	• HBSC
Obesity	<ul> <li>Percentage of 2 to 15 year olds classified as obese or morbidly obese (BMI ≥95th Centile of the 1990 UK reference data)</li> </ul>	Scottish Health Survey
	<ul> <li>Percentage of S2 and S4 pupils who drank alcohol in the last week<sup>ii, vii</sup></li> </ul>	SALSUS
Alcohol	<ul> <li>Percentage of P7 pupils who drink anything alcoholic every week<sup>ii</sup></li> </ul>	• HBSC
consumption	<ul> <li>Mean number of units drunk by S2 and S4 pupils in the last week<sup>i, ii, vii</sup></li> </ul>	• SALSUS
Drug use	Percentage of S2 and S4 pupils who usually take illicit drugs at least once a month <sup>ii</sup>	SALSUS
	Percentage of 16 and 17 year olds who smoke cigarettes nowadays	Scottish Household survey
Smoking	<ul> <li>Percentage of S2 and S4 pupils who usually smoke at least one cigarette a week<sup>ii</sup></li> </ul>	SALSUS
C C	<ul> <li>Percentage of P7 pupils who smoke at least once a week<sup>ii</sup></li> </ul>	• HBSC
Sexual health	• Pregnancies (registered births and stillbirths combined with notifications of abortions) in children and young people aged 15 years and under per 1,000 females aged 13 to 15 years old in the past year	ISD Scotland <u>www.isdscotland.org</u> /Health-Topics/Maternity-and- Births/Teenage-Pregnancy/
	<ul> <li>Percentage of S4 pupils, who reported having had sexual intercourse, who used a condom on the last occasion that they had sexual intercourse<sup>ii</sup></li> </ul>	• HBSC

	Individual	
Indicator	Measure	Data source
	General health	
	Percentage of 16 and 17 year olds who perceive their health in general to be good or very good	Scottish Health Survey
Self-reported health	<ul> <li>Percentage of children and young people aged 15 years and under whose health in general is perceived to be good or very good<sup>vi</sup></li> </ul>	Scottish Health Survey
Long-standing	<ul> <li>Percentage of 16 and 17 year olds who have a long-standing physical condition or disability that has troubled them for at least 12 months, or is likely to affect them for at least 12 months</li> </ul>	Scottish Health Survey
physical condition or disability	<ul> <li>Percentage of children and young people aged 15 years and under who have a long-standing physical condition or disability that has troubled them for at least 12 months, or is likely to affect them for at least 12 months<sup>vi</sup></li> </ul>	Scottish Health Survey
Limiting long- standing physical	• Percentage of 16 and 17 year olds who have a long-standing physical condition or disability that limits their daily activities	Scottish Health Survey
condition or disability	<ul> <li>Percentage of children and young people aged 15 years and under who have a long-standing physical condition or disability that limits their daily activities<sup>vi</sup></li> </ul>	Scottish Health Survey
	Spirituality	
Spirituality <sup>R</sup>	Assessment of spirituality	No suitable data source identified
	Emotional intelligence	
Emotional intelligence <sup>R</sup>	Assessment of emotional intelligence	No suitable data source identified
	Life events	-
Stressful life events <sup>R</sup>	• Percentage of children and young people who have experienced three or more stressful life events	No suitable data source identified
Adverse childhood experiences <sup>R</sup>	<ul> <li>Percentage of children and young people who have experienced one or more adverse childhood experiences</li> </ul>	No suitable data source identified

Family				
Indicator	Measure	Data source		
	Family relations			
Parent-child relationship <sup>R</sup>	• Percentage of children aged from birth to 3 years with a positive parent-child relationship <sup>viii</sup>	No suitable data source identified		
Nurturing adult <sup>R</sup>	• Percentage of children and young people aged 17 years and under who have at least one caring, competent, consistent adult who they can confide in	No suitable data source identified		
Family meals	• Percentage of P7, S2 and S4 pupils who eat a meal with one or both parents 4 or more times a week <sup>ii</sup>	• HBSC		
Talking to parents	Percentage of P7, S2 and S4 pupils who find it very easy or easy to talk to their mother or stepmother (or father's partner) about things that really bother them <sup>ii</sup>	• HBSC		
	<ul> <li>Percentage of P7, S2 and S4 pupils who find it very easy or easy to talk to their father or stepfather (or mother's partner) about things that really bother them<sup>ii</sup></li> </ul>	• HBSC		
Treatment by parent(s)	<ul> <li>Percentage of P7, S2 and S4 pupils who felt that their parent(s) treated them fairly very often or always in the last week<sup>ii</sup></li> </ul>	• HBSC		
Parental discord <sup>R</sup>	• Assessment(s) of the impact of parental discord on children and young people, measured by features of the parental discord such as frequency, intensity and resolution, threat to the child and self-blame felt by the child	No suitable data source identified		
Caring for a family member <sup>R</sup>	Assessment of whether older children and young people with significant caring responsibilities     perceive their caring experience as negative	No suitable data source identified		
	<ul> <li>Assessment of whether older children and young people with significant caring responsibilities perceive their caring experience as positive</li> </ul>	No suitable data source identified		
Family structure				
Lone parent family	Percentage of children and young people aged 17 years and under living in lone parent households	Scottish Household Survey		
Contact with non- resident birth parent <sup>R</sup>	<ul> <li>Percentage of children and young people in frequent contact with their non-resident birth father</li> <li>Percentage of children and young people in frequent contact with their non-resident birth mother</li> </ul>	<ul> <li>No suitable data source identified</li> <li>No suitable data source identified</li> </ul>		
Teenage parents	Live births per 1,000 females aged 15 years and under in the past year	National Records of Scotland		
Parental imprisonment	• Children and young people who had a father in prison per 1,000 aged 17 years and under in the past year <sup>ix</sup>	Scottish Prison Survey <sup>x</sup>		
	<ul> <li>Children and young people who had a mother in prison per 1,000 aged 17 years and under in the past year<sup>ix</sup></li> </ul>	Scottish Prison Survey <sup>x</sup>		

Family				
Indicator	Measure	Data source		
Parental healthy living				
Maternal smoking in pregnancy	<ul> <li>Percentage of mothers who smoked during pregnancy (women recorded as 'current smoker' at antenatal booking appointment) in the past year</li> </ul>	ISD Scotland, SMR02		
Maternal alcohol use in pregnancy <sup>R</sup>	<ul> <li>Percentage of mothers who drank alcohol during pregnancy</li> <li>New-borns affected by alcohol (with foetal alcohol spectrum disorder)</li> </ul>	<ul><li>No suitable data source identified</li><li>No suitable data source identified</li></ul>		
Maternal drug use in pregnancy <sup>R</sup>	Percentage of mothers who took drugs during pregnancy	No suitable data source identified		
Parental problematic alcohol consumption <sup>R</sup>	<ul> <li>Prevalence of children and young people aged 15 years and under affected by parental alcohol misuse xi, xii</li> </ul>	Scottish Government, Scottish Health Survey analysis in development		
Parental problematic drug use <sup>R</sup>	<ul> <li>Prevalence of children and young people aged 15 years and under affected by parental drug misuse<sup>xi, xii</sup></li> </ul>	ISD Scotland and Scottish     Government analysis in the     future		
Parental health				
Parental mental	<ul> <li>Mean score for parents of children aged 15 years and under on the Warwick-Edinburgh Mental Well- being Scale (WEMWBS)<sup>i, xii</sup></li> </ul>	Scottish Health Survey		
wellbeing	<ul> <li>Assessment of mother's mental wellbeing during pregnancy <sup>R</sup></li> </ul>	No suitable data source identified		
Parental common mental health problems	• Percentage of children and young people aged 15 years and under who have a parent who scores 4 or more on the General Health Questionnaire-12 (GHQ-12) (a score of 4 or more indicates a possible mental health problem over the past few weeks) <sup>xii</sup>	Scottish Health Survey		
	<ul> <li>Percentage of mothers who had a common mental health problem during pregnancy <sup>R</sup></li> </ul>	• No suitable data source identified		
Postnatal depression <sup>R</sup>	Percentage of mothers who had postnatal depression	No suitable data source identified		
	Percentage of fathers who had postnatal depression	No suitable data source identified		
Parental alcohol dependency	<ul> <li>Percentage of children and young people aged 15 years and under who have a parent who scores 2 or more on the CAGE questionnaire (a score of 2 or more indicates possible alcohol dependency in the previous 3 months)<sup>xii</sup></li> </ul>	Scottish Health Survey		
Parental limiting long standing physical condition or disability	<ul> <li>Percentage of children and young people aged 15 years and under who have a parent with a long- standing physical condition or disability that has troubled them for at least 12 months, or is likely to affect them for at least 12 months, which limits their daily activities<sup>xii</sup></li> </ul>	Scottish Health Survey		

Learning environment				
Indicator	Measure	Data source		
Engagement with learning				
Pre-school home learning environment <sup>R</sup>	Assessment of the pre-school home learning environment	No suitable data source identified		
School attendance	Percentage school attendance by primary and secondary pupils in the past year	Scottish Government School     Education Statistics		
Liking of school	Percentage of S2 and S4 pupils who like school a lot or a bit at the moment <sup>ii</sup>	SALSUS		
	<ul> <li>Percentage of P7 pupils who like school a lot or a bit at present<sup>ii</sup></li> </ul>	• HBSC		
Peer and friend relationships				
Early years friendships <sup>R</sup>	• Assessment of the ability of children aged 3 to 4 years old to form and maintain friendships	No suitable data source identified		
	Percentage of S2 and S4 pupils who have at least three or more close friends <sup>ii</sup>	SALSUS		
Close friends	<ul> <li>Percentage of P7 pupils) who have at least three or more close friends<sup>ii</sup></li> </ul>	• HBSC		
Relationship with best friend	<ul> <li>Percentage of P7, S2 and S4 pupils who find it very easy or easy to talk to their best friend about things that really bother them<sup>ii</sup></li> </ul>	• HBSC		
Peer relationship problems	• Percentage of S2 and S4 pupils with a 'borderline' or 'abnormal' score on the peer relationship problems scale of the Strengths and Difficulties Questionnaire (SDQ) <sup>ii</sup>	• SALSUS		
	<ul> <li>Percentage of 4 to 12 year olds with a 'borderline' or 'abnormal' score on the peer relationship problems scale of the Strengths and Difficulties Questionnaire (SDQ)<sup>iv</sup></li> </ul>	Scottish Health Survey		
Acceptance by peers	<ul> <li>Percentage of P7, S2 and S4 pupils who strongly agree or agree that other pupils accept them as they are<sup>ii</sup></li> </ul>	• HBSC		
Experience of being bullied	• Percentage of P7, S2 and S4 pupils who haven't been bullied at school in the past couple of months <sup>ii</sup>	• HBSC		
Participation in bullying	<ul> <li>Percentage of P7, S2 and S4 pupils who haven't taken part in bullying another pupil(s) at school in the past couple of months<sup>ii</sup></li> </ul>	• HBSC		

Learning environment						
Indicator	Measure	Data source				
Educational environment						
Treatment by teachers	<ul> <li>Percentage of P7, S2 and S4 pupils who strongly agree or agree that their teachers listen to how they would like to do things<sup>ii</sup></li> </ul>	• HBSC				
Relationship with teachers	<ul> <li>Percentage of P7, S2 and S4 pupils who strongly agree or agree that their teachers care about them as a person<sup>ii</sup></li> </ul>	• HBSC				
Relationship with all school staff <sup>R</sup>	Assessment of pupil's perception of their relationship with all school staff	No suitable data source identified				
Control at school	<ul> <li>Percentage of P7, S2 and S4 pupils who strongly agree or agree that their teachers provide them with choice and options<sup>ii</sup></li> </ul>	• HBSC				
	<ul> <li>Percentage of P7, S2 and S4 pupils who strongly agree or agree that the students in their class(es) treat each other with respect<sup>ii</sup></li> </ul>	• HBSC				
	<ul> <li>Percentage of pupils who feel that their school acknowledges a range of indicators of success at school, not just academic <sup>R</sup></li> </ul>	No suitable data source identified				
School ethos	• Percentage of parents with school-aged children who strongly or tend to agree that the school keeps them well informed about their child's progress	Scottish Household Survey				
	<ul> <li>Assessment of the overall school ethos covering such things as relationships, the environment of learning, personal and professional satisfaction, leadership, opportunities for children to take responsibility, involvement of staff in decision-making and the 'feel' of the school <sup>R</sup></li> </ul>	No suitable data source identified				
	Pressures and expectations					
Time pressure	<ul> <li>Percentage of P7, S2 and S4 pupils who felt that they had enough time for themselves very often or always in the last week<sup>ii</sup></li> </ul>	• HBSC				
Choice of how to spend free time	<ul> <li>Percentage of P7, S2 and S4 pupils who felt that they were able to do the things that they want to do in their free time very often or always in the last week<sup>ii</sup></li> </ul>	• HBSC				
Pressure of school work	Percentage of S2 and S4 pupils who feel they very often or often have more school work than they can handle <sup>ii</sup> HBSC					
Pressure to succeed in life <sup>R</sup>	Assessment of whether children and young people feel pressure to succeed in life     No suitable data source ide					
Pressure to fit in <sup>R</sup>	Assessment of whether children and young people feel pressure to fit in at school or with others their own age     No suitable data source identified					

Community					
Indicator	Measure	Data source			
	Participation				
Sense of agency <sup>R</sup>	ense of agency <sup>R</sup> • Assessment of whether children and young people believe that they can make, or believe that they already do make, a positive difference in the world around them				
Respect of children's rights <sup>R</sup>	Assessment of whether children and young people feel their rights are respected by others	No suitable data source identified			
Influencing local decisions	<ul> <li>Percentage of households containing children and young people aged 8 to 17 years, where at least one 8 to 17 year old regularly takes part in representing young people's views or involvement in youth politics (e.g. Youth Forum or Dialogue Youth)<sup>iv</sup></li> </ul>	Scottish Household Survey			
Participation in clubs, groups or organis'ns	<ul> <li>Percentage of households containing children and young people aged 8 to 17 years, where at least one 8 to 17 year old regularly takes part in clubs, groups or organisations<sup>iv</sup></li> </ul>	Scottish Household Survey			
	Social networks	-			
Contact with peers <sup>R</sup>	Assessment of children and young people's peer group contacts	No suitable data source identified			
	Social support				
Social support	<ul> <li>Percentage of S2 and S4 pupils who agree a lot or a bit that they can ask for help or a favour from neighbours in the area where they live<sup>ii</sup></li> </ul>	• HBSC			
	Trust				
Neighbourhood	<ul> <li>Percentage of S2 and S4 pupils who agree a lot or a bit that you can trust people in the area where they live<sup>ii</sup></li> </ul>	• HBSC			
trust	• Percentage of S2 and S4 pupils who disagree a lot or a bit that most people in the area where they live would try to take advantage of them if they got the chance <sup>ii</sup>	• HBSC			
Community cohesion					
Informal social control <sup>R</sup>	<ul> <li>Assessment of the extent to which adults are willing to intervene in hypothetical neighbourhood situations, for example, where a child/children are perceived to be misbehaving</li> </ul>	No suitable data source identified			
	Safety				
Neighbourhood	Percentage of 16 and 17 year olds who feel very or fairly safe walking alone in their neighbourhood after dark	Scottish Household Survey			
safety	<ul> <li>Percentage of S2 and S4 pupils who, generally speaking, always feel safe in the area they live<sup>ii</sup></li> </ul>	• HBSC			
Salety	<ul> <li>Percentage of S2 and S4 pupils who agree a lot or a bit that it is safe for younger children to play outside during the day in the area where they live<sup>ii</sup></li> </ul>	• HBSC			

Structural							
Indicator	Measure	Data source					
	Equality						
Absolute poverty	<ul> <li>Percentage of children and young people aged 15 years and under, or aged 16 to 19 years (but not married nor in a Civil Partnership nor living with a partner and living with their parents and in full-time non-advanced education or in unwaged government training), living in absolute poverty (before housing costs) (Absolute poverty is defined as living in households whose equivalised income is below 60% of the (inflation adjusted) Great Britain median income in 1998/99)</li> </ul>	<ul> <li>Scottish Government Income and Poverty Statistics</li> </ul>					
Income inequality	<ul> <li>Gini coefficient for households with children aged 17 years and under<sup>xiii</sup></li> </ul>	<ul> <li>Department for Work and Pensions Households Below Average Income dataset from the Family Resources Survey</li> </ul>					
Relative poverty	<ul> <li>Percentage of children and young people aged 15 years and under, or aged 16 to 19 years (but not married nor in a Civil Partnership nor living with a partner and living with their parents and in full-time non-advanced education or in unwaged government training), living in relative poverty (before housing costs) (Relative poverty is defined as living in households whose equivalised income is below 60% of UK median income in the same year)</li> </ul>	<ul> <li>Scottish Government Income and Poverty Statistics</li> </ul>					
Persistent Poverty	Percentage of children and young people aged 15 years and under, or aged 16 to18 years (but in school or non-advanced further education, not married and living with their parents) living in persistent poverty (before housing costs) (Persistent poverty is defined as living in households which have spent three or more years out of any four-year period in relative poverty)	<ul> <li>Scottish Government Income and Poverty Statistics</li> </ul>					
Equality analysis	<ul> <li>Analysis of all of the other indicators by protected characteristics under the Equality Act (2010),<sup>xiv</sup> deprivation, rurality, children with additional support needs and children looked after, where data allow</li> </ul>	<ul> <li>Scottish surveys, plus administrative datasets for the Scottish Index of Multiple Deprivation, Scottish Government Children and Young People and School Education Statistics</li> </ul>					

Structural						
Indicator	Measure	Data source				
Social inclusion						
Workless households	Percentage of children and young people aged 15 years and under who live in workless households	Annual Population Survey				
Positive and sustained destinations	<ul> <li>Percentage of school leavers (from Scottish publicly funded schools) in positive and sustained destinations (further education, higher education, employment, volunteering or training) 9 months after leaving school</li> </ul>	<ul> <li>School Leavers Destination Survey, Follow-up Survey</li> </ul>				
	• Percentage of 16 and 17 year olds with at least one academic or vocational educational qualification	Annual Population Survey				
	• Percentage of children and young people leaving school with a qualification in English and Maths at least at SCQF Level 3 (Access 3 or Standard Grade at Foundation level)	Scottish Government School     Education Statistics				
Education	<ul> <li>Percentage of P3, P7 and S2 pupils estimated to have 'well-established' or better skills at the expected levels for their stages in mathematics<sup>ii, xv</sup></li> </ul>	Scottish Survey of Achievement				
	<ul> <li>Percentage of P3, P7 and S2 pupils estimated to have 'well-established' or better skills at the expected levels for their stages in reading<sup>ii, xvi</sup></li> </ul>	Scottish Survey of Achievement				
School exclusion	• Exclusions (temporary and removal from register) from local authority schools per 1,000 pupils in the past year	Scottish Government School     Education Statistics				
	<ul> <li>Cases assessed as homeless or potentially homeless in the past year where the main applicant was aged 16 or 17 years old at the time of assessment per 1,000<sup>xvii</sup></li> </ul>	Scottish Government Housing and Regeneration Statistics				
Homelessness	• Children and young people in cases assessed as homeless or potentially homeless per 1,000 aged 15 years and under, or aged 16 to18 years (who are either receiving or about to begin full-time education or training, or are, from some other reason unable to support themselves), in the past year <sup>xvii</sup>	<ul> <li>Scottish Government Housing and Regeneration Statistics</li> </ul>				
Feeling lonely	<ul> <li>Percentage of P7, S2 and S4 pupils who never felt lonely in the last week<sup>ii</sup></li> </ul>	• HBSC				
Children looked after	• Children and young people looked after by local authorities per 1,000 aged 17 years and under in the past year • Scottish Government C and Young People Sta					
Additional support needs	Pupils classified as having additional support needs per 1,000 pupils in the past year	Scottish Government School     Education Statistics				

Structural					
Indicator	Measure	Data source			
	Discrimination				
Discrimination and harassment <sup>R</sup>	<ul> <li>Assessment of whether children and young people feel that they have been unfairly treated, discriminated against, harassed or abused due to discrimination</li> </ul>	No suitable data source identified			
Perception of attitude of adults towards children and young people <sup>R</sup>	<ul> <li>Percentage of children and young people who in general think adults have a lot or a fair amount of trust in young people today</li> </ul>	• No suitable data source identified			
Stigma towards children and young people <sup>R</sup>	• Assessment of whether children and young people perceive themselves to be labelled or stigmatised in some way	No suitable data source identified			
	Physical environment				
Neighbourhood satisfaction	<ul> <li>Percentage of 16 and 17 year olds who rate their neighbourhood as a very or fairly good place to live</li> <li>Percentage of S2 and S4 pupils who feel that the area they live is a really good or good place to live<sup>ii</sup></li> </ul>	<ul><li>Scottish Household Survey</li><li>HBSC</li></ul>			
Free time places	<ul> <li>Percentage of S2 and S4 pupils who agree a lot or a bit that there are good places (e.g. leisure centres, parks, shops) to spend their free time in the area that they live<sup>ii</sup></li> </ul>	• HBSC			
Greenspace <sup>R</sup>	Assessment of whether children and young people feel they can access green and open spaces in their neighbourhood	No suitable data source identified			
House condition	Percentage of households with children aged 17 years and under where the highest income householder (or their spouse/partner) rates the condition of their house or flat as very or fairly good	Scottish House Condition Survey			
Overcrowding	<ul> <li>Percentage of households with children aged 17 years and under where the highest income householder (or their spouse/partner) feels their home has too few rooms</li> </ul>	Scottish House Condition Survey			
Violence					
Domestic abuse <sup>R</sup>	Domestic abuse <sup>R</sup> • Percentage of children and young people aged 17 years and under who live in a household where there is domestic abuse				
Child protection <sup>R</sup>	Assessment of the number of children and young people requiring child protection <sup>xviii</sup>	No suitable data source identified			
Neighbourhood violence <sup>R</sup>	Assessment of children and young people's exposure to violence in their neighbourhood	No suitable data source identified			

Structural					
Indicator	Measure	Data source			
	Culture				
Perception of looks	of looks • Percentage of P7, S2 and S4 pupils who think they are average, quite or very good looking <sup>ii</sup> • HBSC				
Body image	Body image       • Percentage of P7, S2 and S4 pupils who think that their body is about the right size <sup>ii</sup> • HBSC				
Culture and values <sup>R</sup>	Assessment(s) relating to the materialism and individualism of modern Western consumer culture	No suitable data source identified			

<sup>i</sup> Where an indicator is based on the mean, the mean will be used if the data are normally distributed; if not then the median is more appropriate. The appropriateness of the mean will be assessed on analysis of the data.

<sup>ii</sup> P1, P3, P7, S2 and S4 pupils are circa 5, 7, 11, 13 and 15 year olds, respectively.

<sup>iii R</sup> Indicates that there is a recommendation attached to the indicator.

<sup>iv</sup> Data collected by parental/guardian assessment.

<sup>v</sup> Recent service changes from hospital-based to community-based treatment have affected the figures for SMR04 which means that retrospective SMR04 data are not suitable for trend analysis. These changes have largely settled down making prospective SMR04 data suitable to use. This indicator, however, remains sensitive to changes in clinical practice and service demands. This means that trends have to be interpreted with caution and care as changes in the trend may not necessarily reflect a change in population need.

<sup>vi</sup> Data includes parent/guardian assessment for those aged 12 years and under and self-assessment for those aged 13 years and above.

<sup>vii</sup> The percentage of S2 & S4 pupils who drank alcohol in the last week and the mean number of units drunk by S2 & S4 pupils in the last week need to be interpreted in tandem.

viii This indicator covers attachment felt by the child, a specific aspect of early parent-child relationships.

<sup>ix</sup> It is unknown from the self-report data if a prisoner is the biological parent, step-parent or guardian etc. of the child.

\* Administrative data on prisoners are being improved and could include information on children. This could be a more accurate source of data in the future than the Scottish Prison Survey which is self-report.

<sup>xi</sup> Indicator under development by the Scottish Government. The suitability of this as an indicator for monitoring trends will be assessed.

<sup>xii</sup> Parent will be aged 16 years and above.

xiii Gini coefficient is an inequality index which measures income inequality between the richest decile of a population and the poorest decile.

xiv The protected characteristics under the act are: age, sex, disability, race, sexual orientation, religion or belief, gender reassignment, marriage and civil partnership, pregnancy and maternity.

\*\* From 2011 the Scottish Survey of Achievement was replaced by the Scottish Survey of Literacy and Numeracy. This indicator will be revised to reflect this new data source when the Scottish Survey of Literacy and Numeracy reports on numeracy in 2012.

- <sup>xvi</sup> From 2011 the Scottish Survey of Achievement was replaced by the Scottish Survey of Literacy and Numeracy. This indicator will be revised to reflect this new data source when the Scottish Survey of Literacy and Numeracy reports on literacy in 2013.
- <sup>xvii</sup> The data include some children and young people who are classified as homeless more than once in a year. However, the number is small and declining.

xviii The Scottish Government is currently developing a child protection indicator for the national performance framework. This will be aligned to, if appropriate.

## Appendix 2: Data caveats and limitations

	Mental health				
Indicator	Measure	Data source	Comments, data limitations		
		Mental w	vellbeing		
Mental wellbeing	Mean score for 16 and 17 year olds on the Warwick-Edinburgh Mental Well- being Scale (WEMWBS)	Scottish Health Survey	<ul> <li>Point estimates and time trend for the whole population of 16 and 17 year olds combined are presented for single years as numbers were large enough and allow for a longer time trend.</li> <li>Equalities analysis was undertaken using a combined dataset of two years data (2010 and 2011), due to small numbers, to improve precision of estimates broken down by age, sex and SIMD. Numbers were too small even with this combined data set for urban-rural analysis.</li> <li>Data were looked at by ethnicity, religion and limiting long-standing illness but the numbers were very small (less than 10 in some cases) even with combined years. Analysis was not undertaken by these categories.</li> </ul>		
	Mean score for S2 and S4 pupils on the Warwick-Edinburgh Mental Well-being Scale (WEMWBS)	SALSUS	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. The 95% confidence intervals presented are 'approximate confidence intervals'. Exact confidence intervals cannot be calculated due to an absence of the DEFT (design factor) values. The approximate values were calculated using the normal approximation method. This assumes a random sample design, which SALSUS is not, and do not take the SALSUS survey design factors into account.		
Life satisfaction	Mean score of how satisfied 16 and 17 year olds are with their life as a while nowadays	Scottish Health Survey	Point estimates and time trend for the whole population of 16 and 17 year olds combined are presented for single years as numbers were large enough and allow for a longer time trend. Equalities analysis was undertaken using a combined dataset of two years data (2010 and 2011), due to small numbers, to improve precision of estimates broken down by age, sex and SIMD. Numbers were too		

			small even with this combined data set for urban-rural analysis.
			Data were looked at by ethnicity, religion and limiting long-standing illness but the numbers were very small (less than 10 in some cases) even with combined years. Analysis was not undertaken by these categories.
	Mean score for P7, S2 and S4 pupils on an adapted Cantril ladder (rating of whether an individual perceives they have the best or worst possible life for them at the moment)	Health Behaviour in School-aged Children Survey (HBSC)	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. Equalities analysis was undertaken for gender and age only as variables to allow for SIMD and urban-rural analysis are not included in the survey.
Happiness	Percentage of P7, S2 and S4 pupils who feel very happy with their life at present	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. The 1998 data, included in the time trend analysis, were obtained from a question that included a 'don't know' response option, which was absent from the response options of subsequent years. Equalities analysis was undertaken for gender and age only as variables to allow for SIMD and urban-rural analysis are not included in the survey.
Pro-social behaviour	Percentage of S2 and S4 pupils with a 'normal' score on the pro-social scale of the Strengths and Difficulties Questionnaire (SDQ)	SALSUS	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. A normal score on this SDQ sub-scale for self-completion is between 6 and 10 (10 being the maximum score). The 95% confidence intervals presented are 'approximate confidence intervals'. Exact confidence intervals cannot be calculated due to an absence of the DEFT (design factor) values. The approximate values were calculated using the normal approximation method. This assumes a random sample design, which SALSUS is not, and do not take the SALSUS survey design factors into account.
	Percentage of 4 to 12 year olds with a 'normal' score on the pro-social scale of the Strengths and Difficulties	Scottish Health Survey	A normal score on this SDQ sub-scale for parental completion is between 6 and 10 (10 being the maximum score).

	Questionnaire (SDQ)		Equalities analysis was undertaken using a combined dataset of four years data (2008-11), due to small numbers, to improve precision of estimates broken down by age, sex, SIMD and urban-rural classification.
		Mental heal	th problems
Common mental health problems	Percentage of 16 to 19 year olds who score 4 or more on the General Health Questionnaire-12 (GHQ-12) (a score of 4 or more indicates a possible mental health problem over the past few weeks)	Scottish Health Survey	<ul> <li>Point estimates and time trend for whole population of 16 and 19 year olds combined presented for single year as numbers are large enough and allows for a longer time trend.</li> <li>Equalities analysis was undertaken using combined dataset of four years data (2008-11), due to small numbers, to improve precision of estimates broken down by age, sex and SIMD. Numbers were too small even with this combined data set for urban-rural analysis.</li> <li>Data were looked at by ethnicity, religion and limiting long-standing illness but the numbers were very small (less than 10 in some cases) even with combined years. Analysis was not undertaken by these categories.</li> </ul>
Emotional and behavioural problems	Percentage of S2 and S4 pupils with a 'borderline' or 'abnormal' total difficulties score on the Strengths and Difficulties Questionnaire (SDQ)	SALSUS	As the measure is based on discontinuous age groups, which do not readily combined into a summary estimate, estimates for each age group are, therefore, discussed separately. A total difficulties score is obtained by summing the scores from four of the five sub-scales (emotional symptoms, conduct problems, hyperactivity/inattention and peer relationship problems). A borderline score for self-completion is between 16 and 19 and an abnormal score is between 20 and 40 (40 being the maximum score). The 95% confidence intervals presented are 'approximate confidence intervals'. Exact confidence intervals cannot be calculated due to an absence of the DEFT (design factor) values. The approximate values were calculated using the normal approximation method. This assumes a random sample design, which SALSUS is not, and do not take the SALSUS survey design factors into account.

	Percentage of 4 to 12 year olds with a 'borderline' or 'abnormal' total difficulties score on the Strengths and Difficulties Questionnaire (SDQ)	Scottish Health Survey	A total difficulties score is obtained by summing the scores from four of the five sub-scales (emotional symptoms, conduct problems, hyperactivity/inattention and peer relationship problems). A borderline score for parental completion is between 14 and 16 and an abnormal score is between 17 and 40 (40 being the maximum score). Equalities analysis was undertaken using a combined dataset of four years data (2008-11), due to small numbers, to improve precision of estimates broken down by age (age groups match that reported in Scottish Health survey), sex, SIMD and urban-rural classification.
Emotional symptoms	Percentage of S2 and S4 pupils with a 'borderline' or 'abnormal' score on the emotional scale of the Strengths and Difficulties Questionnaire (SDQ)	SALSUS	<ul> <li>As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.</li> <li>A borderline score for self-completion of the emotional symptoms scale of the SDQ is 6 and an abnormal score is between 7 and 10 (10 being the maximum score).</li> <li>The 95% confidence intervals presented are 'approximate confidence intervals'. Exact confidence intervals cannot be calculated due to an absence of the DEFT (design factor) values. The approximate values were calculated using the normal approximation method. This assumes a random sample design, which SALSUS is not, and do not take the SALSUS survey design factors into account.</li> </ul>
	Percentage of 4 to 12 year olds with a 'borderline' or 'abnormal' score on the emotional symptoms scale of the Strengths and Difficulties Questionnaire (SDQ)	Scottish Health Survey	<ul> <li>A borderline score for parental completion of the emotional symptoms scale of the SDQ is 4 and an abnormal score is between 5 and 10 (10 being the maximum score).</li> <li>Equalities analysis was undertaken using a combined dataset of four years data (2008-11), due to small numbers, to improve precision of estimates broken down by age (age groups match that reported in Scottish Health survey), sex, SIMD and urban-rural classification.</li> </ul>
Conduct problems	Percentage of S2 and S4 pupils with a 'borderline' or 'abnormal' score on the conduct problems scale of the Strengths and Difficulties Questionnaire	SALSUS	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. A borderline score for self-completion of the conduct problems scale of the SDQ is 4 and an abnormal score is between 5 and 10 (10 being the

			maximum score).
	Percentage of 4 to 12 year olds with a 'borderline' or 'abnormal' score on the conduct problems scale of the Strengths	Scottish Health	<ul> <li>The 95% confidence intervals presented are 'approximate confidence intervals'. Exact confidence intervals cannot be calculated due to an absence of the DEFT (design factor) values. The approximate values were calculated using the normal approximation method. This assumes a random sample design, which SALSUS is not, and do not take the SALSUS survey design factors into account.</li> <li>A borderline score for parental completion of the conduct problems scale of the SDQ is 3 and an abnormal score is between 4 and 10 (10 being the maximum score).</li> <li>Equalities analysis was undertaken using a combined dataset of four</li> </ul>
	and Difficulties Questionnaire (SDQ)	Survey	years data (2008-11), due to small numbers, to improve precision of estimates broken down by age (age groups match that reported in Scottish Health survey), sex, SIMD and urban-rural classification.
Hyperactivity/i nattention	Percentage of S2 and S4 with a 'borderline' or 'abnormal' score on the hyperactivity/inattention scale of the Strengths and Difficulties Questionnaire (SDQ)	SALSUS	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. A borderline score for self-completion of the hyperactivity/inattention scale of the SDQ is 6 and an abnormal score is between 7 and 10 (10 being the maximum score). The 95% confidence intervals presented are 'approximate confidence intervals'. Exact confidence intervals cannot be calculated due to an absence of the DEFT (design factor) values. The approximate values were calculated using the normal approximation method. This assumes a random sample design, which SALSUS is not, and do not take the SALSUS survey design factors into account.
	Percentage of 4 to 12 year olds with a 'borderline' or 'abnormal' score on the hyperactivity/inattention scale of the Strengths and Difficulties Questionnaire (SDQ)	Scottish Health Survey	A borderline score for parental completion of the hyperactivity/inattention scale of the SDQ is 6 and an abnormal score is between 7 and 10 (10 being the maximum score). Equalities analysis was undertaken using a combined dataset of four years data (2008-11), due to small numbers, to improve precision of estimates broken down by age (age groups match that reported in Scottish Health survey), sex, SIMD and urban-rural classification.

Sadness	Percentage of P7, S2 and S4 pupils who felt sad quite often, very often or always in the last week	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. Equalities analysis was undertaken for gender and age only as variables to allow for SIMD and urban-rural analysis are not included in the survey.
Alcohol dependency	Percentage of 16 to 19 year olds who score 2 or more on the CAGE questionnaire ( a score of 2 or more indicates possible alcohol dependency in the previous 3 months)	Scottish Health Survey	A new problem drink variable was created as per the adult mental health indicators report ( <u>www.scotpho.org.uk/publications/reports-and-papers/887-scotlands-mental-health-adults-2012</u> ) to take into account that the CAGE score being used in the mental health indicators is based on the 4 CAGE questions and not the six that the Scottish Government uses, which includes two physical dependency questions over the CAGE questions. Point estimates and time trend analysis for the whole population of 16 and 19 year olds combined are presented for single year as numbers are large enough and allow for a longer time trend. Equalities analysis was undertaken using a combined dataset of four years data (2008-11), due to small numbers, to improve precision of estimates broken down by age, sex and SIMD. Numbers were too small even with this combined data set for age and urban-rural analysis.
Drug-related disorders	Hospital patients per 100,000 children and young people aged 19 years and under discharged in the past year for mental and behavioural disorders due to psychoactive substance use (general acute and psychiatric hospitals)	ISD Scotland, SMR01/04	Recent service changes from hospital-based to community-based treatment have affected the figures for SMR04 which means that retrospective SMR04 data are not suitable for trend analysis and have not been presented.
Suicide	Deaths per 100,000 children and young people aged 19 years and under in the past year from intentional self-harm or by events of undetermined intent	National Records of Scotland	<ul> <li>Point estimate is presented using a combined dataset of five years data (2007-11), due to small numbers, to improve precision of the estimate. As such it was not possible to present a time trend.</li> <li>Equalities analysis was undertaken using a combined dataset of five years data (2007-11), due to small numbers, to improve precision of estimates broken down by age, sex and SIMD. Numbers were too small even with this combined data set for age and urban-rural analysis.</li> </ul>

Contextual constructs						
	Individual					
		Health	y living			
Physical activity	Percentage of 5 to 15 year olds who met the recommended level of physical activity for children (at least 60 minutes of physical activity on all 7 days in the last week) in the previous week	Scottish Health Survey	Data include parent/guardian assessment for those aged 12 years and under and self-assessment for those aged 13 years and above.			
	Percentage of 16 and 17 year olds who ate five or more portions of fruit and vegetables in the previous day	Scottish Health Survey	Point estimate for the whole population of 16 and 17 year olds combined are presented for a combined dataset of four years data (2008-11), due to small numbers, to improve precision of estimates. Time trend analysis was not therefore possible as this allows only two time points (2003 and 2008-11). Equalities analysis was undertaken using the combined 2008-11 dataset			
		0	and was only presented for gender.			
Healthy eating	Percentage of 2 to 15 year olds who ate five or more portions of fruit and vegetables in the previous day	Scottish Health Survey	Data include parent/guardian assessment for those aged 12 years and under and self-assessment for those aged 13 years and above.			
	Percentage of P7, S2 and S4 pupils who usually have breakfast every weekday	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.			
			Although the variable was present in 1998, it does not allow determination of breakfasts on weekdays and was omitted from analyses.			
Obesity	Percentage of 2 to 15 year olds classified as obese or morbidly obese (BMI ≥ 95th centile of the 1990 UK reference data)	Scottish Health Survey	-			
Alcohol consumption	Percentage of S2 and S4 pupils who drank alcohol in the last week	SALSUS	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. 95% confidence intervals were not calculated due to an absence of the DEFT (design factor) values.			

	Percentage of P7 pupils who drink anything alcoholic every week	HBSC	<ul> <li>Percentages were obtained by combining separate variables that ask about the frequency with which the following alcoholic drinks are consumed:</li> <li>2010 - Beer, Wine, Spirits, Alcopops, Cider, Fortified Wine, Other 2006 - Beer, Wine, Spirits, Alcopops, Cider, Fortified Wine, Other 2002 - Beer, Wine, Spirits, Cider, Fortified Wine</li> <li>1998 - Beer, Wine, Spirits, Alcopops, Cider, Fortified Wine</li> <li>Percentages therefore reflect the consumption of any alcohol beverage at least weekly.</li> </ul>
	Mean number of units drunk by S2 and S4 pupils in the last week	SALSUS	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. 95% confidence intervals were not calculated due to an absence of the
Drug use	Percentage of S2 and S4 pupils who usually take illicit drugs at least once a month	SALSUS	DEFT (design factor) values.         As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.         95% confidence intervals were not calculated due to an absence of the DEFT (design factor) values.
	Percentage of 16 and 17 year olds who smoke cigarettes nowadays	Scottish Household Survey	Data are from the random adult section of the survey. Equalities analysis was undertaken using a combined dataset of two years data (2010-11), due to small numbers, to improve precision of estimates. Even when combining two years of data, sample sizes for 16 and 17 year olds are too small to provide robust estimates for each age separately.
Smoking	Percentage of S2 and S4 pupils who usually smoke at least one cigarette a week	SALSUS	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. 95% confidence intervals were not calculated due to an absence of the DEFT (design factor) values.
	Percentage of P7 pupils who smoke at least once a week	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.

			Percentages are very small and the large confidence intervals show imprecision in figures.
	Pregnancies (registered births and stillbirths combined with notifications of abortions) in children and young people aged 15 years and under per 1,000 females aged 13 and 15 years old in the past year	ISD Scotland	Includes all pregnancies in women aged 16 years and under. The rate is calculated using the female population aged 13 to 15 years.
Sexual health	Percentage of S4 pupils who reported having had sexual intercourse, who used a condom on the last occasion that they had sexual intercourse	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. The data include participants who answered that they had ever had sexual intercourse and also to have used a condom the last time they had sexual intercourse on either a question about method(s) to prevent pregnancy or general condom use.
		Genera	I health
Self-reported health	Percentage of 16 and 17 year olds who perceive their health in general to be good or very good	Scottish Health Survey	Point estimate for the whole population of 16 and 17 year olds combined are presented for a combined dataset of four years data (2008-11), due to small numbers, to improve precision of estimates. Time trend analysis was not therefore possible as this allows only two time points (2003 and 2008-11). Equalities analysis was undertaken using the combined 2008-11 dataset and was only presented for gender.
	Percentage of children and young people aged 15 years and under whose health in general is perceived to be good or very good	Scottish Health Survey	Data include parent/guardian assessment for those aged 12 years and under and self-assessment for those aged 13 years and above.
Long-standing physical condition or disability	Percentage of 16 and 17 year olds who have a long-standing physical condition or disability that has troubled them for at least 12 months, or is likely to affect them for at least 12 months	Scottish Health Survey	Point estimate for the whole population of 16 and 17 year olds combined are presented for a combined dataset of four years data (2008-11), due to small numbers, to improve precision of estimates. Time trend analysis was not therefore possible as this allows only two time points (2003 and 2008-11). Equalities analysis was undertaken using the combined 2008-11 dataset and was only presented for gender.

	Percentage of children and young people aged 15 years and under who have a long-standing physical condition or disability that has troubled them for at least 12 months, or is likely to affect them for at least 12 months	Scottish Health Survey	Data include parent/guardian assessment for those aged 12 years and under and self-assessment for those aged 13 years and above.
Limiting long- standing physical condition or	Percentage of 16 and 17 year olds who have a long-standing physical condition or disability that limits their daily activities	Scottish Health Survey	Point estimate for the whole population of 16 and 17 year olds combined are presented for a combined dataset of four years data (2008-11), due to small numbers, to improve precision of estimates. Time trend analysis was not therefore possible as this allows only two time points (2003 and 2008-11). Equalities analysis was undertaken using the combined 2008-11 dataset and was only presented for gender.
disability	Percentage of children and young people aged 15 years and under who have a long-standing physical condition or disability that limits their daily activities	Scottish Health Survey	Data include parent/guardian assessment for those aged 12 years and under and self-assessment for those aged 13 years and above.

	Family				
Family relations					
Family meals	Percentage of P7, S2 and S4 pupils who eat a meal with one or both parents 4 or more times a week	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.		
Talking to	Percentage of P7, S2 and S4 pupils who find it very easy or easy to talk to their mother or stepmother (or father's partner) about things that really bother them	HBSC	As the measure is based on discontinuous age groups, which do not readily combined into a summary estimate, estimates for each age group are, therefore, discussed separately.		
parents	Percentage of P7, S2 and S4 pupils who find it easy or very easy to talk to their father or stepfather (or mother's partner) about things that really bother them	HBSC	Data from the 1998 survey are not included in the time trend as the talking to stepmother or stepfather response option was not included in the question in this survey wave.		
Treatment by parent(s)	Percentage of P7, S2 and S4 pupils who felt that their parent(s) treated them fairly very often or always in the last week	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.		
		Family s	tructure		
Lone parent family	Percentage of children and young people aged 17 years and under living in lone parent households	Scottish Household Survey	Data are from the household part of the Scottish Household Survey. A single parent household is defined in this survey as a household consisting of only one adult of any age and at least one child. For this indicators report, an adult is defined as a person aged 18 years plus to account for the requirement to look at young people aged 16 or 17 still living in the parental home. This differs from the standard definition used in Scottish Household Survey, where an adult is defined as a person aged 16 years plus. This definition means that a household containing one parent and two or more children one of which is aged 18 years old or above would not be classified as a lone parent household.		
Teenage parents	Live births per 1,000 females aged 15 years and under in the past year	National Records of Scotland	-		

Parental	Children and young people who had a father in prison per 1,000 aged 17 years and under in the past year	Scottish Prison Survey	The Scottish Prison Survey is subject to considerable bias over and above the normal survey issues, making comparisons over time, particularly, too weak to comment on whether any difference was down to real change. This is largely due to non-response bias making the sample non-representative (the response every year being largely random in terms of who and how many people respond). It is also not possible to
imprisonment	Children and young people who had a mother in prison per 1,000 aged 17 years and under in the past year	Scottish Prison Survey	calculate robust confidence intervals because of the various caveats around this particular survey, which also include the administration of the survey not really allowing the calculation of a design effect. Equalities analysis was not possible as information on the age and gender of the children was unavailable.
		Parental he	althy living
Maternal smoking in pregnancy	Percentage of mother who smoked during pregnancy (women recorded as 'current smoker' at antenatal booking appointment) in the past year	ISD Scotland, SMR02	Excludes home births and births at non-NHS hospitals.
		Parenta	I health
Parental mental wellbeing	Mean score for parents of children aged 15 years and under on the Warwick- Edinburgh Mental Well-being Scale (WEMWBS)	Scottish Health Survey	A parent will be aged 16 years and above. The point estimate presented is for a combined dataset of two years data (2010-11), due to small numbers, to improve precision of estimates. Time trend analysis was not possible as WEMWBS has only been included in the survey since 2008 and the need to combine years to improve precision allows only two time points. Equalities analysis for the C&YP was not applicable as the mean score is that of the parents.
Parental common mental health problems	Percentage of children and young people aged 15 years and under who have a parent who scored 4 or more on the General Health Questionnaire-12 (GHQ- 12) (a score of 4 or more indicates a possible mental health problem over the past few weeks)	Scottish Health Survey	A parent will be aged 16 years and above. Point estimates are presented for a combined dataset of two years data (2010-11), due to small numbers, to improve precision of estimates. Time trend analysis is presented for 2003 (the survey methodology included a larger sample size allowing single year presentation) and for 2008-09 and 2010-11.

			Equalities analysis was undertaken using a combined dataset of two years data (2010-11), due to small numbers, to improve precision of estimates.
Parental alcohol dependency	Percentage of children and young people aged 15 years and under who have a parent who score 2 or more on the CAGE questionnaire ( a score of 2 or more indicates possible alcohol dependency in the previous 3 months)	Scottish Health Survey	A parent will be aged 16 years and above. The CAGE score used in the mental health indicators is based on the 4 CAGE questions and not the six that the Scottish Government uses, which includes two physical dependency questions over the CAGE questions. Point estimates are presented for a combined dataset of two years data (2010-11), due to small numbers, to improve precision of estimates. Time trend analysis is presented for 2003 (the survey methodology included a larger sample size allowing single year presentation) and for 2008-09 and 2010-11. Equalities analysis was undertaken using a combined dataset of two years data (2010-11), due to small numbers, to improve precision of estimates.
Parental limiting long- standing physical condition or disability	Percentage of children and young people aged 15 years and under who have a parent with a long-standing physical condition or disability that has troubled them for at least 12 months, or is likely to trouble them for at least 12 months, which limits their daily activities	Scottish Health Survey	A parent will be aged 16 years and above. Point estimates are presented for a combined dataset of two years data (2010-11), due to small numbers, to improve precision of estimates. Time trend analysis is presented for 2003 (the survey methodology included a larger sample size allowing single year presentation) and for 2008-09 and 2010-11. Equalities analysis was undertaken using a combined dataset of two years data (2010-11), due to small numbers, to improve precision of estimates.

	Learning environment					
	Engagement with learning					
School attendance	Percentage school attendance by primary and secondary pupils in the past year	Scottish Government School Education Statistics	The data are for the academic year and from mainstream grant-aided schools and do not include grant-aided special schools, independent schools or pre-school establishments. Point estimate, time trend and gender analysis include primary, secondary and special schools, whereas special schools are omitted from the age breakdown analysis. Special school data are recorded by the age of the child and not by the school year of the child, which is the categorisation by which this indicator is presented by age. Since 2010 data are collected biennially. The data are affected by differing reporting practices across schools, local authorities and over time. Although comparison of overall attendance is considered valid over time caution should be taken when considering year on year trends. A time trend was presented from 2007 onwards as earlier data was recorded differently and is therefore not considered comparable.			
Liking of school	Percentage of S2 and S4 pupils who like school a lot or a bit at the moment	SALSUS	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. 95% confidence intervals were not calculated due to an absence of the DEFT (design factor) values.			
	Percentage of P7 pupils who like school a lot or a bit at present	HBSC	-			
	Peer and friend relationships					
Close friends	Percentage of S2 and S4 pupils who have at least three or more close friends	SALSUS	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. 95% confidence intervals were not calculated due to an absence of the DEFT (design factor) values.			

	Percentage of P7 pupils who have at least three or more close friends	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. Percentages were obtained by combining two separate variables questioning about the number of close friends who were male or female. The 1998 data are not included as there was just one single variable which combined friends' gender.
Relationship with best friend	Percentage of P7, S2 and S4 pupils who find it easy or very easy to talk to their best friend about things that really bother them	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.
Peer relationship problems	Percentage of S2 and S4 pupils with a 'borderline' or 'abnormal' score on the peer relationship problems scale of the Strengths and Difficulties Questionnaire (SDQ)	SALSUS	<ul> <li>As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.</li> <li>A borderline score for self-completion of the peer relationship problems scale of the SDQ is 4-5 and an abnormal score is between 6 and 10 (10 being the maximum score).</li> <li>95% confidence intervals were not calculated due to an absence of the DEFT (design factor) values.</li> </ul>
	Percentage of 4 to 12 year olds with a 'borderline' or 'abnormal' score on the peer relationship problems scale of the Strengths and Difficulties Questionnaire (SDQ)	Scottish Health Survey	A borderline score for parental completion of the peer relationship problems scale of the SDQ is 3 and an abnormal score is between 4 and 10 (10 being the maximum score).
Acceptance by peers	Percentage of P7, S2 and S4 pupils who strongly agree or agree that other pupils accept them as they are	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. Data from the 1998 survey are omitted from the time trend analysis as the response options were too dissimilar to that of the 2010 survey. Although the response options for the 2002 and 2006 surveys also differed to that for 2010, they were structured similarly with 2 options, 'Agree a lot' and 'Agree a bit' above the neutral middle option in the 5 point likert response.
Experience of	Percentage of P7, S2 and S4 pupils who	HBSC	As the measure is based on discontinuous age groups, which do not

being bullied	haven't been bullied at school in the past couple of months		readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. The time frame for the 1998 survey was 'this term' rather than 'past couple of months' but the time period was considered close enough for this data to be included in the time trend analysis.
Participation in bullying	Percentage of P7, S2 and S4 pupils who haven't taken part in bullying another pupil(s) at school in the past couple of months	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. The time frame for the 1998 survey was 'this term' rather than 'past couple of months' but the time period was considered close enough for this data to be included in the time trend analysis.
		Educational	environment
Treatment by teachers	Percentage of P7, S2 and S4 pupils who strongly agree or agree that their teachers listen to how they would like to do things	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.
Relationship with teachers	Percentage of P7, S2 and S4 pupils who strongly agree or agree that their teachers care about them as a person	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.
Control at school	Percentage of P7, S2 and S4 pupils who strongly agree or agree that their teachers provide them with choice and options	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.
School ethos	Percentage of P7, S2 and S4 pupils who strongly agree or agree that the students in their class(es) treat each other with respect	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.
	Percentage of parents with school-aged children who strongly or tend to agree that the school keeps them informed about their child's progress	Scottish Household Survey	Data are from the household section of the survey. In families with more than one school-aged child, one was selected at random to be asked about.

	Pressures and expectations			
Time pressure	Percentage of P7, S2 and S4 pupils who felt that they had enough time for themselves very often or always in the last week	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.	
Choice of how to spend free time	Percentage of P7, S2 and S4 pupils who felt that they were able to do the things that they want to do in their free time very often or always in the last week	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.	
Pressure of school work	Percentage of S2 and S4 pupils who feel they very often or often have more school work than they can handle	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.	

Community					
	Participation				
Influencing local decisions	Percentage of households containing children and young people aged 8 to 17 years, where at least one 8 to 17 year old regularly takes part in representing young people's views or involvement in youth politics (e.g. Youth Forum or Dialogue Youth)	Scottish Household Survey	Data are from the household section of the survey and are asked of the household respondent if any household members are aged 8-21 years, including themself. There are slight variations in the question depending on whether there is more than one household member aged 8-21 and whether the household respondent is aged 8-21 years and selected to answer the questions about themselves. For the C&YP mental health indicator, data analysed are restricted to those households with at least one child aged 8-17 and no persons aged 18-21. Age and gender breakdowns are not possible as the question is asked of any children in the household and not of individual children.		
Participation in clubs, groups or organisations	Percentage of household containing children and young people aged 8 to 17 years, where at least one 8 to 17 year old regularly takes part in clubs, groups or organisations	Scottish Household Survey	Data are from the household section of the survey and are asked of the household respondent if any household members are aged 8-21 years, including themself. There are slight variations in the question depending on whether there is more than one household member aged 8-21 and whether the household respondent is aged 8-21 years and selected to answer the questions about themselves. For the C&YP mental health indicator, data analysed are restricted to those households with at least one child aged 8-17 and no persons aged 18-21. Age and gender breakdowns are not possible as the question is asked of any children in the household and not of individual children.		
		Social s	support		
Social support	Percentage of S2 and S4 pupils who agree a lot or a bit that they can ask for help or a favour from neighbours in the area where they live	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.		
		Tru	ust		
Neighbourhood trust	Percentage of S2 and S4 pupils who agree a lot or a bit that you can trust people in the area where they live	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.		

	Percentage of S2 and S4 pupils who disagree a lot or a bit that most people in the area where they live would try to take advantage of them if they got the chance	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.
Community cohesion	Percentage of S2 and S4 pupils who agree a lot or a bit that people say 'hello' and stop to talk to each other in the street in the area where they live	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.
		Saf	ety
Neighbourhood	Percentage of 16 and 17 year olds who feel very or fairly safe walking alone in their neighbourhood after dark	Scottish Household Survey	Data are from the random adult section of the survey. Equalities analysis was undertaken using a combined dataset of two years data (2010-11), due to small numbers, to improve precision of estimates. Even when combining two years of data, sample sizes for 16 and 17 year olds are too small to provide robust estimates for each age separately.
safety	Percentage of S2 and S4 pupils who, generally speaking, always feel safe in the area they live	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.
	Percentage of S2 and S4 pupils who agree a lot or a bit that it is safe for younger children to play outside during the day in the area where they live	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.

	Structural						
		Equa	lity				
Absolute poverty	Percentage of children and young people aged 15 years and under, or aged 16 to 19 years (but not married nor in a Civil Partnership nor living with a partner and living with their parents and in full-time non-advanced education or in unwaged government training), living in absolute poverty (before housing costs) (Absolute poverty is defined as living in households whose equivalised income is below 60% of the (inflation adjusted) Great Britain median income in 1998/99)	Scottish Government Income and Poverty Statistics	Absolute child poverty measure will be rebased to 2010/11 prices from 2011/12 onwards.				
Income inequality	GINI coefficient for households with children aged 17 years and under (Gini coefficient is an inequality index which measures income inequality between the richest decile of a population and the poorest decile)	Department for Work and Pensions Households Below Average Income dataset from the Family Resources Survey	Caution is needed when looking at year on year changes. It has only really been in the last year where the change has been significant.				
Relative poverty	Percentage of children and young people aged 15 years and under, or aged 16 to 19 years (but not married nor in a Civil Partnership nor living with a partner and living with their parents and in full-time non-advanced education or in unwaged government training), living in	Scottish Government Income and Poverty Statistics	-				

	relative poverty (before housing costs) (Relative poverty is defined as living in households whose equivalised income is below 60% of UK median income in the same year)		
Persistent poverty	Percentage of children and young people aged 15 years and under, or aged 16 to18 years (but in school or non-advanced further education, not married and living with their parents) living in persistent poverty (before housing costs) (Persistent poverty is defined as living in households which have spent three or more years out of any four-year period in relative poverty)	Scottish Government Income and Poverty Statistics	Data come from the British Household Panel Survey, which was subsumed into the Understanding Society Survey at the start of 2009. As data require to be obtained from four consecutive survey years the latest figure available is from 2005-08. Figures will be updated by Scottish Government when the new data become available. For more details see <u>www.understandingsociety.org.uk</u> . Estimates for confidence intervals have not been published.
		Social in	clusion
Workless households	Percentage of children and young people aged 15 years and under who live in workless households	Annual Population Survey	A household is defined as a single person, or a group of people living at the same address who have the address as their only or main residence and either share one main meal a day or share living accommodation (or both). The estimates only include those households with at least one person aged 16 to 64. A workless household is a household that includes at least one person aged 16 to 64 and where no-one aged 16 or over is in employment i.e. where all persons aged 16-64 are either unemployed or inactive.
Positive and sustained destinations	Percentage of school leavers (from Scottish publicly funded schools) in positive and sustained destinations (further education, higher education, employment, volunteering or training) 9 months after leaving school	School Leavers Destination Survey, Follow-up Survey	Skills Development Scotland contact each young person they have identified as a school leaver in the September after they leave school and the following March.
Education	Percentage of 16 and 17 year olds with at least one academic or vocational educational qualification	Annual Population Survey	-

Percentage of children and young people leaving school with a qualification in English and Maths at least at SCQF Level 3 (Access 3 or Standard Grade at Foundation level) Percentage of P3, P7 and S2 pupils estimated to have 'well-established' or better skills at the expected levels for their stages in numeracy New indicator from 2011: Percentage of P4, P7 and S2 pupils performing well or very well at the expected levels for their stage in numeracy	Scottish Government School Education Statistics Scottish Survey of Achievement (SSA) and Scottish Survey and Literacy and Numeracy (SSLN)	<ul> <li>This indicator measure has been revised from that in the indicator set that was published November 2011. This is a change from mathematics to numeracy.</li> <li>From 2010 the SSA was replaced by the SSLN and numeracy was first reported in this revised on biennially in 2012.</li> <li>For the SSA, 'well-established' or better means that 65% or more of the items at the level across two test booklets were answered correctly. 95% confidence intervals were calculated from the jackknife standard error for the 'well-established or better' estimate.</li> <li>The estimates are adjusted for the over-representation of reporting authorities in the national sample, and also for sample imbalance in terms of gender and deprivation, both within authorities and nationally.</li> <li>Only pupils from special schools were excluded and pupils with additional support needs who were being taught in mainstream schools could be withdrawn from the sample at the school's discretion, before or during testing.</li> <li>The SSLN covers publicly funded and independent mainstream schools only. 95% confidence intervals were calculated from the standard error, which relate to the proportion achieving "performing well at the level' or 'performing very well at the level'.</li> </ul>
Percentage of P3, P7 and S2 pupils estimated to have 'well-established' or better skills at the expected levels for their stages in reading New indicator from 2011: Percentage of P4, P7 and S2 pupils performing well or very well at the expected levels for their	SSA and SSLN	From 2010 the SSA was replaced by the SSLN and reading was first reported on in this revised survey biennially in 2011. SSA – 'Well-established' or better means that 65% or more of the items in the level-based tasks were answered correctly. 95% confidence intervals calculated from the jackknife standard error for the well-established or better estimate.

	stage in reading		Only pupils from special schools were excluded and pupils with additional support needs who were being taught in mainstream schools could be withdrawn from the sample at the school's discretion, before or during testing.
			The SSLN covers publicly funded and independent mainstream schools only. 95% confidence intervals were calculated from the standard error, which relate to the proportion achieving "performing well at the level' or 'performing very well at the level'.
School exclusion	Exclusions(temporary and removal from register) from local authority schools per 1,000 pupils in the past year	Scottish Government School Education Statistics	Data include publicly funded local authority schools only and do not include grant-aided schools. Point estimate, time trend and gender analysis include primary, secondary and special schools, whereas special schools are omitted from the age breakdown analysis. Special school data are recorded by the age of the child and not by the school year of the child, which is the categorisation by which this indicator is presented by age. Since 2010 data are collected biennially. Caution is required in interpreting trends due to changes in reporting systems. Exclusions since 2006/07 have fallen year on year due to work by schools and the local authority and an effort to improve relationships and behaviour and work with C&YP at risk of exclusion. New guidance on exclusions from school was published in 2011.
Homelessness	Cases assessed as homeless or potentially homeless in the past year where the main applicant was aged 16 or 17 years old at the time of assessment per 1,000	Scottish Government Housing and Regeneratio n Statistics	The data are derived from councils' administration of homelessness legislation, HL1 data. Trends can be affected by legislative changes, changes in interpretation of legislation or guidance and by changes in local authority recording practice. For instance a major Scotland wide approach to prevent homelessness (housing options work) has reduced the total number of applications overall and how these applications are assessed appears to be changing slightly, such as a reduction in the number of lost contacts between the application and assessment stage. Under the homelessness legislation, only people aged 16 or over can apply as homeless. They can also apply more than once and so make repeat presentations. The vast majority of cases which repeat are single person households and couples without children. The double counting that affects this measure has been removed. Further background

	Children and young people in cases assessed as homeless or potentially homeless per 1,000 aged 15 years and under, or aged 16 to 18 years (who are either receiving or about to begin full-time education or training, or are, for some other reason unable to support themselves), in the past year	Scottish Government Housing and Regeneration Statistics	<ul> <li>information on the data and context can be found at www.scotland.gov.uk/homelessstats.</li> <li>The data are derived from councils' administration of homelessness legislation, HL1 data. Trends can be affected by legislative changes, changes in interpretation of legislation or guidance and by changes in local authority recording practice. For instance a major Scotland wide approach to prevent homelessness (housing options work) has reduced the total number of applications overall and how these applications are assessed appears to be changing slightly, such as a reduction in the number of lost contacts between the application and assessment stage.</li> <li>Under the homelessness legislation, only people aged 16 or over can apply as homeless. They can also apply more than once and so make repeat presentations. The vast majority of cases which repeat are single person households and couples without children. The double counting that affects this measure has been removed.</li> <li>The data shows the total number of children, by age groups, which are contained with all homeless cases. These children have not made a homelessness application in their own right. As households containing children is largely unaffected by double counting. The reason households with children don't make repeat presentations is because they are entitled to settled accommodation. Further background information on the data and context can be found at www.scotland.gov.uk/homelesstats.</li> </ul>
Feeling lonely	Percentage of P7, S2 and S4 pupils who never felt lonely in the last week	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. Data from the question in the 1998 survey were not used as the time period was 'ever' rather than 'last week', and the response options also differed. This prevented time trend analysis.
Children looked after	Children and young people looked after by local authorities per 1,000 aged 17 years and under in the past year	Scottish Government Children and Young People Statistics	Children who are looked after by local authorities can either be looked after at home (e.g. supervised by the local authority but living at home) or looked after away from home (e.g. living in residential accommodation, in the community or with family/friends). The statistics were collected at an individual-level from local authorities. Data exclude children who are on a planned series of short term placements.

			Until 2009 the year end reporting date was 31st March, from 2010 it was 31st July. Until 2009 the population came from the mid-year population estimate on the 30 June of the previous year. In 2010 and 2011 the population estimate came from the mid-year population on the 30 June of the same year. The population estimates for 2012 come from the mid-year population estimate on the 30 June 2011 as 2012 data is unavailable at time of analysis.
			Changes between 2003-04 and 2004-05 are partly due to improved recording. In 2006 the Scottish Borders did not provide information on the number of looked after children. Prior to 2007, data include estimates wherever local authorities were not able to provide information. Statistics for years prior to 2008-09 used data supplied by local authorities aggregated at a local authority level. Since 2008-09, local authorities are reporting significant improvements in the quality of their data reporting as a result of the new individualised collection methodology. This should be borne in mind when performing cross-year comparisons.
Additional support needs	Pupils classified as having additional support needs per 1,000 pupils in the past year	Scottish Government School Education	Until 2009 the year end reporting date was 31st March, from 2010 it was 31st July. Changes over the years are partly due to improved recording. Data include all publicly funded schools in Scotland (local authority and grant-aided). All pupils in special schools are considered to have additional support needs. As special school data are not categorised by school year but by the age of the child, age equalities analysis is presented by age of the child and includes mainstream and special schools.
		Statistics	Caution is required in interpreting trends due to changes in recording practices, processes and categorisation. For example the marked increase between 2008 and 2009 was largely driven by changes in recording practices and efforts to improve processes around data capture by Glasgow City. The increases since 2010 are partly due to improvement in recording and an additional category of 'Child plans' introduced in 2011.

	Physical environment							
Neighbourhood satisfaction	Percentage of 16 and 17 year olds who rate their neighbourhood as a very or fairly good place to live	Scottish Household Survey	Data are from the random adult section of the survey. Equalities analysis was undertaken using a combined dataset of two years data (2010-11), due to small numbers, to improve precision of estimates. Even when combining two years of data, sample sizes for 16 and 17 year olds are too small to provide robust estimates for each age separately.					
	Percentage of S2 and S4 pupils who feel that the area they live is a really good or good place to live	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.					
Free time places	Percentage of S2 and S4 pupils who agree a lot or a bit that there are good places (e.g. leisure centres, parks, shops) to spend their free time in the area that they live	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.					
House condition	Percentage of households with children aged 17 and under where the highest income householder (or their spouse/partner) rates the condition of their house or flat as very or fairly good	Scottish House Condition Survey	In 2007 there was a change to calendar collection from financial year, as a result there is a small collection gap between mid-2006 and the beginning of 2007. This is viewed by the Scottish House Condition Survey team as approximately continuous and although there is nothing that can be done to rectify this there is no obvious discontinuity in the outputs that would be cause for concern. No equalities analysis was possible as there is no information on the children as the highest income householder is the responder.					
Overcrowding	Percentage of households with children aged 17 years and under where the highest income householder (or their spouse/partner) feels their home has too few rooms	Scottish House Condition Survey	In 2007 there was a change to calendar collection from financial year; as a result there is a small collection gap between mid-2006 and the beginning of 2007. This is viewed by the Scottish House Condition Survey team as approximately continuous and although there is nothing that can be done to rectify this there is no obvious discontinuity in the outputs that would be cause for concern. No equalities analysis was possible as there is no information on the children as the highest income householder is the responder.					

	Culture						
Perception of looks	Percentage of P7, S2 and S4 pupils who think they are average, quite or very good looking	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately.				
Body image	Percentage of P7, S2 and S4 pupils who think that their body is about the right size	HBSC	As the measure is based on discontinuous age groups, which do not readily combine into a summary estimate, estimates for each age group are, therefore, discussed separately. Data from the 1998 survey were omitted as an additional response of 'Don't think about it' was included in the response options.				

## Appendix 3: Age group coverage of the children and young people's indicators

	Construct	Indicator	Pre-birth	Pre-school	Primary	Secondary	Post- compulsory schooling
		Mental wellbeing					
	Mental	Life satisfaction					
	Wellbeing	Happiness					
		Pro-social behaviour					
		Common Mental Health Problems					
		Emotional and Behavioural Problems					
High level		Emotional symptoms					
Р Ч		Conduct problems					
lig	Mental health	Hyperactivity/inattention					
-	problems	Sadness					
	problems	Alcohol dependency					
		Drug-related disorders					
		Suicide					
		Self-harm					
		Eating disorder					
	Learning and	Play					
	development	Readiness for school					
		Physical activity					
		Healthy eating					
		Obesity					
Individual	Healthy living	Alcohol consumption					
vid		Drug use					
ipu		Smoking					
-		Sexual health					_
		Self-reported health					
	General health	Long-standing physical condition or disability					
		Limiting long-standing physical condition or disability					
	Spirituality	Spirituality					

	Emotional intelligence	Emotional intelligence			
	Life events	Stressful life events			
	Life events	Adverse childhood experiences			
		Parent-child relationship			
		Nurturing adult			
		Family meals			
	Family relations	Talking to parents			
		Treatment by parents			
		Parental discord			
		Caring for a family member			
		Lone parent family			
	Family structure	Contact with non-resident parent			
Ϊγ	r anny Structure	Teenage parents			
Family		Parental imprisonment			
Ë		Maternal smoking in pregnancy			
	Parental healthy living	Maternal alcohol use in pregnancy			
		Maternal drug use in pregnancy			
		Parental problematic alcohol consumption			
		Parental problematic drug use			
		Parental mental wellbeing			
		Parental common mental health problems			
	Parental health	Post-natal depression			
		Parental alcohol dependency			
		Parental limiting long-standing physical condition or disability			
Ļ	Engagement	Pre-school home learning environment			
nen	with learning	School attendance			
μu		Liking of school			
iro		Early years friendships			
nv		Close friends			
g e	Peer and friend	Relationship with best friend			
inç	relationships	Peer relationship problems			
Learning environment		Acceptance by peers			
-es		Experience of being bullied			
		Participation in bullying			

		Treatment by teachers			
Learning environment cont.		Relationship with teachers			
	Educational	Relationship with all school staff			
		Control at school			
	environment				
		School ethos			
		Time pressure			
b		Choice of how to spend free time			
in	Pressures and	School work pressure			
Learr	expectations	Pressure to succeed in life			
		Pressure to fit in			
		Sense of agency			
		Respect of children's rights			
	Participation	Influencing local decisions			
ity		Participation in clubs, groups or organisations			
n	Social networks	Contact with peers			
Ш	Social support	Social support			
Community		Neighbourhood trust			
0	Trust	Community cohesion			
		Informal social control			
	Safety	Neighbourhood safety			
		Absolute poverty			
	E anna llitera	Income inequality			
	Equality	Relative poverty			
		Persistent poverty			
=		Workless households			
ura		Positive and sustained destinations			
Structural		Education			
ťr					
S	Social Inclusion	School exclusion			
		Homelessness			
		Feeling lonely			
		Children looked after			
		Additional support needs			

Structural cont.	Discrimination	Discrimination and harassment	
		Perception of attitude of adults towards children and young	
		people	
	Physical environment	Stight towards children and young people       Neighbourhood satisfaction	
		Free time places	
		Greenspace	
		House condition	
		Overcrowding	
	Violence	Domestic abuse	
		Child protection	
		Neighbourhood violence	
	Culture	Perception of looks	
		Body image	
		Culture and values	

Colour code	Data source
	Annual Population Survey
	Administrative data/Scottish Government statistic (Note: this may be from another survey)
	Data-less with associated recommendation
	Health Behaviour in School-aged Children
	No indicator for the age sub-group
	School Leavers Destination Survey, Follow-up Survey
	Scottish Adolescents Lifestyle and Substance Use Survey
	Scottish Health Survey
	Scottish House condition survey
	Scottish Household survey
	Scottish Prison Survey
	Scottish Survey of Achievement/Scottish Survey of Literacy and Numeracy

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