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Public Health Information for Scotland

Scotland's mental health: Adults 2012

Full report, October 2012

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Published by NHS Health Scotland

Woodburn House
Canaan Lane
Edinburgh EH10 4SG

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NHS Health Scotland is a WHO Collaborating Centre for Health Promotion and Public Health Development.

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Ministerial foreword

I am grateful to NHS Health Scotland for this report, which builds on the first national profile of adult mental health, *Scotland's Mental Health and its Context: Adults 2009*, to present an updated picture of adult mental health in Scotland. This is based on a set of measurable, meaningful and practical indicators which support the Scottish Government's action to improve population mental health and wellbeing. The indicator set encompasses measures of mental health problems and mental wellbeing, as well as associated contextual factors. The indicators enable monitoring of changes in Scotland's mental health over time, as well as by dimensions of equality, helping to inform decision-making about priorities for action and resource-allocation.

It is encouraging that the balance of the indicators and contextual factors suggest that in recent years progress has been made to improve mental health and the conditions that can influence it. One of the salient positives is that the suicide rate continues to fall; we remain committed to action which helps to prevent suicide and will publish a consultation paper later this year on policy and action for prevention of suicide and self-harm beyond the lifetime of Choose Life .

In contrast, the proportion of adults with possible alcohol dependency and the number of deaths from mental and behavioural disorders due to psychoactive substance use has worsened. To tackle this, as driven by our national Alcohol Framework and Drugs Strategy, we will continue to improve the quality of, and access to, support and treatment services that are available to people in Scotland who are affected by problem alcohol and drug use. Since 2008, over 272,000 Alcohol Brief Interventions (ABIs) have been delivered across Scotland and we are committed to embedding ABIs into routine NHS practice in order to reduce hazardous and harmful drinking. In addition, 40,000 people have received specialist support and treatment for their drug problem since 2007. Moreover, the national HEAT Target to improve access to specialist drug and alcohol treatment services will ensure that by March 2013 90% of people referred will be seen within three weeks.

Time trend data are not yet available for some indicators of mental health leaving a degree of uncertainty regarding how adult mental health in Scotland has changed over recent years. However, as more data becomes available over time, a clearer and more robust picture of change will emerge.

As stated in the Scottish Government's Mental Health Strategy for 2012-15 , we are proud of what has been achieved collectively so far in Scotland in improving population mental health and in improving services for people who experience mental illness. The Mental Health Strategy sets out a wide range of key commitments – both targeted and population-wide – to continue to build on these strong foundations and to do so at an increased pace. This indicators report adds to the growing range of evidence which we will use to help inform further developments in policy and practice; my thanks go to NHS Health Scotland for the detailed hard work which has gone into its preparation.

Michael Matheson
Minister for Public Health

October 2012

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Acknowledgements

This report could not have been written without the generous support, advice and additional data analysis provided by a number of people. In particular, the authors would like to thank:

- NHS Health Scotland colleagues: Sandra Auchterlonie, for administrative support; Drew Millard, Rory Mitchell, Jane Parkinson and Mark Robinson for quality checking of data outputs; Louise Flanagan for quality checking of SPSS syntax and data analysis
- Catherine Bromley, Scotcen Social Research, for technical advice on data from the *Scottish Health Survey*
- Marie Climson, National Records of Scotland, for providing selected vital statistics on those aged 16 years and over
- Carrie Graham and Julie Ramsay, for advice on data from the *Scottish Health Survey*
- Nicholas Krzyzanowski, for analysis of data from the *Scottish Household Survey*
- Catherine Millington and Wojciech Hupert, for guidance on data from the *Scottish Crime and Justice Survey*
- Deborah Shipton and Martin Taulbut, Glasgow Centre for Population Health, for provision of SPSS syntax for several indicators and advice on data sources and analysis
- Diane Stockton, Information Services Division, for statistical advice and support
- Susan Walker, for analysis of data from the Scottish House Condition Survey
- Simon Webster, for analysis of data from the *Psychosocial Working Conditions Survey*
- Alan Winetrobe, for analysis of data from the Annual Population Survey
- Jonathan Wright, for advice and support on data contained in the *Well? What do you think?* survey
- Wendy Halliday, Monica Merson, Jane Parkinson, NHS Health Scotland, for comments on the final draft of this report.

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
CIS-R	Revised Clinical Interview Schedule
ESS	European Social Survey
FRS	Family Resources Survey
GHQ-12	12-item General Health Questionnaire
NRS	National Records of Scotland (previously General Register Office for Scotland)
PWCS	Psychosocial Working Conditions Survey
SCJS	Scottish Crime and Justice Survey (previously Scottish Crime and Victimisation Survey)
SHCS	Scottish House Condition Survey
SHeS	Scottish Health Survey
SHoS	Scottish Household Survey
SIMD	Scottish Index of Multiple Deprivation
SSAS	Scottish Social Attitudes Survey
SPSS	Statistical Package for the Social Sciences
WEMWBS	Warwick-Edinburgh Mental Well-being Scale

Executive summary

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 adult indicator set was published in December 2007. The set comprises 54 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.

The 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.

The first analysis of the adult indicators was provided in 2009. This report is the second in the series. Using the adult indicators, it aims to provide a comprehensive and up-to-date description of mental health (covering both mental wellbeing and mental health problems) and associated contextual factors in the adult population of Scotland. Where the data allow, trends over time and equalities analysis (by gender, age and the Scottish Index of Multiple Deprivation (SIMD)) are also presented. All estimates are based upon the most recent data available at the time of analysis.

Further work is required to establish two indicators (spirituality and emotional intelligence) and no data were available for one indicator (deliberate self-harm). Some data were therefore available for 51 out of the 54 indicators. This permitted point prevalence to be calculated for all 51, equalities analysis for 50 and examination of change over time for 29. Unless stated otherwise, indicators cover adults aged 16 and above.

A three-colour 'traffic light' system was used to illustrate the results from the time trends and equalities analyses. This gives a clear visual impression, based on statistical analysis of significance, of which aspects of adult mental health and which associated contextual factors have improved, worsened or remained stable over time. It also shows which population subgroups are faring better, worse or no differently than others in relation to their mental health and associated contextual factors.

Overall, the picture over the last decade can be summed up as broadly stable, with a promising level of positive change and only a small, but important, number of negative trends.

Time trend data were available for five out of the nine indicators of mental health. One indicator of mental health has improved:

- rates of suicide.

Two indicators of mental health show no significant change:

- life satisfaction
- common mental health problems.

Two indicators of mental health have worsened:

- possible alcohol dependency
- deaths from mental and behavioural disorders due to psychoactive substance use.

Time trend data are not yet available for four indicators of mental health (mental wellbeing, depression, anxiety and deliberate self-harm) leaving a fair amount of uncertainty regarding how adult mental health in Scotland has changed over recent years.

Of the 45 indicators covering the contextual factors associated with mental health, time trend data were available for 24. Two showed divergent trends for men and women, bringing the total number of results to 26.

Ten contextual factors have improved:

Individual level
- physical activity
- healthy eating (women)
- alcohol consumption
- self-reported health
- adult learning

Community level
- home safety

Structural level
- financial management
- education
- financial inclusion
- neighbourhood satisfaction.

Although statistically significant, change for several of these contextual factors amounted to only one or two percentage points over a period of years. This applied to adult learning, home safety, financial inclusion and neighbourhood satisfaction. In terms of absolute differences, the largest improvements were seen for financial management, physical activity and education.

Thirteen contextual factors show no significant change:

Individual level
- healthy eating (men)

Community level
- involvement in local community (women)
- social contact
- social support

Structural level
- income inequality
- worklessness
- noise
- house condition
- overcrowding
- work-related stress
- demand at work
- control at work
- colleague support at work.

Three contextual factors have worsened:
- men's involvement in the local community
- neighbourhood safety

- manager support at work.

The data suggesting a reduction in male involvement in the local community are quite old (2000 to 2003) while the change in neighbourhood safety was small – one percentage point – and may simply reflect year-to-year variability rather than a genuine downward trend. Both of these trends should be monitored to confirm if the worsening observed in this report is reflective of recent (male involvement in the local community) or real change (neighbourhood safety).

To improve Scotland's mental health, priority should be given to the three indicators where there is solid evidence of worsening over the last decade or so: deaths from mental and behavioural disorders due to psychoactive substance use, alcohol dependency and manager support at work. The trends for psychoactive substance-related deaths and alcohol dependency are of particular concern. Action should also be focused on the 15 indicators which have not showed any significant change with the aim of turning them into areas of improvement. Finally, there is scope for further improvement on many of the indicators which have already improved, particularly healthy eating among women, physical activity, adult learning, financial management and suicide.

The report also highlights clear inequalities in mental health within the Scottish population, by socioeconomic status, age and gender. Socioeconomic inequalities were particularly extensive; of the 50 indicators for which equalities analysis was possible, a poorer state of mental health and less favourable contextual factors were associated with greater socioeconomic disadvantage for 42. Only two indicators – unrealistic time pressures at work (demand) and drinking within the weekly alcohol limits – were more favourable in more deprived areas. Age was associated with differences in mental health and associated contextual factors for 43 indicators and gender associated with differences for 31. No gender difference was observed in either measure of mental wellbeing, which is surprising given that significant differences were observed between men and women for every indicator of mental health problems. As more data accumulate in the area of mental wellbeing measurement, this paradox will be an important topic to explore for the insights it might provide for health improvement action.

The balance of the indicators suggests that modest progress is being made in terms of improving mental health and the conditions that underpin or undermine it. There remains substantial scope for action, building on the range of national policies already in place. These include policies not primarily directed towards mental health (poverty, inequality, nutrition, physical activity) that foster a mentally flourishing Scotland, as well as specific action on topics such as alcohol and drug misuse.

Inequalities in mental health and contextual factors are extensive. Both targeted and population-wide strategies are necessary to ensure more equal opportunities and outcomes between genders, ages and socioeconomic groups as well as overall improvement in mental health and the conditions that foster it. The existence of substantial inequalities in both person- and area-based indicators suggests that targeting should also be guided by both personal and area characteristics. Consistent data are lacking on other dimensions of equality, which therefore remain largely uncharted territory.

The breadth and complexity of the adult indicators demonstrates that a very wide range of policies, strategies, actions, organisations and individuals have a role to play in creating a mentally flourishing Scotland. We hope that this report will contribute to that

process by adding to our understanding of adult 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, ultimately facilitating more effective 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; and, in the longer term, that the indicator set will be reflected in future mental health policy.

Updates to this report will be produced once every four years.

1. Introduction

1.1 The adult mental health indicators for Scotland

Background

Improving mental health is a national priority in Scotland. In 2004, as part of its *National Programme for Improving Mental Health and Wellbeing* (2001–2008),[1] the Scottish Government commissioned NHS Health Scotland to establish a core set of sustainable mental health indicators to enable regular national monitoring and so support the Scottish Government's drive on mental health improvement.[2] Development of the indicators was identified as a support activity to the National Programme in its 2003–2006 action plan.[3] Commitment to the indicators was reaffirmed in the Scottish Government's 2009 action plan for mental health improvement, *Towards a mentally flourishing Scotland: Policy and action plan 2009–2011*.[4]

Development

The adult indicator set was finalised and published in December 2007. For comprehensive information on the development process, please refer to the following three key papers:

- **Rationale paper, October 2007** – documents the thinking, reasons and constraints behind decisions made over the course of development.[2]
- **Final briefing paper, December 2007** – provides a summary of the indicators, their measures, data sources and recommendations for further work.[5]
- **Final report, December 2007** – sets out the background to and rationale for development, an overview of the evidence-base, objectives, development process, working understandings, indicators, indicator measures and data sources. It also provides the questions and scales used in the national surveys to obtain the data for the indicators.[6]

A separate paper lists all of the outputs from the adult mental health indicators programme.[7] The outputs themselves are available from the adult mental health indicators page of the NHS Health Scotland website.

Paradigm

Historically, assessment of population mental health has focused largely on the prevalence of mental health problems using surveys and scales to do so.[8,9] However, good mental health is not just the absence of mental health problems; it also includes mental wellbeing. Growing recognition of the importance of mental wellbeing generated increased interest in developing indicators to measure it to accompany those for mental health problems.[8] The indicators work therefore took mental health to be an overarching term covering both mental health problems and mental wellbeing, and established indicators measuring both dimensions.

The indicator set

The adult indicator set comprises 54 indicators plus a cross-cutting equalities analysis that involves analysing each indicator by selected dimensions of equality. The indicators are structured into two categories (Table 1):

- Mental health – covering both mental wellbeing and mental health problems

- Contextual factors – covering the factors associated with mental health at an individual, community and structural level. Although these contextual factors are associated with mental health they may not be causally related.

Unless stated otherwise, indicators cover adults aged 16 years and above.

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

Mental health		
Mental wellbeing (2)	Mental health problems (7)	
Contextual factors associated with mental health		
Individual	Community	Structural
Learning and development (1)	Participation (3)	Equality (1)
Healthy living (4)	Social networks (1)	Social inclusion (2)
General health (3)	Social support (2)	Discrimination (3)
Spirituality (1)	Trust (2)	Financial security/debt (2)
Emotional intelligence (1)	Safety (4)	Physical environment (6)
		Working life (6)
		Violence (3)

Further work is required to establish indicators for spirituality and emotional intelligence. The concept behind each of the indicators has yet to be fully defined, suitable questions identified or developed and an appropriate data collection source (or sources) identified.

A list of the indicators and their measures is provided in Appendix 1.

1.2 Reporting arrangements

Aim 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.

Using the adult indicators, this report aims to provide a comprehensive and up-to-date description of mental health (covering both mental wellbeing and mental health problems) and associated contextual factors in the adult population of Scotland.

The report has three objectives:

- to describe the mental health and associated contextual factors of the adult Scottish population at a single point in time, using the most recent data available at the time of analysis
- where the data allow, to analyse time trends over the last decade
- to identify differences within the adult population by selected protected characteristics identified in the Equality Act 2010 (gender and age) and by the SIMD, a marker of area-level deprivation, again using the most recent data available at the time of analysis.[10]

Frequency

The first report in the adult series, *Scotland's Mental Health and its Context: Adults 2009*, provided the first ever systematic assessment of the adult population's mental health.[11] Continued monitoring is designed to track subsequent national progress towards strategic goals for mental health improvement in Scotland. Updates to this report on adult mental health will be published once every four years.

In scope

- The report provides a comprehensive and up-to-date account of mental health and associated contextual factors in the adult population of Scotland at national level.
- Where the data allow, trends over time and equalities analysis are also presented.
- The findings are considered in light of the mental health improvement strategy and the implications for policy and practice discussed.

Out of scope

- The report is concerned with mental health at a national level. It does not provide local analysis or international comparisons.
- Due to limited data availability, small numbers and for concision, the report does not analyse trends over time by measures of equality.
- The Equality Act 2010 outlines nine protected characteristics.[i] The fullest picture of equality or inequality in mental health in Scotland would disaggregate the data for each indicator by all nine protected characteristics. However, due to limited data availability and small numbers, the report does not undertake equalities analysis by protected characteristics other than gender and age.

Target audience

This report is targeted towards organisations, partnerships, policy-makers and planners who have a role in creating a mentally flourishing Scotland. It will be useful to professionals working in public health intelligence, policy making and health improvement planning, in the fields of mental health and other policy areas where there is a link to mental health, within the Scottish Government, NHS Boards, local authorities, community planning partnerships, other public sector organisations, non-government organisations (NGOs), academia and the third sector.

Although the indicators were originally developed to support monitoring at national level, for those working at local level the national-level estimates in this report provide a benchmark for local comparison. The indicators will also be useful 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.

[i] Age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation.

Format

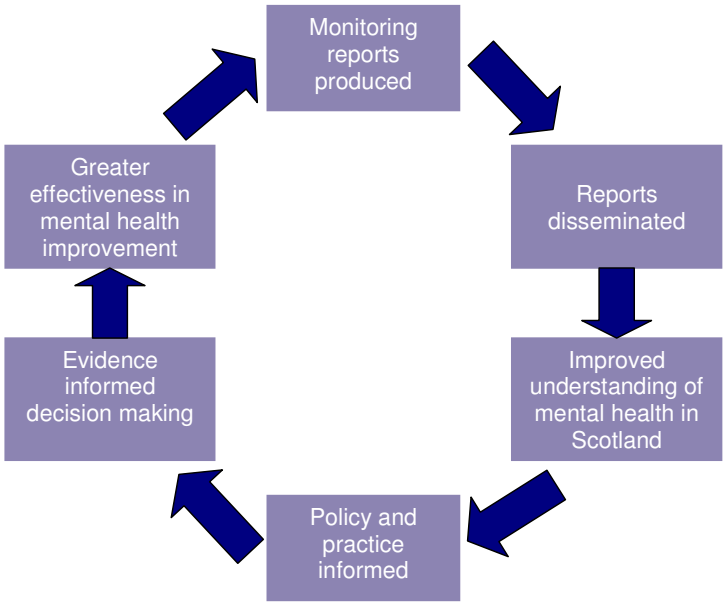
The aim and objectives of this report are unchanged from the first, but a different format has been used to a) reduce the length of the report, and b) to show the results in each of the three sections for all of the indicators together (rather than describing them separately for each indicator as in the first report). Together, these changes are intended to make the report and its findings more accessible and, in particular, to show the picture for adult mental health in Scotland in its entirety, whether the focus is on the most recent estimates for the population as a whole, trends over time or inequalities.

An accompanying Excel file includes charts for all statistically significant results, for both the time trend and equalities analyses.[12]

Intended impact

We have endeavoured to convey a very large amount of information about Scotland's adult mental health in as short and simple a format as possible to maximise readership, understanding and its use to inform strategic decision making and action for mental health improvement. The anticipated results chain from the mental health indicators is shown in Diagram 1.

Diagram 1. Results chain for the mental health indicators



2. Methods

2.1 Data availability

No data were available for three indicators. Indicators have yet to be established for spirituality and emotional intelligence. Data on deliberate self-harm in the last year are being collected from 2012 onwards. Point prevalence was calculated for the population overall for the remaining 51 indicators and equalities analysis undertaken (by gender, age, and SIMD) for 50 – risk of disclosure associated with small sample size prevented equalities analysis of the indicator for income inequality. Sufficient data points were available to allow analysis of trends over time for 29 indicators.

2.2 Data sources

The adult indicator set is based upon data from eight different sources (number of indicators in brackets after the abbreviation):

1. the *Scottish Health Survey* (SHeS, 28)
2. the *Scottish Household Survey* (SHoS, 7)
3. the *Scottish Crime and Justice Survey* (SCJS, 6)
4. the *Scottish House Condition Survey* (SHCS, 3)
5. the *Annual Population Survey* (APS, 3)
6. the *Scottish Social Attitudes Survey* (SSAS, 2)
7. *National Records of Scotland* (NRS, 2)
8. and the *Family Resources Survey* (FRS, 1).

Please see the Technical supplement for the full breakdown of indicators by data source.[14]

Of the 29 indicators analysed for change over time, 20 use the data source identified in the national adult mental health indicator set while nine are based upon an interim source[ii] because insufficient data points were available from the preferred source (see the Technical Supplement for full details).[14] The three additional interim sources brings the total number of sources used within this report to 11.

2.3 Target population

While the term 'adults' is generally taken throughout the report to denote all those aged 16+ years, in some cases data limitations or indicator definitions have made it necessary to analyse the indicators for a narrower age range. Estimates for escape facility and attitude to violence are based on adults aged 18+ due to the age range of the target group in the source survey (SSAS - adults aged 18+). In line with the indicator definitions, education and worklessness apply to women aged 16-59 years and men aged 16-64 years (see the Technical Supplement for full details).[14] Age ranges are displayed in all of the tables of results.

[ii] Life satisfaction - European Social Survey
Involvement in local community - Scottish Household Survey
Social contact and social support - Well? What do you think?
Stress, demand, control, manager support and colleague support - Psychosocial Working Conditions Survey.

2.4 Data description and analysis

Categorical variables (44 of 51) were described using percentages, rounded to the nearest whole number.

Seven indicators are numeric variables. Four of these (mental wellbeing, life satisfaction, work–life balance and attitude to violence) were described using the mean score rounded to one decimal place. Income inequality was measured by the Gini coefficient, rounded to two decimal places following standard convention. Mortality data (psychoactive substance-related deaths and suicide) were described by European age-standardised rates (EASR) per 100,000 adults in the population (to one decimal place).

Due to limitations in data availability we were unable to do our own analysis of indicators from the APS (3) and the SHCS (3). The survey teams provided the 95% confidence intervals to establish differences between groups and over time.

2.4.1 Point prevalence

All point prevalence estimates are for the most recent year available at the time of analysis and are for the adult population as a whole, i.e. 16+ years.

2.4.2 Trends over time

The aim of the time trends analysis was to examine change in the last decade, but for some indicators the time series is shorter due to data availability. All results are based upon the latest data available at the time of analysis.

Binary logistic regression was used to test for differences over time in all categorical variables, controlling for differences in gender and age between years. The Kruskal–Wallis test was used to determine differences over time in numeric variables, except for the two indicators based on mortality data (psychoactive substance-related deaths and suicide) which were assessed by comparing the 95% confidence intervals.[iii]

Time trend analysis was undertaken for both the adult population as a whole and for men and women separately. Unless different trends emerged for men and women, results are presented for the population as a whole. Because of small numbers and for concision, time trend analysis was not undertaken by age groups or SIMD quintiles.

2.4.3 Equalities analysis

All equalities analysis was based upon the most recent data available at the time of analysis (i.e. the same year used for the point prevalence estimates).

[iii] 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. Since no population comparisons are being made, the point prevalence estimates do not need to be age-standardised. However, to avoid having two sets of figures for the same year, one age-standardised and one not, the EASR has been used for the point prevalence estimates as well as the time series.

Equalities analysis of categorical indicators used the Pearson's chi-squared test of association to test for differences between men and women. Where more than two groups were being compared (by age and SIMD), the chi-squared test for linear trend was used to test for linear between-group differences and the Pearson's chi-squared test for non-linear differences.

Equalities analysis of numeric variables used the t-test to determine differences between men and women and the Kruskal-Wallis test to determine differences between age groups and SIMD quintiles. Between-group differences in the two mortality indicators (psychoactive substance-related deaths and suicide) were assessed by comparing the 95% confidence intervals.

To examine for differences by age, the preference was to break the data down by 10-year age bands: 16–24, 25–34, 35–44, 45–54, 55–64, 65–74, 75+. This was achievable for 20 of the 50 indicators analysed for equalities. Regrouping into a smaller number of age bands was necessary for the remaining 30 indicators due to small numbers – see Appendix 2 for details. Time trend analysis was performed upon data for the adult population as a whole (16+) with the exception of physical activity which was restricted to 16–74 years to allow comparability over the time series (see Technical Supplement for further information).[14]

Statistical significance was set at $p<0.05$ for all comparisons. Any use of the term 'significant' is taken to mean statistically significant, but this does not imply practical significance or importance.

2.5 Presentation of the results

In the first adult report, findings were described separately for each indicator. This provided an excellent reference point if you were interested in individual aspects of Scotland's mental health or the contextual factors associated with it, but it was less easy to see the overall picture. In this report, the results are therefore described in a small number of tables and spine charts, each covering all of the indicators analysed in that section.

Results are captured in three tables. The first shows the most recent point prevalence estimates for the adult population as a whole.

The second table presents the time trend estimates for the last decade or so, again for the adult population as a whole. The estimates are colour-coded to show the results of the time trend analysis – green for a statistically significant improvement over time, orange for no significant change and red for significant worsening. Corresponding spine charts show the percentage change over the entire time series, i.e. from the first to last data point. A ranked spine chart ranks the differences over time from largest to smallest to show where improvement and deterioration have been greatest and smallest.

The third table presents the most recent point prevalence data broken down by gender, age and SIMD to show age-related differences and gender and socioeconomic equalities/inequalities in the mental health of adults in Scotland. Colour-coding illustrates whether those differences are statistically significant or not. Corresponding equalities spine charts show the size of the difference between each of the population subgroups, expressed as relative risk. Ranked spine charts rank the differences from largest to smallest to show where there is greatest scope to narrow the gap between different subgroups and so reduce inequalities in the population's mental health.

This presentation of the results is designed to clearly show:

- which components of Scotland's mental health are flourishing and which components are languishing
- where population mental health has improved, remained stable or worsened over the last decade or so
- by ranking of the differences over time from largest to smallest, where improvement and deterioration have been the most marked and, in instances of stability, where Scotland's mental health has remained steady in the face of challenges or it has been resistant to change despite action
- where there are inequalities in mental health between men and women and people living in the most and least deprived areas and where there are differences by age
- by ranking of the differences between those sociodemographic population subgroups from the largest to smallest, where lies the greatest potential to reduce inequalities in mental health in Scotland.

An accompanying Excel file includes charts for all statistically significant results, for both the time trends and equalities analyses.[12]

3. Results

3.1 Mental health in the population as a whole

This section of the report describes the mental health, and associated contextual factors, of the adult Scottish population at a single point in time using the most recent data available at the time of analysis. Figures are for the adult population as a whole and are presented in Table 2.

3.1.1 Mental health

In relation to mental wellbeing, in 2009 the mean Warwick–Edinburgh Mental Well-being Scale (WEMWBS) score for mental wellbeing overall was 49.7 on a scale from 14 (the lowest level of mental wellbeing) to 70 (the highest) and the mean life satisfaction score was 7.6 on a scale from zero (extremely dissatisfied) to 10 (extremely satisfied).

In relation to mental health problems, in 2009 14% of adults scored 4+ on the GHQ-12, indicating a possible mental health problem over the past few weeks; 9% scored 2 or more on the depression section of the CIS-R and 7% scored 2 or more on the anxiety section, indicating moderate to high severity symptoms of depression or anxiety respectively in the previous week; 10% had a CAGE score of 2+, indicating possible alcohol dependency in the previous three months; the EASR of deaths from mental and behavioural disorders due to psychoactive substance use was 10.4 per 100,000 adults and the rate of suicide 18.0 per 100,000 adults.[iv]

3.1.2 Contextual factors associated with mental health

Individual

In 2009, 50% of working-age adults[v] (no longer in continuous full-time education) had participated in some type of adult learning (taught or non-taught) in the last year.

In 2009, 37% of adults reported that they met the recommended physical activity levels in the previous four weeks; 23% reported eating at least five portions of fruit and vegetables in the previous day – 'five a day'; 77% reported drinking within the recommended weekly limits (21 units or less for men, 14 units or less for women). In 2009/10, 7% reported having taken drugs in the past year.

In 2009, 77% reported that their health in general was good or very good; 37% of adults reported a long-standing physical condition or disability and 24% reported a limiting long-standing physical condition or disability, defined as one that limits daily activities.

Indicators have yet to be established for spirituality and emotional intelligence.

[iv] Deaths from mental and behavioural disorders due to psychoactive substance use will be subsumed within the number of recorded suicides from 2011 onwards. Suicide data prior to 2011 will not be directly comparable with data published after this time. More information is available from the National Records of Scotland website.[13]

[v] Women aged 16-59, men aged 16-64.

Community
In 2008, 22% of adults reported volunteering at least five or six times in the past year. In 2009, 26% of adults (aged 16+) felt involved in their local community a great deal or a fair amount while 21% strongly agreed or agreed that they could influence decisions affecting their local area.

In 2009, 94% of adults had contact (in person, by phone, letter, email or through the internet) at least once a week with family, friends or neighbours not living with them; 88% reported having a primary support group of three or more people to rely on for comfort and support in a personal crisis; 4% provided 20 or more hours of unpaid care per week.

In 2009, 46% of adults agreed that most people can be trusted and 57% agreed that most people in their neighbourhood can be trusted.

In 2008, 72% of adults felt very or fairly safe walking alone in their neighbourhood after dark. In 2009, 97% felt very or fairly safe when home alone at night. In 2009/10, 14% reported having been a victim of non-violent neighbourhood crime (crime occurring locally) and 59% perceived crime in their local area to be very or fairly common.

Structural
In 2009/10, the Gini coefficient for Scotland was 0.35, slightly lower than that recorded for the UK as a whole (0.36).

In 2009, 10% of working-age adults[vi] were 'workless' (unemployed or economically inactive and who want to work, excluding students) while 88% held at least one academic or vocational qualification.

In 2009, 11% of adults reported that they had been unfairly treated or discriminated against in the past year and 8% reported that they had personally experienced harassment or abuse in the past year due to discrimination; in 2009/10, 16% thought that racial discrimination was a big problem in Scotland.

In 2008, 52% of adults reported that their household managed very or quite well financially while 98% of households reported that they had access to a bank/building society/credit union/post office card account.

In 2008, 93% of adults reported being satisfied with their neighbourhood (rated their neighbourhood as a very or fairly good place to live). In 2009, 12% were bothered by noise often or fairly often when home indoors; 80% reported that they had an escape facility (somewhere in their local area where they could go to 'escape' from everyday problems/stresses, not home/garden); 76% felt that they and their family had access to greenspace (a safe and pleasant park, green or other area of grass) in their neighbourhood; 83% rated the condition of their house/flat as very or fairly good; 14% felt that their home was overcrowded (had too few rooms).

In 2009, 14% of adults found their job very or extremely stressful; on a scale from zero (extremely dissatisfied) to 10 (extremely satisfied), the mean score for satisfaction with work–life balance was 6.4; 25% reported that they often had or always had unrealistic time pressures at work (demand); 63% reported that they often or always had a choice

[vi] Women aged 16-59, men aged 16-64.

in deciding the way that they do their work (control); 65% felt that they had manager support at work; 79% reported having colleague support at work.

In 2009/10, 3% of adults reported being physically or emotionally abused by a partner or an ex-partner in the past year and 3% reported having experienced neighbourhood violence in the past year. In 2009, on a scale from one (where violence is viewed by the respondent as ‘not wrong at all’) to five (‘very seriously wrong’), the mean score for attitude to violence was 3.0.

Table 2. Scotland's adult mental health: most recent estimates for the population overall

	Domain	Construct	Indicator	Unit	Age range	Year	Estimate
	Mental health	Mental wellbeing	Mental wellbeing	Mean score	16+	2009	**49.7**
			Life satisfaction	Mean score	16+	2009	**7.6**
		Mental health problems	Common mental health problems	%	16+	2009	**14**
			Depression	%	16+	2009	**9**
			Anxiety	%	16+	2009	**7**
			Alcohol dependency	%	16+	2009	**10**
			Psychoactive substance-related deaths††	EASR per 100,000	16+	2009	**10.4**
			Suicide††	EASR per 100,000	16+	2009	**18.0**
			Deliberate self-harm	n/a	n/a	n/a	n/a
Contextual factors associated with mental health	Individual	Learning and development	Adult learning	%	16-59/64‡	2009	**50**
		Healthy living	Physical activity	%	16+	2009	**37**
			Healthy eating	%	16+	2009	**23**
			Alcohol consumption	%	16+	2009	**77**
			Drug use	%	16+	2009/10	**7**
		General health	Self-reported health	%	16+	2009	**77**
			Long-standing physical condition or disability	%	16+	2009	**37**
			Limiting long-standing physical condition or disability	%	16+	2009	**24**
		Spirituality	Spirituality – Indicator to be identified	n/a	n/a	n/a	n/a
		Emotional intelligence	Emotional intelligence – Indicator to be identified	n/a	n/a	n/a	n/a
	Community	Participation	Volunteering	%	16+	2008	**22**
		Participation	Involvement in local community	%	16+	2009	**26**
		Participation	Influencing local decisions	%	16+	2009	**21**
		Social networks	Social contact	%	16+	2009	**94**
		Social support	Social support	%	16+	2009	**88**
		Social support	Caring	%	16+	2009	**4**
		Trust	General trust	%	16+	2009	**46**
		Trust	Neighbourhood trust	%	16+	2009	**57**
		Safety	Neighbourhood safety	%	16+	2008	**72**
		Safety	Home safety	%	16+	2009	**97**
		Safety	Non-violent neighbourhood crime	%	16+	2009/10	**14**
		Safety	Perception of local crime	%	16+	2009/10	**59**
	Structural	Equality	Income inequality	Gini score	n/a	2009/10	**0.35**
		Social inclusion	Worklessness	%	16-59/64‡	2009	**10**
		Social inclusion	Education	%	16-59/64‡	2009	**88**
		Discrimination	Discrimination	%	16+	2009	**11**
		Discrimination	Racial discrimination	%	16+	2009/10	**16**
		Discrimination	Harassment	%	16+	2009	**8**
		Financial security/debt	Financial management	%	16+	2008	**52**
		Financial security/debt	Financial inclusion	%	16+	2008	**98**
		Physical environment	Neighbourhood satisfaction	%	16+	2008	**92**
		Physical environment	Noise	%	16+	2009	**12**
		Physical environment	Escape facility	%	18+†	2009	**80**
		Physical environment	Greenspace	%	16+	2009	**76**
		Physical environment	House condition	%	16+	2009	**83**
		Physical environment	Overcrowding	%	16+	2009	**14**
		Working life	Stress	%	16+	2009	**14**
		Working life	Work-life balance	Mean score	16+	2009	**6.4**
		Working life	Demand	%	16+	2009	**25**
		Working life	Control	%	16+	2009	**63**
		Working life	Manager support	%	16+	2009	**65**
		Working life	Colleague support	%	16+	2009	**79**
		Violence	Partner abuse	%	16+	2009/10	**3**
		Violence	Neighbourhood violence	%	16+	2009/10	**3**
		Violence	Attitude to violence	Mean score	18+†	2009	**3.2**

Notes
1. Estimates are based on calendar year unless stated otherwise.
2. EASR - European Age-Standardised Rate per 100,000 adults.
3. Unless stated otherwise, estimates are for adults aged 16+.

†Escape facility and attitude to violence refer to adults aged 18+ rather than 16+ as the source survey (Scottish Social Attitudes Survey) targets adults aged 18+.

‡Indicators from the Annual Population Survey (adult learning, worklessness and education) are based on women aged 16-59 and men aged 16-64.

†† From 2011, psychoactive substance-related deaths will be subsumed within the total number of recorded suicides. Suicide data prior to 2011 will not be directly comparable with data published after this time.

3.2 Trends over time

This section of the results shows whether there has been any change in recent years in the mental health, and associated contextual factors, of the adult population in Scotland. Time trend analysis was possible for a total of 29 out of 54 indicators. The aim was to examine trends over the last decade or so, but differences in data methodologies over time mean that the time period for analysis varied across the indicator set (Table 3). The longest time series spanned 11 years (physical activity 1998–2008, income inequality, worklessness and education 1999–2009) and the shortest only three years (adult learning 2007-2009). Seven and four years were the most common intervals. The oldest data were from 1998 and the most recent from 2009.

Table 3. Lengths of the indicator time series

	Time span (number of years)*	**Number of indicators with that time span**
	11 years	4 indicators
	10 years	2 indicators
	9 years	2 indicators
	7 years	8 indicators
	6 years	3 indicators
	5 years	3 indicators
	4 years	6 indicators
	3 years	1 indicators
Total number of indicators analysed		29 indicators

*Refers to the number of years from the first to last in the time series, not the number of data points. For example, the life satisfaction time series has four data points – 2002, 2004, 2006 and 2008 – spanning seven years (2002–2008).

Time trend analysis was undertaken for both the adult population as a whole and for men and women separately. Results are presented for adults generally unless different trends emerged for men and women. This was the case for only two indicators: healthy eating and involvement in local community.

A three-colour 'traffic light' system has been used to illustrate the results from the time trend analysis (Table 4). Green shading indicates that there has been a statistically significant improvement over time and red shading indicates a significant worsening over time. Where no statistically significant change has occurred, an orange traffic light has been assigned. This might reflect relative stability over time, or a level of change that does not reach statistical significance. It is important to note that while an indicator may not have changed significantly over time either for the population as a whole, or for men or women, this may conceal diverging trends for other equalities sub-groups (e.g. worsening for older individuals, improvement for young people, variations by area deprivation quintile).

Table 4. Time trend traffic light system and summary

Traffic light	Trend over time	No. of indicators
	Statistically significant improvement	11
	No significant change – may reflect stability or non-significant fluctuation	15
	Statistically significant deterioration	5
	No trend data	23
	Indicator not yet defined	2
	Total	56*

*Exceeds 54, the total number of indicators, as different trends emerged for men and women for two indicators. These have therefore been presented separately for each sex.

All time trend results are shown in Table 5.

Table 6 lists the indicators for which time trend data were not available. As shown, time series were most frequently absent for community indicators, seven out of 12 (58%), and individual indicators, five out of 10 (50%).

Spines 1 and 2 show the percentage change in adult mental health that has occurred in Scotland over the last few years, from the first to the last data point in each time series. Spine 1 presents the percentage changes by indicator domain while Spine 2 ranks them according to the direction of significance (better, no significant difference, worse) and, within that, by the size of the change from largest to smallest.

Table 5. Scotland's adult mental health: trends over time

Significantly better across time period
Not significantly different across time period
Significantly worse across time period

	Domain	Construct	Indicator	Unit	Age range	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	P-value
	Mental Health	Mental wellbeing	Life satisfaction	Mean	16+					7.0		7.3		7.4		7.5		0.456
		Mental health problems	Common mental health problems	%	16+						15					15	14	0.565
			Alcohol dependency	%	16+						8					11	10	0.000
			Psychoactive substance-related deaths†	EASR per 100,000	16+				6.2	7.8	6.1	6.5	5.6	7.7	8.1	10.3	10.4	CI††
			Suicide†	EASR per 100,000	16+				21.9	22.3	19.6	20.4	18.6	18.6	20.1	20.4	18.0	CI††
Contextual factors associated with mental health	Individual	Learning and development	Adult learning	%	Women 16-59, Men 16-64										48	50	50	CI††
		Healthy living	Physical activity	%	16-74	32					39					41		0.007
			Healthy eating (men)	%	16+						20					20	22	0.125
			Healthy eating (women)	%	16+						22					24	25	0.011
			Alcohol consumption	%	16+						72					75	77	0.000
		General health	Self-reported health	%	16+						74					75	77	0.000
	Community	Participation	Involvement in local community (men)	%	16+			24	24	24	21							0.018
		Participation	Involvement in local community (women)	%	16+			27	27	28	28							0.099
		Social networks	Social contact	%	16+							83		83		85		0.157
		Social support	Social support	%	16+							83		82		83		0.715
		Safety	Neighbourhood safety	%	16+					73	75	74	75	74	73	72		0.009
		Safety	Home safety	%	16+					96	97	96	97	97	97	97		0.000
	Structural	Equality	Income inequality‡	Gini score	N/A		0.33	0.34	0.31	0.31	0.31	0.30	0.31	0.32	0.33	0.34	0.35	CI††
		Social inclusion	Worklessness	%	Women 16-59, Men 16-64		12	11	12	12	11	10	9	9	8	9	10	CI††
		Social inclusion	Education	%	Women 16-59, Men 16-64		82	82	83	84	84	84	85	86	86	87	88	CI††
		Financial security/debt	Financial management	%	16+		42	40	46	48	46	47	46	49	53	52		0.000
		Financial security/debt	Financial inclusion	%	16+							96	98	98	98	98		0.000
		Physical environment	Neighbourhood satisfaction	%	16+		91	92	92	92	92	92	92	92	92	92		0.000
		Physical environment	Noise*	%	16+							13	13		16	12	12	CI††
		Physical environment	House condition*	%	16+							84	84		83	83	83	CI††
		Physical environment	Overcrowding*	%	16+							16	16		16	13	14	CI††
		Working life	Stress	%	16+							15	11	12	10			0.204
		Working life	Demand	%	16+							16	11	12	12			0.435
		Working life	Control	%	16+							23	12	17	17			0.592
		Working life	Manager support	%	16+							74	75	63	62			0.012
		Working life	Colleague support	%	16+							77		81	76			0.982

Footnotes

1 Shaded cells indicate a statistically significant difference (P<0.05) over the time period; **2** Estimates are based on calendar year unless stated otherwise; **3** EASR - European Age-Standardised Rate per 100,000 adults; **4** Data are for all adults (men and women combined) unless stated otherwise;
5 Only indicators with time series data have been included in the table.

Notes on selected indicators

*Years are 2004/05, 2005/06, 2007, 2008, 2009; † From 2011, psychoactive substance-related deaths will be subsumed within the total number of recorded suicides. Suicide data prior to 2011 will not be directly comparable with data published after this time; ‡This estimate is based on the financial year (April - March); †† Comparison of confidence intervals used to determine significance of change over time

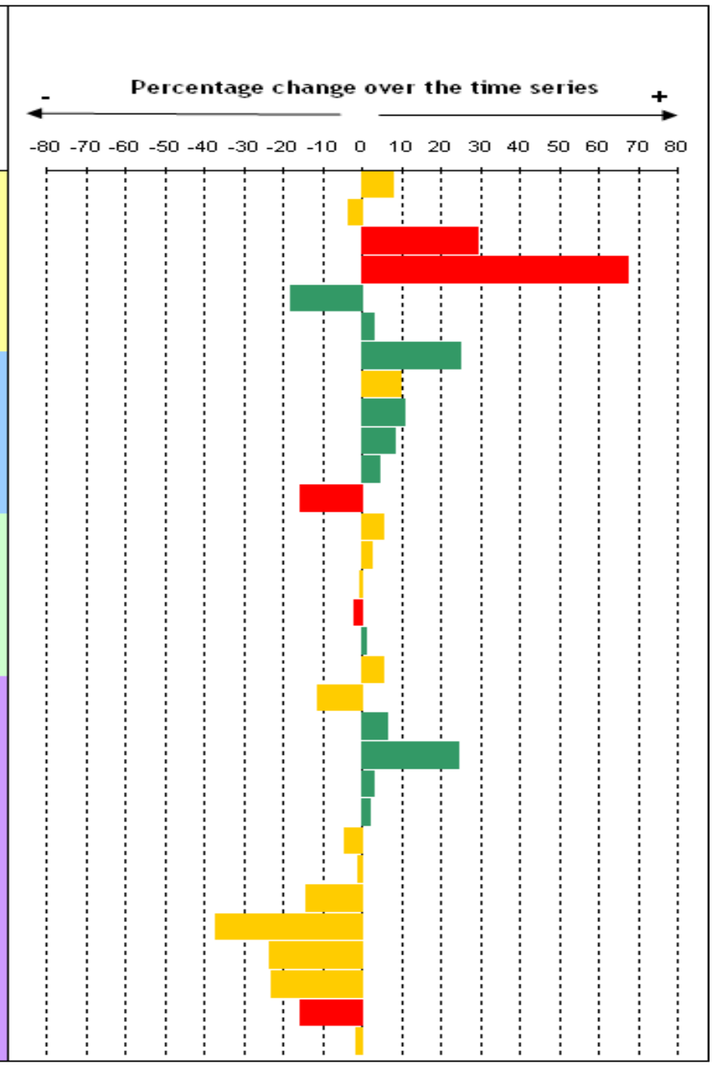
Table 6. Scotland's adult mental health – indicators currently without time trend data

Construct	Indicator
Mental wellbeing	Mental wellbeing
Mental health problems	Depression
Mental health problems	Anxiety
Mental health problems	Deliberate self-harm
Healthy living	Drug use
General health	Long-standing physical condition or disability
General health	Limiting long-standing physical condition or disability
Spirituality	Spirituality - indicator not yet defined
Emotional intelligence	Emotional intelligence - indicator not yet defined
Participation	Volunteering
Participation	Influencing local decisions
Social support	Caring
Trust	General trust
Trust	Neighbourhood trust
Safety	Non-violent neighbourhood crime
Safety	Perception of local crime
Discrimination	Discrimination
Discrimination	Racial discrimination
Discrimination	Harassment
Physical environment	Escape facility
Physical environment	Greenspace
Working life	Work–life balance
Violence	Partner abuse
Violence	Neighbourhood violence
Violence	Attitude to violence

Spine 1. Trends over time in Scotland's adult mental health, ordered by indicator domain

Significantly improved over time
No significant change over time
Significantly worsened over time

	Domain	Construct	Indicator	Unit	Time trend estimates: First	Time trend estimates: Last	Percentage change	P-Value	Time period
Contextual factors associated with mental health	Mental Health	Mental wellbeing	Life satisfaction	mean score	7.0	7.5	8	0.46	2002-2008
		Mental health problems	Common mental health problems	%	14.8	14.3	-3	0.56	2003-2009
		Mental health problems	Alcohol dependency	%	7.8	10.1	29	0.00	2003-2009
		Mental health problems	Psychoactive substance-related deaths††	EASR	6.2	10.4	67.4	†	2001-2009
		Mental health problems	Suicide††	EASR	21.9	18.0	-18.1	†	2001-2009
	Individual	Learning & development	Adult learning	%	48.4	49.9	3	†	2007-2009
		Healthy living	Physical activity	%	32.5	40.5	25	0.01	1998-2008
		Healthy living	Healthy eating (men)	%	19.9	21.8	10	0.13	2003-2009
		Healthy living	Healthy eating (women)	%	22.2	24.6	11	0.01	2003-2009
		Healthy living	Alcohol consumption	%	71.5	77.3	8	0.00	2003-2009
		Participation	Self-reported health	%	73.5	76.7	4	0.00	2003-2009
	Community	Participation	Involvement in local community (men)	%	24.4	20.5	-16	0.02	2000-2003
		Participation	Involvement in local community (women)	%	26.9	28.4	5	0.10	2000-2003
		Social networks	Social contact	%	82.7	84.9	3	0.23	2004-2008
		Social support	Social support	%	83.4	82.9	-1	0.05	2004-2008
		Safety	Neighbourhood safety	%	73.3	72.1	-2	0.01	2002-2008
		Safety	Home safety	%	96.0	97.0	1	0.00	2002-2008
	Structural	Equality	Income inequality†	Gini score	0.3	0.3	5.2	†	1999-2010
		Social inclusion	Worklessness†	%	11.7	10.4	-11	†	1999-2009
		Social inclusion	Education†	%	82.3	87.7	7	†	1996-2009
		Financial security/debt	Financial management	%	41.7	51.8	24	0.00	1999-2008
		Financial security/debt	Financial inclusion	%	95.5	98.4	3	0.00	2004-2008
		Physical environment	Neighbourhood satisfaction	%	90.7	92.5	2	0.00	1999-2008
		Physical environment	Noise†	%	12.9	12.4	-4	†	2004-2009
		Physical environment	House condition†	%	83.9	83.1	-1	†	2004-2009
		Physical environment	Overcrowding†	%	16.1	13.8	-14	†	2004-2009
		Working life	Stress†	%	15.2	9.6	-37	0.20	2004-2007
		Working life	Demand	%	16.0	12.2	-24	0.94	2004-2007
		Working life	Control	%	22.7	17.5	-23	0.59	2004-2007
		Working life	Manager support	%	73.8	62.5	-15	0.01	2004-2007
		Working life	Colleague support	%	76.7	75.6	-1	0.98	2004-2007



Notes

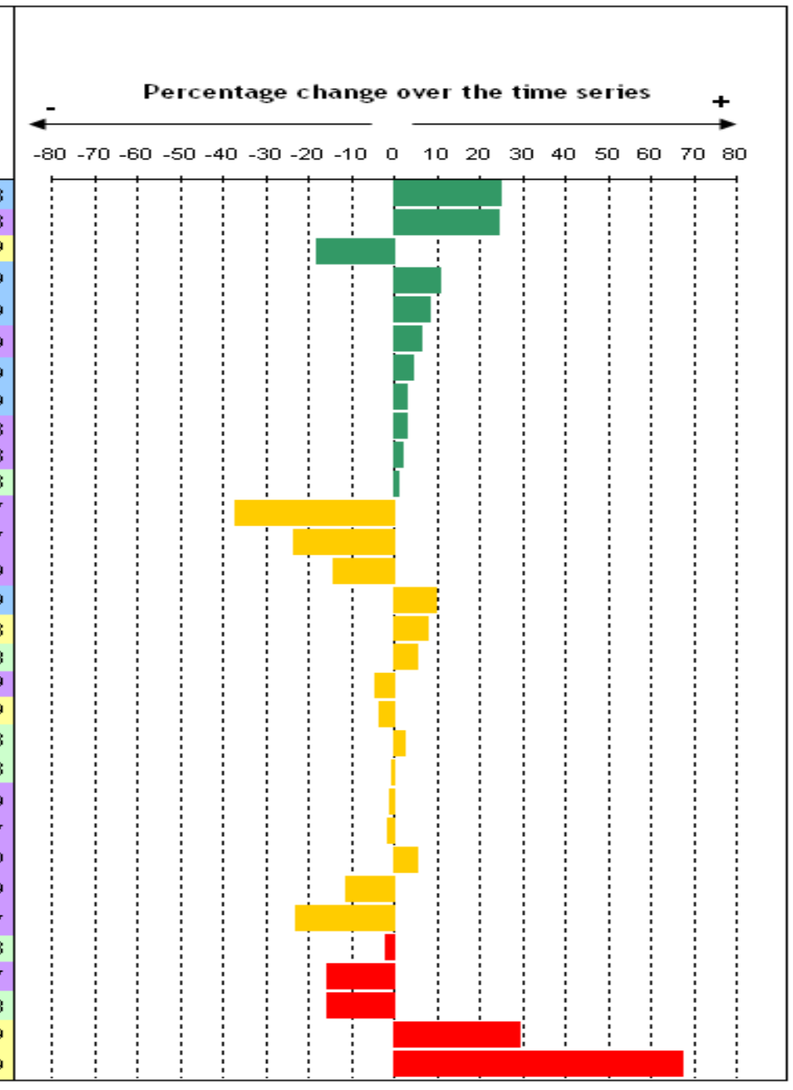
1. This spine chart shows the relative difference between the first and last data points in the time series, expressed as percentage change over time.
2. Percentage change is based on the unrounded estimates for first and last time points in the series and may therefore differ from what you would expect given the values in Table 6, rounded to whole numbers (percentages), one decimal point (mean scores) or two decimal points (Gini coefficient).
3. All green bars represent indicators where there has been a significant improvement over time, red bars represent indicators where there has been a significant worsening over time, orange bars represent indicators where there has been no significant change (may reflect stability or non-significant fluctuation).
4. P-values show whether there is a significant difference (linear or non-linear) over the time series overall. P-values less than 0.05 were deemed statistically significant.
5. Time period may not include most recent point estimate due to recent change of data source.
6. EASR - European Age-Standardised Rate per 100,000 population.

†Comparison of confidence intervals was used to ascertain statistically significant differences over time. Differences were deemed significant where there was no overlap of confidence intervals.
†† From 2011, psychoactive substance-related deaths will be subsumed within the total number of recorded suicides. Suicide data prior to 2011 will not be directly comparable with data published after this time.
*Indicates a difference larger than +/- 80%, the maximum shown on the chart in order to maintain a reasonable scale. See the 'Percentage difference' column for the actual value.

Spine 2. Trends over time in Scotland's adult mental health, ranked by direction and size of difference

Significantly improved over time
No significant change over time
Significantly worsened over time

Construct	Indicator	Unit	Time trend estimates		Percentage change	P-Value	Time period
			First	Last			
Healthy living	Physical activity	%	32.5	40.5	25	0.01	1998-2008
Financial security/debt	Financial management	%	41.7	51.8	24	0.00	1999-2008
Mental health problems	Suicide ††	EASR	21.9	18.0	-18.1	†	2001-2009
Healthy living	Healthy eating (women)	%	22.2	24.6	11	0.01	2003-2009
Healthy living	Alcohol consumption	%	71.5	77.3	8	0.00	2003-2009
Social inclusion	Education†	%	82.3	87.7	7	†	1996-2009
Participation	Self-reported health	%	73.5	76.7	4	0.00	2003-2009
Learning & development	Adult learning	%	48.4	49.9	3	†	2007-2009
Financial security/debt	Financial inclusion	%	95.5	98.4	3	0.00	2004-2008
Physical environment	Neighbourhood satisfaction	%	90.7	92.5	2	0.00	1999-2008
Safety	Home safety	%	96.0	97.0	1	0.00	2002-2008
Working life	Stress†	%	15.2	9.6	-37	0.20	2004-2007
Working life	Demand	%	16.0	12.2	-24	0.94	2004-2007
Physical environment	Overcrowding†	%	16.1	13.8	-14	†	2004-2009
Healthy living	Healthy eating (men)	%	19.9	21.8	10	0.13	2003-2009
Mental wellbeing	Life satisfaction	mean score	7.0	7.5	8	0.46	2002-2008
Participation	Involvement in local community (women)	%	26.9	28.4	5	0.10	2000-2003
Physical environment	Noise†	%	12.9	12.4	-4	†	2004-2009
Mental health problems	Common mental health problems	%	14.8	14.3	-3	0.56	2003-2009
Social networks	Social contact	%	82.7	84.9	3	0.23	2004-2008
Social support	Social support	%	83.4	82.9	-1	0.05	2004-2008
Physical environment	House condition†	%	83.9	83.1	-1	†	2004-2009
Working life	Colleague support	%	76.7	75.6	-1	0.98	2004-2007
Equality	Income inequality†	Gini score	0.3	0.3	5.2	†	1999-2010
Social inclusion	Worklessness†	%	11.7	10.4	-11	†	1999-2009
Working life	Control	%	22.7	17.5	-23	0.59	2004-2007
Safety	Neighbourhood safety	%	73.3	72.1	-2	0.01	2002-2008
Working life	Manager support	%	73.8	62.5	-15	0.01	2004-2007
Participation	Involvement in local community (men)	%	24.4	20.5	-16	0.02	2000-2003
Mental health problems	Alcohol dependency	%	7.8	10.1	29	0.00	2003-2009
Mental health problems	Psychoactive substance-related deaths ††	EASR	6.2	10.4	67.4	†	2001-2009



Notes

1. This spine chart shows the relative difference between the first and last data points in the time series, expressed as percentage change over time.
2. Percentage change is based on the unrounded estimates for first and last time points in the series and may therefore differ from what you would expect given the values in Table 6, rounded to whole numbers (percentages), one decimal point (mean scores) or two decimal points (Gini coefficient).
3. All green bars represent indicators where there has been a significant improvement over time, red bars represent indicators where there has been a significant worsening over time, orange bars represent indicators where there has been no significant change (may reflect stability or non-significant fluctuation).
4. P-values show whether there is a significant difference (linear or non-linear) over the time series overall. P-values less than 0.05 were deemed statistically significant.
5. Time period may not include most recent point estimate due to recent change of data source.
6. EASR - European Age-Standardised Rate per 100,000 population.

†Comparison of confidence intervals was used to ascertain statistically significant differences over time. Differences were deemed significant where there was no overlap of confidence intervals.

†† From 2011, psychoactive substance-related deaths will be subsumed within the total number of recorded suicides. Suicide data prior to 2011 will not be directly comparable with data published after this time.

*Indicates a difference larger than +/- 80%, the maximum shown on the chart in order to maintain a reasonable scale. See the 'Percentage difference' column for the actual value.

3.2.1 Mental health

There are nine indicators of mental health, two of mental wellbeing and seven of mental health problems. Time trend data were available for five of these indicators: one of mental wellbeing (life satisfaction) and four of mental health problems (common mental health problems, alcohol dependency, psychoactive substance-related deaths and suicide).

Life satisfaction has not changed significantly over the time series (Table 5). Measured on a scale from zero (extremely dissatisfied) to 10 (extremely satisfied), the mean score was 7.0 in 2002 and 7.5 in 2008. There has also been no significant change in the prevalence of common mental health problems, 15% in 2003 and 2008 and 14% in 2009. The proportion of adults with possible alcohol dependency increased significantly from 8% in 2003 to 10% in 2009. Psychoactive substance-related deaths (measured by the EASR of deaths from mental and behavioural disorders due to psychoactive substance use) also increased significantly from 6.2 deaths per 100,000 adults in 2001 to 10.4 in 2009. From 2001 to 2009, there was a significant fall in the EASR of adult deaths from suicide (21.9 to 18.0 per 100,000 adults)[iv].

For the three indicators that have significantly changed over time, the relative and absolute differences are:

	Percentage difference	Absolute difference
1. psychoactive substance-related deaths (6.2 to 10.4 per 100,000 adults)	67%	4.2 deaths per 100,000 adults
2. alcohol dependency (8% to 10%)	29%	2 % points
3. suicide (21.9 to 18.0 deaths per 100,000 adults)	-18%	-3.9 deaths per 100,000 adults

Box 1. Interpreting absolute and relative differences

Because not all of the indicators are measured on the same scale (the majority are percentages (44 of 51), two are standardised death rates, four are mean scores on scales of varying sizes and income inequality was measured by the Gini coefficient) all of the spine charts in this report are based on the relative difference rather than absolute difference. Using the relative difference between the first and last time points in the time series and the relative risk between groups (men and women, the most and least deprived quintiles) allowed the difference to be compared on a single scale for all indicators. However, the relative difference can sometimes be misleading: where the estimates for two time points or groups are both low values, even a very small absolute difference will produce a large relative difference. For example, those living in the most deprived quintile are almost twice as likely as those living in the least deprived quintile to provide 20+ hours of unpaid care per week but the absolute difference is only 3 percentage points (relative risk 1.90, 6% vs. 3%). For that reason, whenever comparing the gap between two groups or time points, the absolute differences are also given in the text for comparison. In interpreting the results and weighing up which differences merit attention, consideration has been given to the size of both the relative and absolute differences.

Time trend data were not available for mental wellbeing (measured by the WEMWBS), depression, anxiety and deliberate self-harm (Table 6).

3.2.2 Contextual factors associated with mental health

Of the 45 contextual indicators, time trend data were available for 24 (Table 5) and unavailable for 21 (Table 6). Two of the analysed indicators showed divergent trends for men and women, bringing the total number of results to 26. Half, 13 out of 26, did not change significantly over time:

Individual level
- healthy eating (men)

Community level
- involvement in local community (women)
- social contact
- social support

Structural level
- income inequality
- worklessness
- noise
- house condition
- overcrowding
- work-related stress
- demand at work
- control at work
- colleague support at work.

Although there was no significant change in worklessness (the percentage of unemployed or economically inactive working-age[vii] adults actively seeking employment, excluding students) between the first and last years in the time series (1999: 12%, 95% CI 11.1% to 12.3%; 2009: 10%, 95% CI 9.7% to 11.1%), there was a significant reduction from 1999 to 2007 (12% to 8%) after which it increased significantly (10% in 2009).

Note that no significant change might reflect stability or a level of change that was too small to reach statistical significance.

[vii] Women aged 16-59, men aged 16-64.

Areas of improvement

Ten out of the 24 contextual indicators analysed for differences over time showed improvement (Spine 2). In order, from the greatest to smallest percentage difference, these are as follows. Absolute differences are shown for comparison.

		Relative difference (% difference)	Absolute difference
1.	physical activity (32% to 41%)	25%	9 % points
2.	financial management (42% to 52%)	24%	10 % points
3.	healthy eating (women) (22% to 25%)	11%	3 % points
4.	alcohol consumption (72% to 77%)	8%	5 % points
5.	education (82% to 88%)	7%	6 % points
6.	self-reported health (74% to 77%)	4%	3 % points
7.	adult learning (48% to 50%)	3%	2 % points
8.	financial inclusion (96% to 98%)	2%	2 % points
9.	home safety (96% to 97%)	1%	1 % point
10.	neighbourhood satisfaction (91% to 92%)	1%	1 % point

The proportion of adults (aged 16–74) meeting the weekly recommended levels of physical activity increased significantly from 32% in 1998 to 41% in 2008. Between 1999 and 2008, the proportion of adults reporting that their household managed very or quite well financially increased significantly from 42% to 52%. Between 2003 and 2009, the proportion of women eating 'five a day' increased significantly from 22% to 25% (there was no significant change for men, 20% to 22%), the proportion of adults drinking within the recommended weekly limits (21 units or less for men, 14 units or less for women) increased significantly from 72% to 77% and the proportion who reported their health to be good or very good increased significantly (from 74% to 77%). Between 1999 and 2009, the proportion of working-age adults[vi] with at least one formal educational qualification (academic or vocational) increased significantly from 82% to 88%. There was a small but statistically significant rise in the proportion of working-age adults who participated in some type of adult learning from 48% in 2007 to 50% in 2009. Between 2004 and 2008, the proportion of households with access to a bank, building society, credit union or post office card account rose significantly from 96% to 98%. Over the same time period, there was a small but significant increase in the proportion of adults who reported feeling very or fairly safe when home alone at night (96% to 97%). Between 1999 and 2008, neighbourhood satisfaction among adults increased slightly but significantly from 91% to 92%.

Areas of deterioration

Three out of the 24 contextual indicators analysed for differences over time showed deterioration (Spine 2). In order, from the greatest to smallest percentage difference, these are:

		Relative difference (% difference)	Absolute difference
1.	involvement in local community (men) (24% to 21%)	-16%	-3 % points
2.	manager support (74% to 62%)	-15%	-12 % points
3.	neighbourhood safety (73% to 72%)	-1%	-1 % points

Between 2000 and 2003, the proportion of men who felt involved in their local community a great deal or a fair amount fell slightly but significantly from 24% to 21%; there was no significant change for women (27% to 28%). Between 2004 and 2007, the proportion of adults who agreed that their manager encourages them at work decreased significantly from 74% to 62%. Between 2002 and 2008, there was a slight but significant decrease in the proportion of adults who felt very or fairly safe when walking alone in the local neighbourhood after dark (73% to 72%).

Shifts in direction from 2009 to 2012

Comparing the results of the time trend analysis in this report with those in the 2009 report, the direction of significance (no significant difference/significantly improved/significantly worsened) was the same for 19 of the 29 indicators. Ten have changed direction (Table 7).

Table 7. Time trend results: indicators that have changed direction since the 2009 report

	2009	2012	Difference in data source and/or methodology
Mental health			
- common mental health problems			✓
Individual level			
- healthy eating (men)			✓
- alcohol consumption			✓
- self-reported health			✓
Community level			
- involvement in local community (women)			×
- involvement in local community (men)			×
Structural level			
- worklessness			×
- house condition			×
- overcrowding			×
- neighbourhood safety.			×

However, four of these also involve a change in survey data source and/or methodology (common mental health problems, healthy eating among men, alcohol consumption and self-reported health) and may reflect those alterations rather than a real change in the direction of travel (Appendix 3). There has been no change in data source or survey methodology for the remaining six, suggesting a genuine shift in the direction of change over the period of measurement prior to the 2009 report compared to that preceding the 2012 report. Only two of these indicators have shifted into the worsening category – involvement in the local community among men and neighbourhood safety – the rest have moved from improvement or worsening to no significant change.

3.3 Inequalities in Scotland's mental health

This section of the results shows whether there are any differences in the mental health, and associated contextual factors, of the adult Scottish population by gender, age and SIMD (Table 8). The gray shading indicates a significant difference between population subgroups: between men and women, between age groups or between SIMD quintiles. An absence of shading indicates no significant difference between comparison groups.

In the spine charts that follow, Spines 3–8, one population subgroup is compared with another: women versus men, men versus women, and the most deprived SIMD quintile compared with the least deprived. Here, green shading indicates that mental health (or an associated contextual factor) in the group of interest is statistically better than the comparison group, orange shading indicates no significant difference and red shading indicates that it is significantly worse.

Equalities analysis was performed for 50 indicators – all with available data except income inequality which could not be disaggregated due to disclosure risks. Of these, gender was associated with differences in mental health for 31 indicators (62%), age 43 (86%) and SIMD 44 (88%) (Table 9).

Equalities analysis was done on eight out of the nine indicators of mental health (data are not yet available for deliberate self-harm). Inequalities by deprivation were observed for all eight indicators, by age for seven (all except anxiety) and by gender for six (all except both measures of mental wellbeing – overall mental wellbeing and life satisfaction). Five indicators showed significant inequalities in mental health by all three equality strands (gender, age and SIMD). The remaining three indicators showed differences in mental health by population subgroups for two of the three equality strands, either by age and SIMD (both measures of mental wellbeing) or by gender and SIMD (anxiety).

Equalities analysis was done for eight of the ten individual-level indicators - all except spirituality and emotional intelligence for which indicators have yet to be established. Of all the domains, this was the most extensively affected by inequalities between the different population subgroups. Inequalities by age and SIMD were observed for all eight indicators and by gender for seven (all except self-reported health).

Equalities analysis was done for all 12 indicators within the community domain. Age was associated with differences in all 12, SIMD with 11 (all except social contact) and gender with 7. Inequalities by all three equality dimensions (gender, age and SIMD) were found for six of the 12 community-level contextual factors (involvement in local community, social support, caring, neighbourhood safety, home safety, perception of local crime); five differed by age and SIMD but not gender (volunteering, influencing local decisions, general trust, neighbourhood trust, non-violent neighbourhood crime) and one differed by gender and age (social contact).

Equalities analysis was done for 22 of the 23 structural indicators – all except income inequality. This domain was the least extensively affected by differences in mental health by gender, age and SIMD: deprivation was associated with

differences in mental health for 17 of the 22 structural indicators, age with 16 and gender with 11. Inequalities by all three equality dimensions were found for six structural indicators, 11 varied by two dimensions and four differed by only one – discrimination, control at work, manager support at work and colleague support at work. Only one indicator in the whole set, the likelihood of work-related stress, did not differ significantly by either gender, age or SIMD.

Table 8. Inequalities in mental health in Scotland, by gender, age and area deprivation

Statistically significant difference
No statistically significant difference

					Gender		Age Bands																SIMD Quintiles					All
Domain	Construct	Indicator	Unit	Year	Men	Women	16-24	25-34	35-44	45-54	55-64	65-74	75+	16-44	45-64	65+	35-49	50-59/ 50-64‡	25-44	45-59	55+	16-59	60+	1st (most dep)	2nd	3rd	4th	5th (least dep)	
Contextual factors associated with mental health	Mental Health	Mental wellbeing	Mean score	2009	49.9	49.7	50.2	49.8	49.5	48.8	50.3	50.9	48.6											47.8	48.9	49.7	50.6	51.3	49.7
		Life satisfaction	Mean score	2009	7.6	7.6	7.8	7.6	7.5	7.4	7.7	8.0	7.5											7.1	7.4	7.6	7.9	8.0	7.6
		Common mental health problems	%	2009	11	17	16	14	16	17	12	9	15											21	16	14	12	10	14
	Mental health problems	Depression*	%	2009	7	10								8	11	7								13	9	9	7	5	9
		Anxiety*	%	2009	6	10								7	10	7								13	8	8	7	5	7
		Alcohol dependency	%	2009	12	8	15	14	12	9	7	4	3											14	11	10	9	8	10
		Psychoactive substance-related deaths** †	EASR per 100,000	2009	16.4	4.6	9.0	21.9	17.0	4.9											0.3			26.0	10.9	7.8	4.5	2.2	10.4
		Suicide** †	EASR per 100,000	2009	27.4	8.9	16.0	24.1	26.2	21.6	16.2					10.0								30.8	20.5	19.1	11.6	7.9	18.0
	Individual	Learning and development	Adult learning††	%	2009	51	49	55	54									50	46						40	46	50	54	60	50
		Healthy living	Physical activity	%	2009	43	32	50	47	45	40	33	19	8											35	38	34	41	38	37
			Healthy eating	%	2009	22	25	17	23	22	22	28	26	25											17	19	23	28	28	23
			Alcohol consumption	%	2009	73	81	70	74	78	74	77	84	93											80	80	78	77	73	77
			Drug use	%	2009/10	10	5	20	15	8	3											0			10	9	6	5	6	7
		General health	Self-reported health	%	2009	77	77	90	87	83	76	71	65	53											65	71	74	84	88	77
			Long-standing physical condition or disability	%	2009	35	39	16	20	25	36	52	61	68											43	40	41	33	31	37
			Limiting long-standing physical condition or disability	%	2009	22	25	9	11	15	22	32	40	55											32	26	26	18	17	24
	Community	Participation	Volunteering	%	2008	21	23	19	15	27	24	25	22	15											14	18	23	27	27	22
		Participation	Involvement in local community	%	2009	24	28	20	20	26	27	25	34	37											22	22	28	26	33	26
		Participation	Influencing local decisions	%	2009	20	21	13	18	21	26	20	22	22											18	18	22	22	24	21
		Social networks	Social contact	%	2009	91	97	96	96	95	91	92	95	96											95	93	94	92	96	94
		Social support	Social support	%	2009	86	90	94	89	87	87	88	88	82											85	87	88	90	91	88
		Social support	Caring	%	2009	4	5	1	1	4	5	7	7	6											6	4	5	3	3	4
		Trust	General trust	%	2009	47	46	45	42	43	48	45	50	58											33	45	50	50	54	46
		Trust	Neighbourhood trust	%	2009	57	58	37	45	52	60	67	75	77											35	47	61	67	75	57
		Safety	Neighbourhood safety	%	2008	84	61	73	76	79	80	73					55								57	67	76	79	81	72
		Safety	Home safety	%	2009	99	96	94	97	98	98	97					98								93	97	98	98	99	97
		Safety	Non-violent neighbourhood crime	%	2009/10	14	15	15											19	16			8		20	17	13	10	12	14
		Safety	Perception of local crime	%	2009/10	57	61	69	65	63	58	56	53	41											79	71	54	48	45	59
	Structural	Equality	Income inequality	Gini score	2009/10																									0.35
		Social inclusion	Worklessness††	%	2009	11	10	15	10								9	9							19	12	10	7	5	10
		Social inclusion	Education††	%	2009	89	87	91	93								88	81							75	84	90	93	96	88
		Discrimination	Discrimination	%	2009	11	12								14	12	4								12	12	11	11	11	11
		Discrimination	Racial discrimination	%	2009/10	14	19	19											18	16			13		22	17	15	14	15	16
		Discrimination	Harassment	%	2009	8	7								10	6	3								9	10	7	6	6	8
		Financial security/debt	Financial management	%	2008	56	46	41	41	46	52	59					59								37	46	53	58	68	52
		Financial security/debt	Financial inclusion	%	2008	99	98	98	99	98	99	99					98								96	98	99	100	100	98
		Physical environment	Neighbourhood satisfaction	%	2008	93	92	86	91	93	94	94					96								79	91	96	98	99	92
		Physical environment	Noise	%	2009	11	15															15	8		20	14	11	8	7	12
		Physical environment	Escape facility‡	%	2009	84	77	82†	77	79	83	84					79								65	77	83	87	89	80
		Physical environment	Greenspace	%	2009	78	74	74	78	77	77	76	76	72											64	72	75	83	85	76
		Physical environment	House condition	%	2009	85	80															80	89		75	82	82	86	91	83
		Physical environment	Overcrowding	%	2009	14	14															18	6		15	14	16	12	11	14
		Working life	Stress	%	2009	13	16	10	12	17	17										12				14	13	15	14	16	14
		Working life	Work-life balance	Mean score	2009	6.3	6.5	6.4	6.1	6.4	6.1	6.8					7.8								6.2	6.2	6.5	6.3	6.6	6.4
		Working life	Demand	%	2009	25	25	18	22	30	30										18				22	22	24	28	27	25
		Working life	Control	%	2009	63	63								61	66	62								54	57	66	64	71	63
		Working life	Manager support	%	2009	60	70								66	63	63								66	58	72	64	65	65
		Working life	Colleague support	%	2009	77	82								81	77	72								78	82	79	77	80	79
		Violence	Partner abuse	%	2009/10	3	4	11											4	2			1		5	5	3	2	2	3
		Violence	Neighbourhood violence	%	2009/10	3	2	7											4	1			0		5	3	2	2	2	3
		Violence	Attitude to violence‡	Mean score	2009	3.0	3.3	2.8†	3.0	3.0	3.3	3.3					3.4								3.1	3.2	3.1	3.3	3.1	3.2

Footnotes
1 Equalities analysis not undertaken for four indicators: data were not available for deliberate self-harm; indicators for spirituality and emotional intelligence have yet to be agreed, income inequality could not be disaggregated due to discloure risk associated with small sample size; **2** Shaded cells indicate a statistically significant difference between genders, age groups (linear or non-linear) and SIMD quintiles (linear, except for overcrowding which was non-linear) (P<0.05); **3** Estimates are based on calendar year unless stated otherwise; **4** SIMD - Scottish Index of Multiple Deprivation; **5** EASR - European Age-Standardised Rate per 100,000 adults; **6** Values of zero and 100 are due to rounding of percentages to whole numbers.

Notes on selected indicators
*Depression and anxiety - estimates for all adults are from 2009, estimates for equalities analysis are based on 2 years' aggregated data (2008-2009) due to small numbers; **Psychoactive substance-related deaths, suicide - estimates for all adults are from 2009, estimates for equalities analysis are based on 3 years' aggregated data (2007-2009) due to small numbers; †From 2011, psychoactive substance-related deaths will be subsumed within the total number of recorded suicides. Suicide data prior to 2011 will not be directly comparable with data published after this time; ‡Escape facility and attitude to violence refer to adults aged 18-24 years rather than 16-24 years as the source survey (Scottish Social Attitudes Survey) targets adults aged 18+; ††Indicators from the Annual Population Survey (adult learning, worklessness and education) are based on women aged 16-59 and men aged 16-64.

Table 9. Inequalities in Scotland's mental health – summary of significant differences by gender, age and area deprivation

Statistically significant difference
No statistically significant difference

	Domain	Construct	Indicator	Significantly different by: Gender	Age	SIMD	No. of equality dimensions that indicator varies by
	Mental health	Mental wellbeing	Mental wellbeing				2
			Life satisfaction				2
		Mental health problems	Common mental health problems				3
			Depression				3
			Anxiety				2
			Alcohol dependency				3
			Psychoactive substance-related deaths				3
			Suicide				3
		Mental health subtotals		6	7	8	
Contextual factors associated with mental health	Individual	Learning and development	Adult learning				3
		Healthy Living	Physical activity				3
			Healthy eating				3
			Alcohol consumption				3
			Drug use				3
		General health	Self-reported health				2
			Long-standing physical condition or disability				3
			Limiting long-standing physical condition or disability				3
		Spirituality	Spirituality – indicator to be established	N/A	N/A	N/A	NA
		Emotional intelligence	Emotional intelligence – indicator to be established	N/A	N/A	N/A	NA
		Individual subtotals		7	8	8	
	Community	Participation	Volunteering				2
		Participation	Involvement in local community				3
		Participation	Influencing local decisions				2
		Social networks	Social contact				2
		Social support	Social support				3
		Social support	Caring				3
		Trust	General trust				2
		Trust	Neighbourhood trust				2
		Safety	Neighbourhood safety				3
		Safety	Home safety				3
		Safety	Non-violent neighbourhood crime				2
		Safety	Perception of local crime				3
		Community subtotals		7	12	11	

	Structural	Equality	Income inequality	N/A	N/A	N/A	N/A
		Social inclusion	Worklessness				2
		Social inclusion	Education				3
		Discrimination	Discrimination				1
		Discrimination	Racial discrimination				3
		Discrimination	Harassment				2
		Financial security/debt	Financial management				3
		Financial security/debt	Financial inclusion				2
		Physical environment	Neighbourhood satisfaction				2
		Physical environment	Noise				3
		Physical environment	Escape facility				2
		Physical environment	Greenspace				2
		Physical environment	House condition				3
		Physical environment	Overcrowding				2
		Working life	Stress				0
		Working life	Work–life balance				2
		Working life	Demand				2
		Working life	Control				1
		Working life	Manager support				1
		Working life	Colleague support				1
		Violence	Partner abuse				2
		Violence	Neighbourhood violence				3
		Violence	Attitude to violence				2
		Structural subtotals		11	16	17	
		TOTAL		31	43	44	

Number of indicators significantly different by all 3 equality dimensions	24
Number of indicators significantly different by 2 equality dimensions	21
Number of indicators significantly different by 1 equality dimension	4
Number of indicators significantly different by 0 equality dimensions	1

3.3.1 Inequalities by gender

Of the three equality dimensions examined, inequalities in mental health were least prevalent by gender, 31 out of 50 indicators (62%). There was no significant difference in men and women's mental health or its influences for the following 19 indicators:

- Mental health – neither of the two measures of mental wellbeing (overall mental wellbeing nor life satisfaction)
- Individual – self-reported health
- Community – volunteering, influencing local decisions, general trust, neighbourhood trust, non-violent neighbourhood crime
- Structural – worklessness, discrimination, harassment, neighbourhood satisfaction, overcrowding, work-related stress, work–life balance, demand at work, control at work, colleague support at work, partner abuse (Table 8).

The remainder of this section focuses on those indicators where there is a significant difference between men and women.

Mental health

In 2009, women were significantly more likely than men to have a common mental health problem, as measured by a score of four or more on the GHQ-12 (17% vs 11%), depression (10% vs 7%) and anxiety (10% vs 6%). However, men were significantly more likely than women to suffer from possible alcohol dependency (12% vs 8%), to have died from mental and behavioural disorders due to psychoactive substance use (16.4 deaths per 100,000 men vs 4.6 per 100,000 women) and to have committed suicide (27.4 per 100,000 men vs 8.9 per 100,000 women).

Contextual factors associated with mental health

Individual

All estimates for individual-level contextual factors are from 2009, with the exception of drug use which is based on financial year 2009/10. Women were significantly less likely to have participated in some type of adult learning in the last year (49% vs 51%) and to meet the weekly recommendations for physical activity (32% vs 43%) but more likely to eat healthily, determined by the percentage eating five portions of fruit and vegetable a day (25% vs 22%). Men were significantly less likely to drink within the recommended weekly limits for alcohol consumption (73% vs 81%) and more likely to have taken drugs in the previous year (10% vs 5%). Women were more likely than men to have either a long-standing physical condition or disability (39% vs 35%) or a limiting long-standing physical condition or disability (25% vs 22%).

Community

Community-level estimates are for 2008, 2009 or 2009/10 – see Table 8 for details. Women were significantly more likely to feel involved in their local community (28% vs 24%), to have social contact with non-household members at least once a week (either in person, by phone, letter, email or through the internet) (97% vs 91%), to have social support (90% vs 86%) and to have caring responsibilities, defined as 20+ hours per week of unpaid care to a member of their household or to someone not living with them (5% vs 4%). However, neighbourhood and home safety were both significantly higher in men; men were more likely to feel very or fairly safe walking alone in their neighbourhood after dark (84% vs 61%) and to feel very or fairly safe when home alone at night (99% vs 96%). Men were also less likely to perceive crime in their local area as very or fairly common (57% vs 61%).

Structural
As for the community domain, structural estimates are for 2008, 2009 or 2009/10. Women were significantly less likely than men to hold at least one academic or vocational educational qualification (87% vs 89%), more likely to think that racial discrimination is a big problem in Scotland (19% vs 14%), less likely to report that their household managed very or quite well financially (46% vs 56%), less likely to live in a household with access to a bank, building society, credit union or post office card account (98% vs 99%), more likely to report being bothered often or fairly often by noise when home indoors (15% vs 11%), less likely to report that they had an escape facility (somewhere in their local area where they could go to 'escape' from everyday problems/stresses, not home/garden) (77% vs 84%), less likely to feel they have a safe and pleasant park, green or other area of grass in their neighbourhood, excluding personal garden space, which they and their family can use (74% vs 78%) and less likely to rate the condition of their home as very or fairly good (80% vs 85%).

Men were significantly less likely than women to agree that their line manager encourages them at work (60% vs 70%), were more likely to have experienced neighbourhood violence in the past year (3% vs 2%) and viewed violence as more acceptable than women (mean score of 3.0 vs 3.3 for women on a scale from one, 'not wrong at all', to five, 'very seriously wrong').

How big is the gender gap in mental health?
The following four spine charts (Spines 3–6) show the relative differences in mental health and associated contextual factors between the sexes, expressed as relative risk. The first two show the differences for women compared with men – Spine 3 presents the differences by indicator domain and Spine 4 ranks them according to the direction and size of the effect. Spines 5 and 6 show the corresponding differences for men compared with women.

Women fared worse than men on 19 of the 50 indicators analysed for inequalities (39%) (Spine 4). In order, from the greatest to smallest relative risk, these are:

	Relative risk	Absolute difference
1. anxiety (10% vs 6%)	1.78	4 % points
2. depression (10% vs 7%)	1.52	3 % points
3. common mental health problems (17% vs 11%)	1.48	6 % points
4. noise (15% vs 11%)	1.40	4 % points
5. racial discrimination (19% vs 14%)	1.38	5 % points
6. caring (4.7% vs 3.6%)	1.28	1% point
7. neighbourhood safety (61% vs 84%)	0.73	-23 % points
8. physical activity (32% vs 43%)	0.73	-11 % points
9. financial management (46% vs 56%)	0.84	-10 % points
10. limiting long-standing physical condition or disability (25% vs 22%)	1.14	3 % points
11. long-standing physical condition or disability (39% vs 35%)	1.10	4 % points
12. escape facility (77% vs 84%)	0.92	-7 % points
13. perception of local crime (61% vs 57%)	1.06	4 % points
14. house condition (80% vs 85%)	0.94	-5 % points
15. greenspace (74% vs 78%)	0.96	-4 % points
16. adult learning (49% vs 51%)	0.96	-2 % points
17. home safety (96% vs 99%)	0.97	-3 % points
18. education (87% vs 89%)	0.98	-2 % points
19. financial inclusion (98% vs 99%)	0.99	-1 % point

Men fared worse than women on 12 of the 50 indicators analysed for inequalities (24%) (Spine 6). In order from the greatest to smallest relative risk, these are:

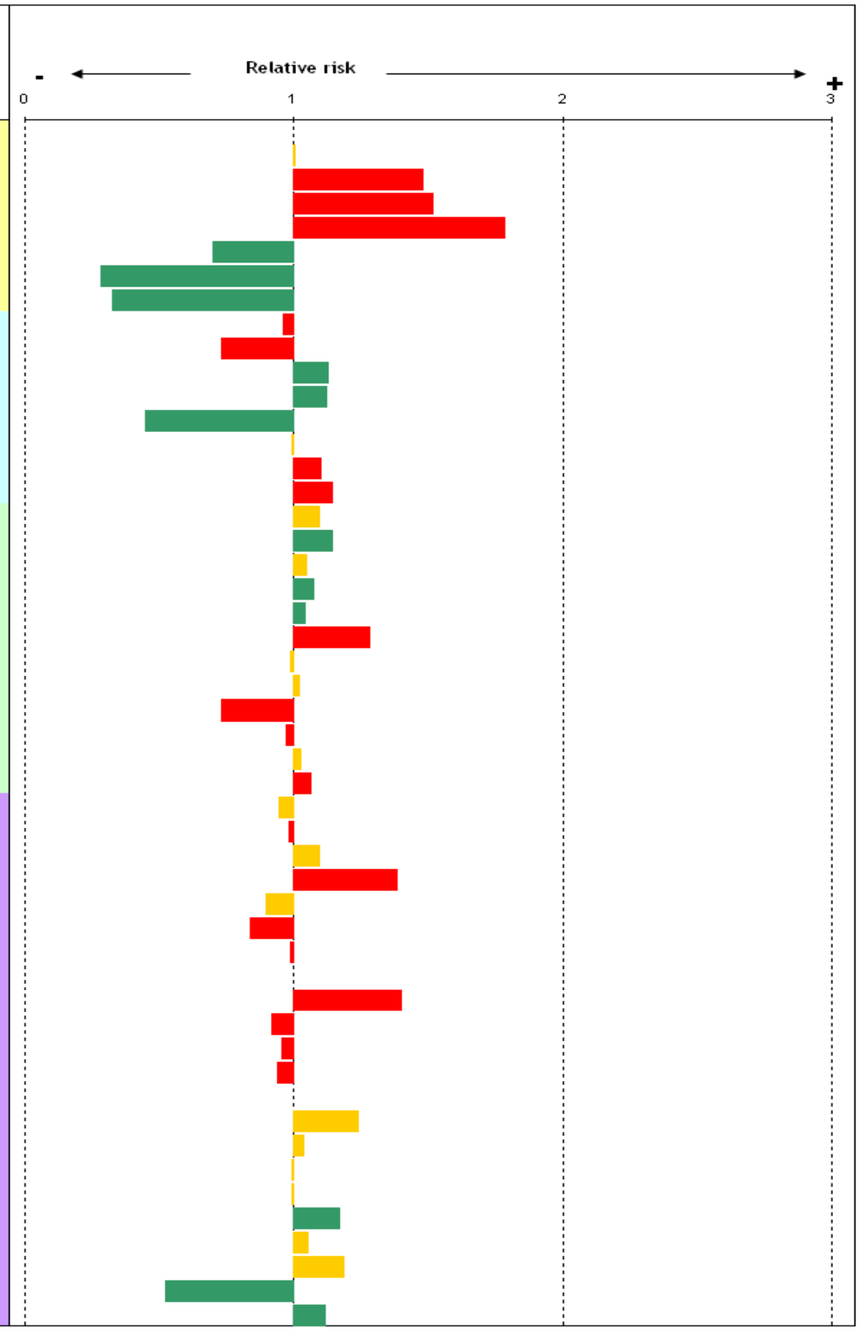
	Relative risk	Absolute difference
1. psychoactive substance-related deaths (16.4 vs 4.6 per 100,000 adults)	3.56	11.8 deaths per 100,000 adults
2. suicide (27.4 vs 8.9 per 100,000 adults)	3.07	18.5 deaths per 100,000 adults
3. drug use (10% vs 5%)	2.24	5 % points
4. neighbourhood violence (3% vs 2%)	1.91	1 % point
5. alcohol dependency (12% vs 8%)	1.43	4 % points
6. manager support (60% vs 70%)	0.85	-10 % points
7. involvement in local community (24% vs 28%)	0.87	-4 % points
8. healthy eating (22% vs 25%)	0.89	-3 % points
9. alcohol consumption (73% vs 81%)	0.89	-8 % points
10. attitude to violence (3.0 vs 3.3*)	0.90	-0.3*
11. social contact (91% vs 97%)	0.93	-6 % points
12. social support (86% vs 90%)	0.96	-4 % points

*On a scale of 1 to 5

Spine 3. Gender difference in mental health: women compared with men, ordered by indicator domain (most recent year)

Women fare significantly better than men
No significant difference between the sexes
Women fare significantly worse than men

Domain	Construct	Indicator	Unit	Point estimate (women)	Point estimate (men)	Percentage difference	Relative risk	P-value	Year
Contextual factors associated with mental health									
Mental Health	Mental wellbeing	Mental wellbeing	Mean	49.7	49.9	-0.4	1.00	0.31	2009
	Mental wellbeing	Life satisfaction	Mean	7.6	7.6	0.6	1.01	0.15	2009
	Mental health problems	Common mental health problems	%	16.9	11.4	47.8	1.48	0.00	2009
	Mental health problems	Depression	%	10.3	6.8	51.5	1.52	0.00	2009
	Mental health problems	Anxiety	%	10.0	5.6	78.2	1.78	0.00	2009
	Mental health problems	Alcohol dependency	%	8.3	11.9	-30.3	0.70	0.00	2009
	Mental health problems	Psychoactive substance-related deaths	EASR	4.6	16.4	-71.9	0.28	†	2009
	Mental health problems	Suicide	EASR	8.9	27.4	-67.5	0.33	†	2009
Individual	Learning & development	Adult learning	%	48.8	50.9	-4.1	0.96	†	2009
	Healthy living	Physical activity	%	31.6	43.1	-26.7	0.73	0.00	2009
	Healthy living	Healthy eating	%	24.6	21.8	12.9	1.13	0.00	2009
	Healthy living	Alcohol consumption	%	81.5	72.8	12.0	1.12	0.00	2009
	Healthy living	Drug use	%	4.5	10.1	-55.4	0.45	0.00	2009/10
	General health	Self-reported health	%	76.6	76.9	-0.5	1.00	0.71	2009
	General health	Long-standing physical condition or disabiility	%	38.8	35.2	10.2	1.10	0.00	2009
	General health	Limiting long-standing physical condition or disability	%	25.2	22.0	14.5	1.14	0.00	2009
Community	Participation	Volunteering	%	22.6	20.7	9.3	1.09	0.07	2008
	Participation	Involvement in local community	%	27.8	24.3	14.4	1.14	0.04	2009
	Participation	Influencing local decisions	%	21.0	20.1	4.7	1.05	0.55	2009
	Social networks	Social contact	%	97.0	90.6	7.1	1.07	0.00	2009
	Social support	Social support	%	89.8	86.4	3.9	1.04	0.01	2009
	Social support	Caring	%	4.7	3.6	28.2	1.28	0.03	2009
	Trust	General trust	%	46.2	46.8	-1.1	0.99	0.79	2009
	Trust	Neighbourhood trust	%	58.0	56.8	2.0	1.02	0.56	2009
	Safety	Neighbourhood safety	%	61.3	83.7	-26.9	0.73	0.00	2008
	Safety	Home safety	%	95.5	98.5	-3.1	0.97	0.00	2009
	Safety	Non-violent neighbourhood crime	%	14.6	14.3	2.5	1.03	0.52	2009/10
	Safety	Perception of local crime	%	61.0	57.5	6.2	1.06	0.00	2009/10
Structural	Social inclusion	Worklessness	%	10.1	10.7	-5.6	0.94	†	2009
	Social inclusion	Education	%	86.9	88.5	-1.8	0.98	†	2009
	Discrimination	Discrimination	%	11.8	10.7	9.6	1.10	0.41	2009
	Discrimination	Racial discrimination	%	19.0	13.7	38.4	1.38	0.00	2009/10
	Discrimination	Harassment	%	7.2	8.0	-10.2	0.90	0.43	2009
	Financial security/debt	Financial management	%	46.5	55.6	-16.4	0.84	0.00	2008
	Financial security/debt	Financial inclusion	%	97.6	98.9	-1.4	0.99	0.00	2008
	Physical environment	Neighbourhood satisfaction	%	92.3	92.6	-0.3	1.00	0.57	2008
	Physical environment	Noise	%	14.8	10.6	39.8	1.40	0.00	2009
	Physical environment	Escape facility	%	77.2	83.9	-7.9	0.92	0.00	2009
	Physical environment	Greenspace	%	74.2	77.5	-4.3	0.96	0.00	2008
	Physical environment	House condition	%	80.1	85.2	-6.1	0.94	0.00	2009
	Physical environment	Overcrowding	%	13.7	13.8	-0.4	1.00	0.13	2009
	Working life	Stress	%	15.8	12.8	23.8	1.24	0.10	2009
	Working life	Work-life balance	Mean	6.5	6.3	3.4	1.03	0.07	2009
	Working life	Demand	%	24.7	24.9	-0.7	0.99	0.94	2009
	Working life	Control	%	62.7	63.1	-0.6	0.99	0.88	2009
	Working life	Manager support	%	70.2	59.9	17.1	1.17	0.00	2009
	Working life	Colleague support	%	81.5	77.4	5.4	1.05	0.05	2009
	Violence	Partner abuse	%	3.8	3.2	18.6	1.19	0.11	2009/10
	Violence	Neighbourhood violence	%	1.8	3.4	-47.5	0.52	0.00	2009/10
	Violence	Attitude to violence	Mean	3.3	3.0	11.4	1.11	0.00	2009

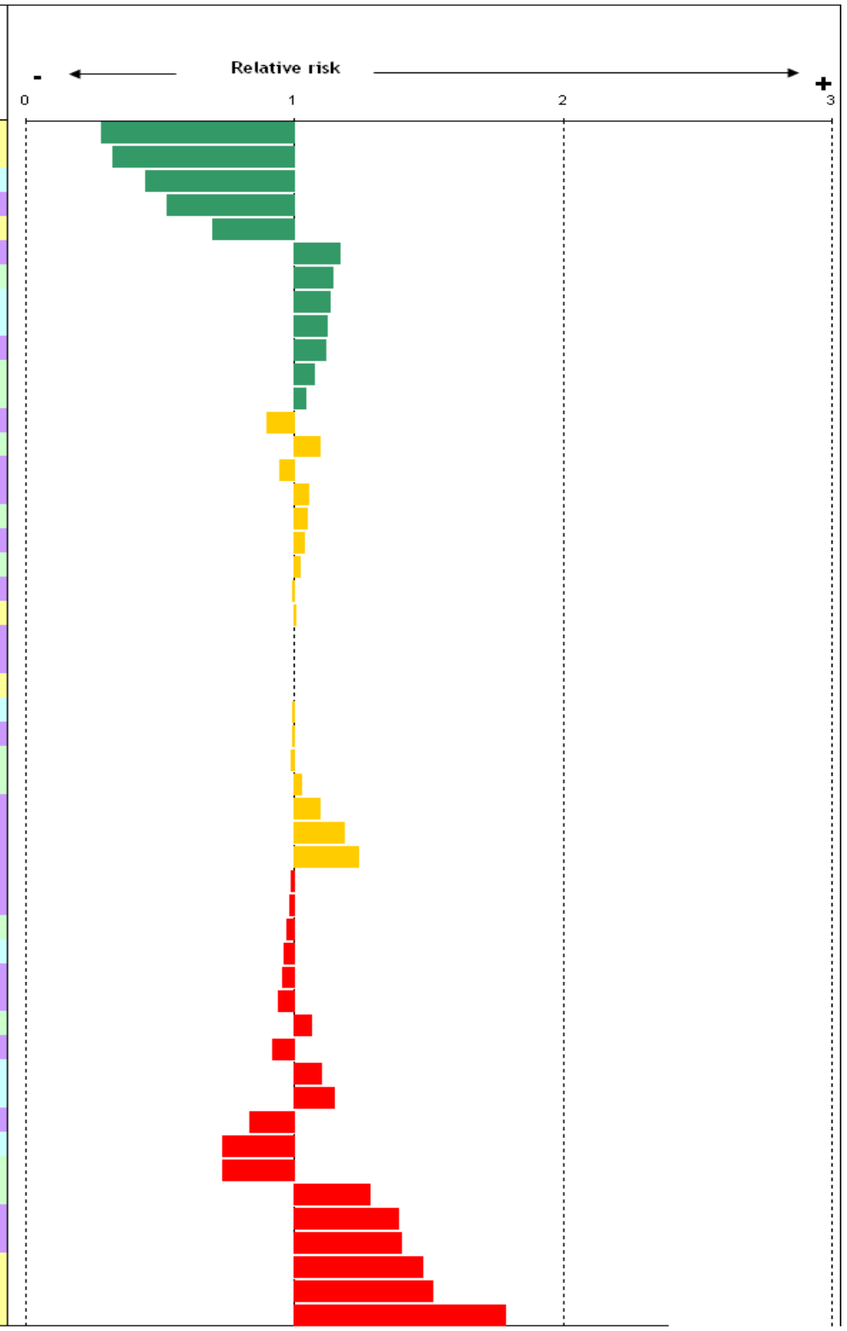


Notes
1. This spine chart shows the relative risk between the sexes, i.e. the estimate for women divided by the estimate for men.
2. All green bars represent indicators where women fare significantly better than men, red bars represent indicators where women fare significantly worse than men, orange bars represent indicators where there is no significant difference betwen the sexes.
3. P-values show whether there is a significant difference between the estimates for men and women. P-values less than 0.05 were deemed statistically significant.
4. EASR - European Age-Standardised Rate per 100,000 population.
5. Equalities analysis not undertaken for three indicators: indicators for spirituality and emotional intelligence have yet to be agreed, income inequality could not be disaggregated due to discloure risk associated with small sample size.
†Comparison of confidence intervals was used to ascertain statistically significant differences between estimates for men and women. Differences were deemed significant where there was no overlap of confidence intervals.

Spine 4. Gender difference in mental health: women compared with men, ranked by direction and size of difference (most recent year)

Women fare significantly better than men
No significant difference between the sexes
Women fare significantly worse than men

Construct	Indicator	Unit	Point estimate (women)	Point estimate (men)	Percentage difference	Relative risk	P-value	Year
Mental health problems	Psychoactive substance-related deaths	EASR	4.6	16.4	-71.9	0.28	†	2009
Mental health problems	Suicide	EASR	8.9	27.4	-67.5	0.33	†	2009
Healthy living	Drug use	%	4.5	10.1	-55.4	0.45	0.00	2009/10
Violence	Neighbourhood violence	%	1.8	3.4	-47.5	0.52	0.00	2009/10
Mental health problems	Alcohol dependency	%	8.3	11.9	-30.3	0.70	0.00	2009
Working life	Manager support	%	70.2	59.9	17.1	1.17	0.00	2009
Participation	Involvement in local community	%	27.8	24.3	14.4	1.14	0.04	2009
Healthy living	Healthy eating	%	24.6	21.8	12.9	1.13	0.00	2009
Healthy living	Alcohol consumption	%	81.5	72.8	12.0	1.12	0.00	2009
Violence	Attitude to violence	Mean	3.3	3.0	11.4	1.11	0.00	2009
Social networks	Social contact	%	97.0	90.6	7.1	1.07	0.00	2009
Social support	Social support	%	89.8	86.4	3.9	1.04	0.01	2009
Working life	Harassment	%	7.2	8.0	-10.2	0.90	0.43	2009
Participation	Volunteering	%	22.6	20.7	9.3	1.09	0.07	2008
Discrimination	Worklessness	%	10.1	10.7	-5.6	0.94	†	2009
Discrimination	Colleague support	%	81.5	77.4	5.4	1.05	0.05	2009
Participation	Influencing local decisions	%	21.0	20.1	4.7	1.05	0.55	2009
Working life	Work-life balance	Mean	6.5	6.3	3.4	1.03	0.07	2009
Trust	Neighbourhood trust	%	58.0	56.8	2.0	1.02	0.56	2009
Working life	Demand	%	24.7	24.9	-0.7	0.99	0.94	2009
Mental wellbeing	Life satisfaction	Mean	7.6	7.6	0.6	1.01	0.15	2009
Physical environment	Overcrowding	%	13.7	13.8	-0.4	1.00	0.13	2009
Physical environment	Neighbourhood satisfaction	%	92.3	92.6	-0.3	1.00	0.57	2008
Mental wellbeing	Mental wellbeing	Mean	49.7	49.9	-0.4	1.00	0.31	2009
General health	Self-reported health	%	76.6	76.9	-0.5	1.00	0.71	2009
Working life	Control	%	62.7	63.1	-0.6	0.99	0.88	2009
Trust	General trust	%	46.2	46.8	-1.1	0.99	0.79	2009
Safety	Non-violent neighbourhood crime	%	14.6	14.3	2.5	1.03	0.52	2009/10
Discrimination	Discrimination	%	11.8	10.7	9.6	1.10	0.41	2009
Violence	Partner abuse	%	3.8	3.2	18.6	1.19	0.11	2009/10
Physical environment	Stress	%	15.8	12.8	23.8	1.24	0.10	2009
Financial security/debt	Financial inclusion	%	97.6	98.9	-1.4	0.99	0.00	2008
Social inclusion	Education	%	86.9	88.5	-1.8	0.98	†	2009
Safety	Home safety	%	95.5	98.5	-3.1	0.97	0.00	2009
Learning & development	Adult learning	%	48.8	50.9	-4.1	0.96	†	2009
Physical environment	Greenspace	%	74.2	77.5	-4.3	0.96	0.00	2008
Physical environment	House condition	%	80.1	85.2	-6.1	0.94	0.00	2009
Safety	Perception of local crime	%	61.0	57.5	6.2	1.06	0.00	2009/10
Physical environment	Escape facility	%	77.2	83.9	-7.9	0.92	0.00	2009
General health	Long-standing physical condition or disabiility	%	38.8	35.2	10.2	1.10	0.00	2009
General health	Limiting long-standing physical condition or disability	%	25.2	22.0	14.5	1.14	0.00	2009
Financial security/debt	Financial management	%	46.5	55.6	-16.4	0.84	0.00	2008
Healthy living	Physical activity	%	31.6	43.1	-26.7	0.73	0.00	2009
Safety	Neighbourhood safety	%	61.3	83.7	-26.9	0.73	0.00	2008
Social support	Caring	%	4.7	3.6	28.2	1.28	0.03	2009
Discrimination	Racial discrimination	%	19.0	13.7	38.4	1.38	0.00	2009/10
Physical environment	Noise	%	14.8	10.6	39.8	1.40	0.00	2009
Mental health problems	Common mental health problems	%	16.9	11.4	47.8	1.48	0.00	2009
Mental health problems	Depression	%	10.3	6.8	51.5	1.52	0.00	2009
Mental health problems	Anxiety	%	10.0	5.6	78.2	1.78	0.00	2009



Notes
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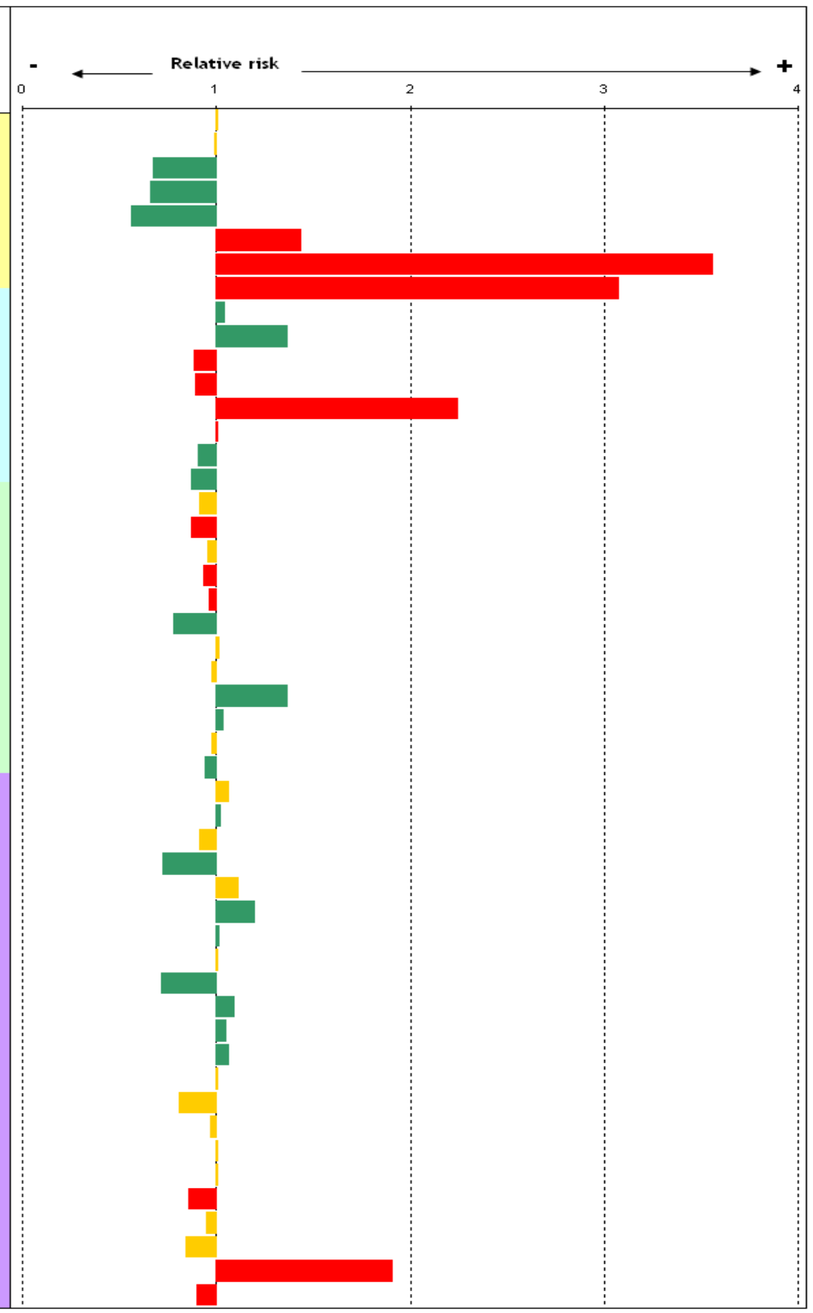
2. All green bars represent indicators where women fare significantly better than men, red bars represent indicators where women fare significantly worse than men, orange bars represent indicators where there is no significant difference betwen the sexes.
3. P-values show whether there is a significant difference between the estimates for men and women. P-values less than 0.05 were deemed statistically significant.
4. EASR - European Age-Standardised Rate per 100,000 population.
5. Equalities analysis not undertaken for three indicators: indicators for spirituality and emotional intelligence have yet to be agreed, income inequality could not be disaggregated due to discloure risk associated with small sample size.
†Comparison of confidence intervals was used to ascertain statistically significant differences between estimates for men and women. Differences were deemed significant where there was no overlap of confidence intervals.

Spine 5. Gender difference in mental health: men compared with women, ordered by indicator domain (most recent year)

Men fare significantly better than women
No significant difference between the sexes
Men fare significantly worse than women

Contextual factors associated with mental health	Domain	Construct	Indicator	Unit	Point estimate (men)	Point estimate (women)	Percentage difference	Relative risk	P-value	Year
	Mental Health	Mental wellbeing	Mental wellbeing	Mean	49.9	49.7	0.4	1.00	0.31	2009
		Mental wellbeing	Life satisfaction	Mean	7.6	7.6	-0.6	0.99	0.15	2009
		Mental health problems	Common mental health problems	%	11.4	16.9	-32.3	0.68	0.00	2009
		Mental health problems	Depression	%	6.8	10.3	-34.0	0.66	0.00	2009
		Mental health problems	Anxiety	%	5.6	10.0	-43.9	0.56	0.00	2009
		Mental health problems	Alcohol dependency	%	11.9	8.3	43.5	1.43	0.00	2009
		Mental health problems	Psychoactive substance-related deaths	EASR	16.4	4.6	255.7	3.56	†	2009
		Mental health problems	Suicide	EASR	27.4	8.9	207.3	3.07	†	2009
	Individual	Learning & development	Adult learning	%	50.9	48.8	4.3	1.04	†	2009
		Healthy living	Physical activity	%	43.1	31.6	36.5	1.37	0.00	2009
		Healthy living	Healthy eating	%	21.8	24.6	-11.4	0.89	0.00	2009
		Healthy living	Alcohol consumption	%	72.8	81.5	-10.7	0.89	0.00	2009
		Healthy living	Drug use	%	10.1	4.5	124.1	2.24	0.00	2009/10
		General health	Self-reported health	%	76.9	76.6	0.5	1.00	0.71	2009
		General health	Long-standing physical condition or disabiility	%	35.2	38.8	-9.2	0.91	0.00	2009
		General health	Limiting long-standing physical condition or disability	%	22.0	25.2	-12.7	0.87	0.00	2009
	Community	Participation	Volunteering	%	20.7	22.6	-8.5	0.91	0.07	2008
		Participation	Involvement in local community	%	24.3	27.8	-12.6	0.87	0.04	2009
		Participation	Influencing local decisions	%	20.1	21.0	-4.5	0.95	0.55	2009
		Social networks	Social contact	%	90.6	97.0	-6.6	0.93	0.00	2009
		Social support	Social support	%	86.4	89.8	-3.8	0.96	0.01	2009
		Social support	Caring	%	3.6	4.7	-22.0	0.78	0.03	2009
		Trust	General trust	%	46.8	46.2	1.1	1.01	0.79	2009
		Trust	Neighbourhood trust	%	56.8	58.0	-2.0	0.98	0.56	2009
		Safety	Neighbourhood safety	%	83.7	61.3	36.7	1.37	0.00	2008
		Safety	Home safety	%	98.5	95.5	3.2	1.03	0.00	2009
		Safety	Non-violent neighbourhood crime	%	14.3	14.6	-2.5	0.98	0.52	2009/10
		Safety	Perception of local crime	%	57.5	61.0	-5.8	0.94	0.00	2009/10
	Structural	Social inclusion	Worklessness	%	10.7	10.1	5.9	1.06	†	2009
		Social inclusion	Education	%	88.5	86.9	1.8	1.02	†	2009
		Discrimination	Discrimination	%	10.7	11.8	-8.8	0.91	0.41	2009
		Discrimination	Racial discrimination	%	13.7	19.0	-27.8	0.72	0.00	2009/10
		Discrimination	Harassment	%	8.0	7.2	11.4	1.11	0.43	2009
		Financial security/debt	Financial management	%	55.6	46.5	19.6	1.20	0.00	2008
		Financial security/debt	Financial inclusion	%	98.9	97.6	1.4	1.01	0.00	2008
		Physical environment	Neighbourhood satisfaction	%	92.6	92.3	0.3	1.00	0.57	2008
		Physical environment	Noise	%	10.6	14.8	-28.5	0.72	0.00	2009
		Physical environment	Escape facility	%	83.9	77.2	8.6	1.09	0.00	2009
		Physical environment	Greenspace	%	77.5	74.2	4.5	1.04	0.00	2008
		Physical environment	House condition	%	85.2	80.1	6.4	1.06	0.00	2009
		Physical environment	Overcrowding	%	13.8	13.7	0.4	1.00	0.13	2009
		Working life	Stress	%	12.8	15.8	-19.2	0.81	0.10	2009
		Working life	Work-life balance	Mean	6.3	6.5	-3.3	0.97	0.07	2009
		Working life	Demand	%	24.9	24.7	0.7	1.01	0.94	2009
		Working life	Control	%	63.1	62.7	0.6	1.01	0.88	2009
		Working life	Manager support	%	59.9	70.2	-14.6	0.85	0.00	2009
		Working life	Colleague support	%	77.4	81.5	-5.1	0.95	0.05	2009
		Violence	Partner abuse	%	3.2	3.8	-15.7	0.84	0.11	2009/10
		Violence	Neighbourhood violence	%	3.4	1.8	90.7	1.91	0.00	2009/10
		Violence	Attitude to violence	Mean	3.0	3.3	-10.2	0.90	0.00	2009



Notes
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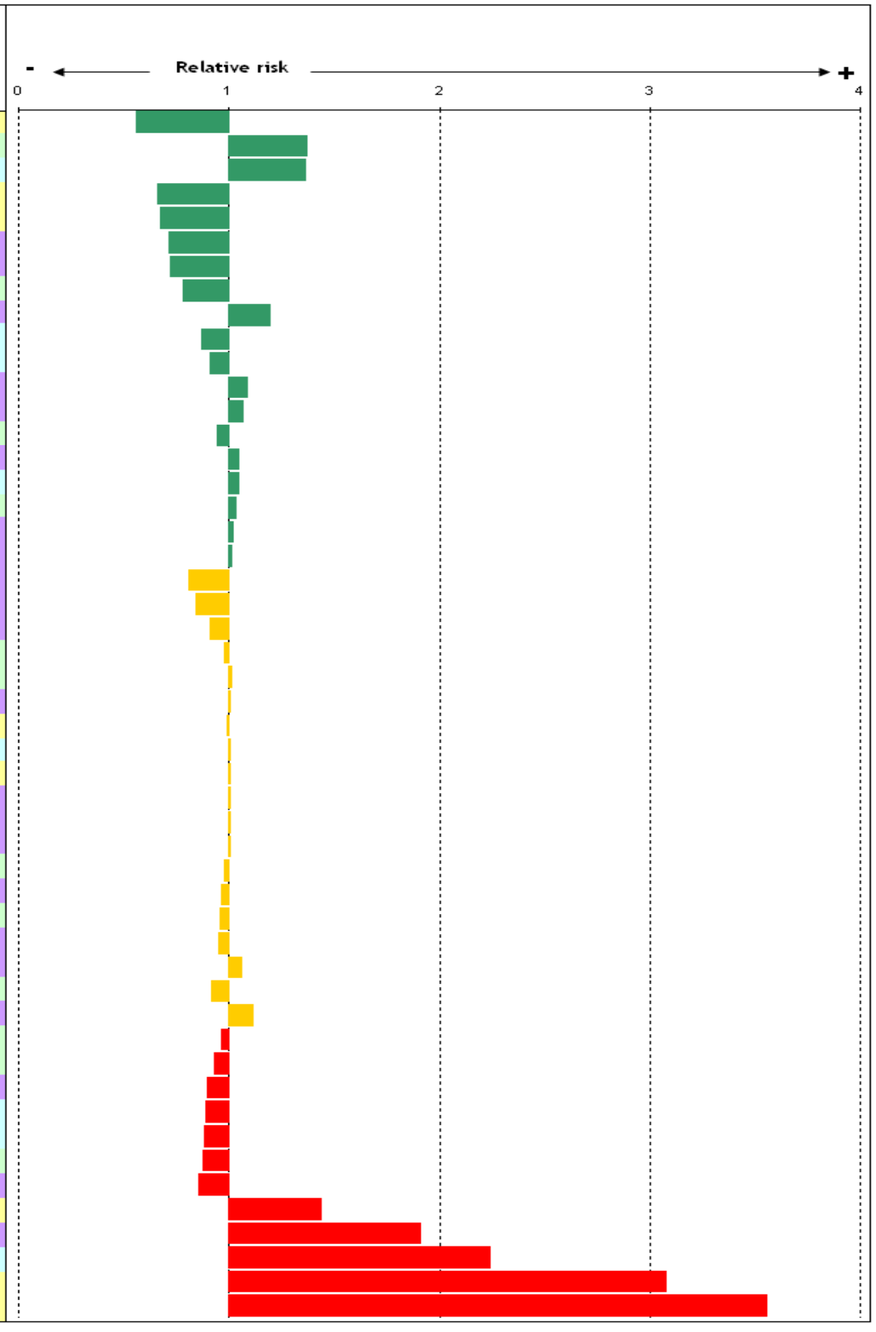
2. All green bars represent indicators where men fare significantly better than women, red bars represent indicators where men fare significantly worse than women, orange bars represent indicators where there is no significant difference betwen the sexes.
3. P-values show whether there is a significant difference between the estimates for men and women. P-values less than 0.05 were deemed statistically significant.
4. EASR - European Age-Standardised Rate per 100,000 population.
5. Equalities analysis not undertaken for three indicators: indicators for spirituality and emotional intelligence have yet to be agreed, income inequality could not be disaggregated due to discloure risk associated with small sample size.
†Comparison of confidence intervals was used to ascertain statistically significant differences between estimates for men and women. Differences were deemed significant where there was no overlap of confidence intervals.

Spine 6. Gender difference in mental health: men compared with women, ranked by direction and size of difference (most recent year)

Men fare significantly better than women
No significant difference between the sexes
Men fare significantly worse than women

Construct	Indicator	Unit	Point estimate (men)	Point estimate (women)	Percentage difference	Relative risk	P-value	Year
Mental health problems	Anxiety	%	5.6	10.0	-43.9	0.56	0.00	2009
Safety	Neighbourhood safety	%	83.7	61.3	36.7	1.37	0.00	2008
Healthy living	Physical activity	%	43.1	31.6	36.5	1.37	0.00	2009
Mental health problems	Depression	%	6.8	10.3	-34.0	0.66	0.00	2009
Mental health problems	Common mental health problems	%	11.4	16.9	-32.3	0.68	0.00	2009
Physical environment	Noise	%	10.6	14.8	-28.5	0.72	0.00	2009
Discrimination	Racial discrimination	%	13.7	19.0	-27.8	0.72	0.00	2009/10
Social support	Caring	%	3.6	4.7	-22.0	0.78	0.03	2009
Financial security/debt	Financial management	%	55.6	46.5	19.6	1.20	0.00	2008
General health	Limiting long-standing physical condition or disability	%	22.0	25.2	-12.7	0.87	0.00	2009
General health	Long-standing physical condition or disabiility	%	35.2	38.8	-9.2	0.91	0.00	2009
Physical environment	Escape facility	%	83.9	77.2	8.6	1.09	0.00	2009
Physical environment	House condition	%	85.2	80.1	6.4	1.06	0.00	2009
Safety	Perception of local crime	%	57.5	61.0	-5.8	0.94	0.00	2009/10
Physical environment	Greenspace	%	77.5	74.2	4.5	1.04	0.00	2008
Learning & development	Adult learning	%	50.9	48.8	4.3	1.04	†	2009
Safety	Home safety	%	98.5	95.5	3.2	1.03	0.00	2009
Social inclusion	Education	%	88.5	86.9	1.8	1.02	†	2009
Financial security/debt	Financial inclusion	%	98.9	97.6	1.4	1.01	0.00	2008
Working life	Stress	%	12.8	15.8	-19.2	0.81	0.10	2009
Violence	Partner abuse	%	3.2	3.8	-15.7	0.84	0.11	2009/10
Discrimination	Discrimination	%	10.7	11.8	-8.8	0.91	0.41	2009
Safety	Non-violent neighbourhood crime	%	14.3	14.6	-2.5	0.98	0.52	2009/10
Trust	General trust	%	46.8	46.2	1.1	1.01	0.79	2009
Working life	Control	%	63.1	62.7	0.6	1.01	0.88	2009
Mental wellbeing	Life satisfaction	Mean	7.6	7.6	-0.6	0.99	0.15	2009
General health	Self-reported health	%	76.9	76.6	0.5	1.00	0.71	2009
Mental wellbeing	Mental wellbeing	Mean	49.9	49.7	0.4	1.00	0.31	2009
Physical environment	Neighbourhood satisfaction	%	92.6	92.3	0.3	1.00	0.57	2008
Physical environment	Overcrowding	%	13.8	13.7	0.4	1.00	0.13	2009
Working life	Demand	%	24.9	24.7	0.7	1.01	0.94	2009
Trust	Neighbourhood trust	%	56.8	58.0	-2.0	0.98	0.56	2009
Working life	Work-life balance	Mean	6.3	6.5	-3.3	0.97	0.07	2009
Participation	Influencing local decisions	%	20.1	21.0	-4.5	0.95	0.55	2009
Working life	Colleague support	%	77.4	81.5	-5.1	0.95	0.05	2009
Social inclusion	Worklessness	%	10.7	10.1	5.9	1.06	†	2009
Participation	Volunteering	%	20.7	22.6	-8.5	0.91	0.07	2008
Discrimination	Harassment	%	8.0	7.2	11.4	1.11	0.43	2009
Social support	Social support	%	86.4	89.8	-3.8	0.96	0.01	2009
Social networks	Social contact	%	90.6	97.0	-6.6	0.93	0.00	2009
Violence	Attitude to violence	Mean	3.0	3.3	-10.2	0.90	0.00	2009
Healthy living	Alcohol consumption	%	72.8	81.5	-10.7	0.89	0.00	2009
Healthy living	Healthy eating	%	21.8	24.6	-11.4	0.89	0.00	2009
Participation	Involvement in local community	%	24.3	27.8	-12.6	0.87	0.04	2009
Working life	Manager support	%	59.9	70.2	-14.6	0.85	0.00	2009
Mental health problems	Alcohol dependency	%	11.9	8.3	43.5	1.43	0.00	2009
Violence	Neighbourhood violence	%	3.4	1.8	90.7	1.91	0.00	2009/10
Healthy living	Drug use	%	10.1	4.5	124.1	2.24	0.00	2009/10
Mental health problems	Suicide	EASR	27.4	8.9	207.3	3.07	†	2009
Mental health problems	Psychoactive substance-related deaths	EASR	16.4	4.6	255.7	3.56	†	2009



Notes
1. This spine chart shows the relative risk between the sexes, i.e. the estimate for men divided by the estimate for women.
2. All green bars represent indicators where men fare significantly better than women, red bars represent indicators where men fare significantly worse than women, orange bars represent indicators where there is no significant difference betwen the sexes.
3. P-values show whether there is a significant difference between the estimates for men and women. P-values less than 0.05 were deemed statistically significant.
4. EASR - European Age-Standardised Rate per 100,000 population.
5. Equalities analysis not undertaken for three indicators: indicators for spirituality and emotional intelligence have yet to be agreed, income inequality could not be disaggregated due to discloure risk associated with small sample size.
†Comparison of confidence intervals was used to ascertain statistically significant differences between estimates for men and women. Differences were deemed significant where there was no overlap of confidence intervals.

3.3.2 Inequalities by age

Differences in mental health and associated contextual factors were more common by age than gender but less common than by deprivation. In total, significant differences between age groups were observed for 43 of 50 analysed indicators (86%). Age was most often broken down into 10-year age bands (16–24, 25–34, 35–44, 45–54, 55–64, 65–74, 75+), but different configurations have been used where this was not possible, either because certain age groups were not included in the original data source or regrouping of age bands due to small numbers (see Appendix 1 for full details).

There was no significant difference between age groups for the following seven indicators:

- Mental health – anxiety
- Structural – financial inclusion, escape facility, greenspace, work-related stress, control at work, manager support at work.[viii]

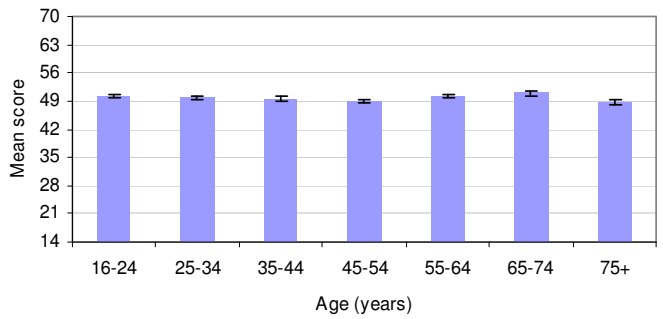
Age effects were found for all of the indicators in the individual and community domains. The remainder of this section focuses on those indicators with a significant difference between age groups.

There are no spine charts to show the size of the gap in mental health between different age groups. Considerable variability in the age bands used to break down each indicator and non-linear relationships between age and many of the indicators meant that it was not possible to choose two particular age groups to make meaningful comparison across the entire indicator set. Instead, individual graphs are shown for each indicator below (pages 47–52).

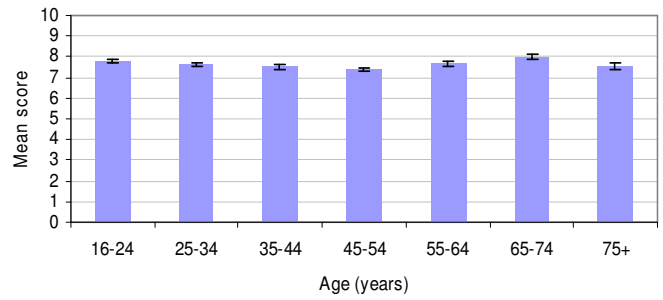
[viii] Although there was a statistically significant non-linear association between financial inclusion and age, it has not been included as a significant result as the estimates did not vary systematically with age, indicating no substantive relationship between financial inclusion and age. Estimates of 98% or 99% were observed across the six age groups used for analysis of this indicator.

Age charts
Mental health

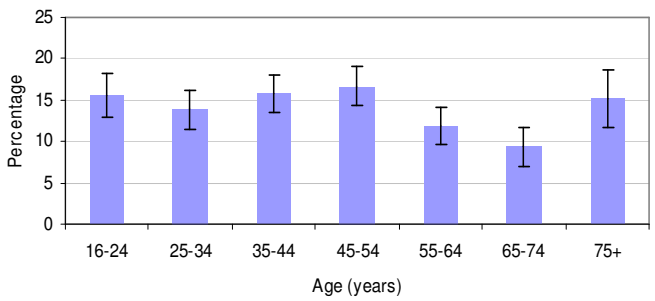
Mental wellbeing: Mean score for mental wellbeing, by age



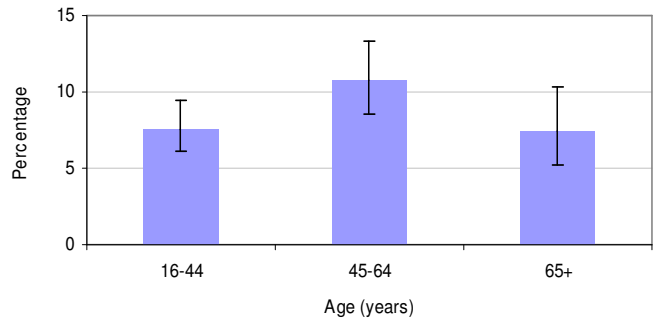
Life satisfaction: Mean life satisfaction score, by age



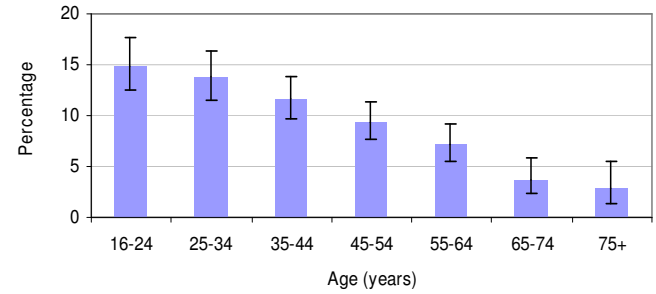
Common mental health problems: Percentage with a possible mental health problem, by age



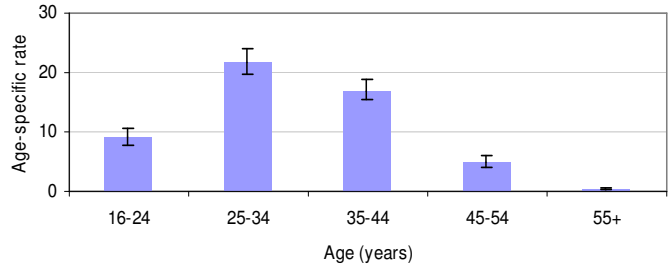
Depression: Percentage with moderate to high severity symptoms of depression, by age



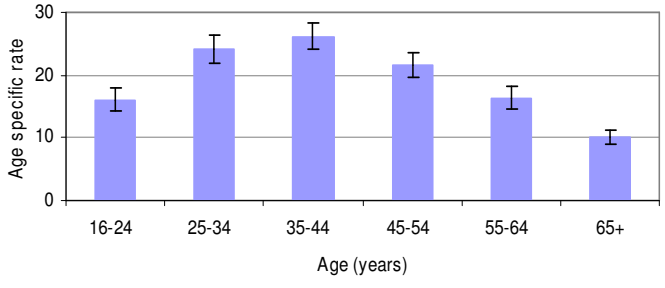
Alcohol dependency: Percentage with possible alcohol dependency, by age



Psychoactive substance-related deaths: Deaths from 'mental and behavioural disorders due to psychoactive substance use, by age

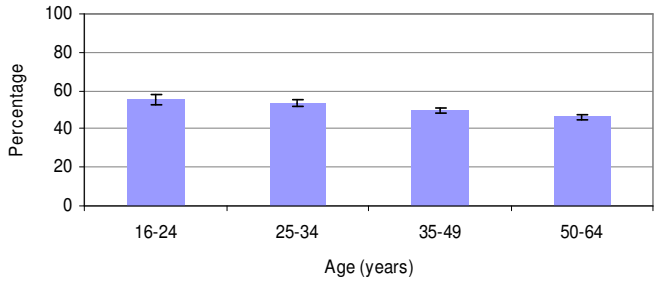


Suicide: Deaths from intentional self-harm and of undetermined intent, by age

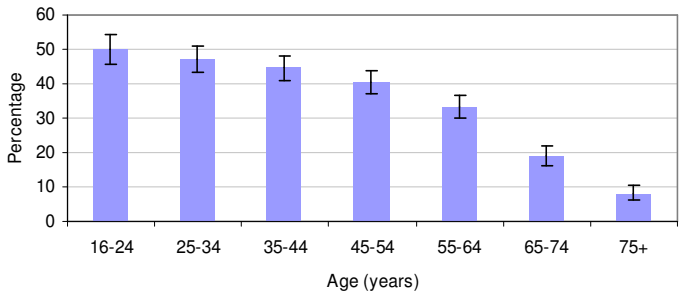


Individual

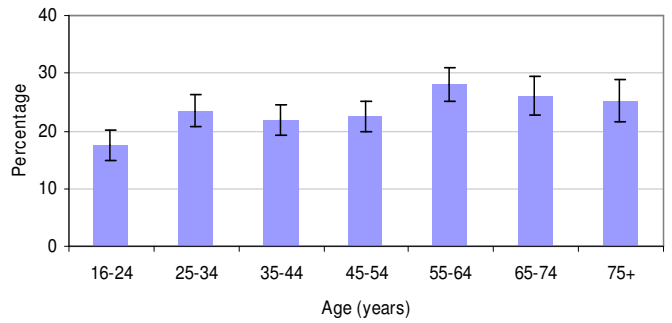
Adult Learning: Percentage no longer in full time education who participated in adult learning, by age



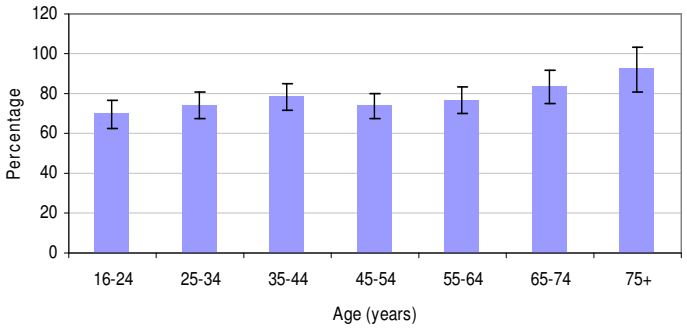
Physical activity: Percentage who met the recommended level of physical activity in the previous 4 weeks, by age



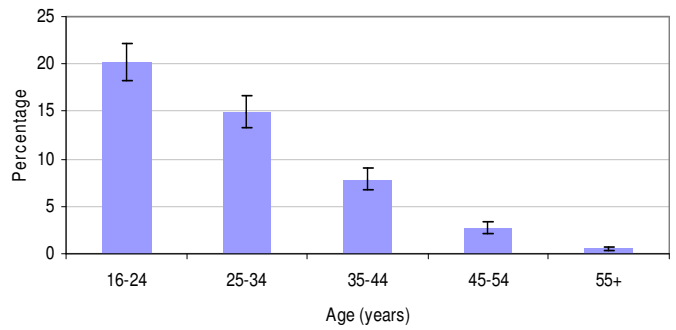
Healthy eating: Percentage eating five or more portions of fruit and vegetables, by age



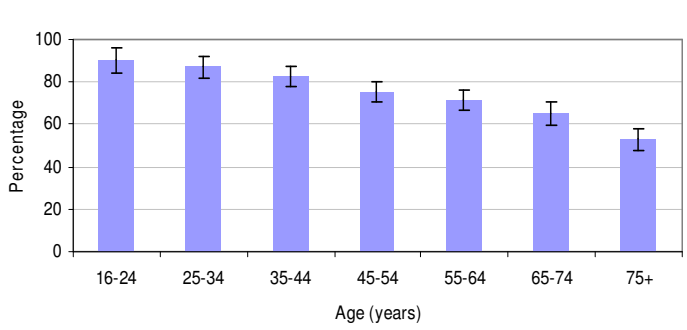
Alcohol consumption: Percentage meeting guidelines on weekly alcohol consumption, by age



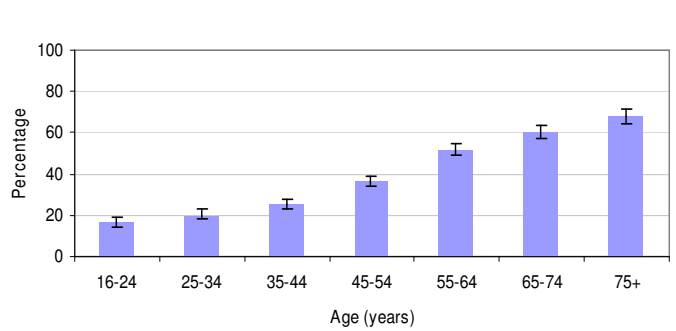
Drug use: Percentage who have taken drugs in the last 12 months, by age



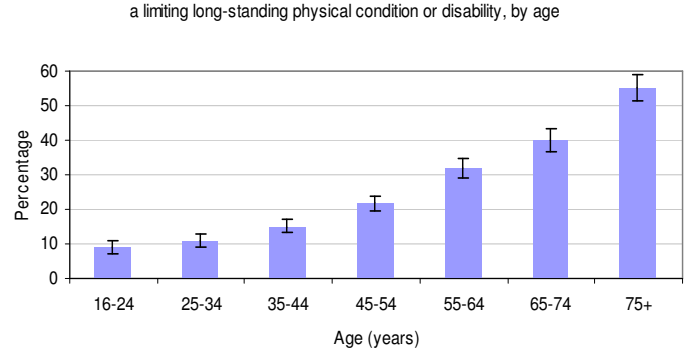
Self-reported health: Percentage perceiving their general health to be good/very good, by age



Long-standing physical condition or disability: Percentage with a long-standing physical condition or disability, by age

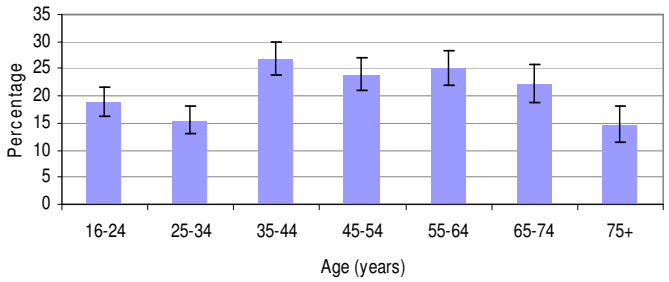


Limiting long-standing physical condition or disability: Percentage with a limiting long-standing physical condition or disability, by age

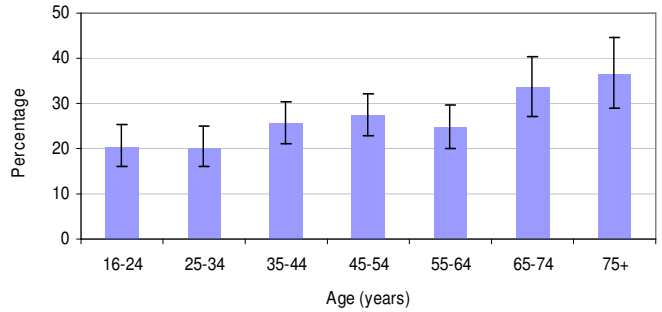


Community

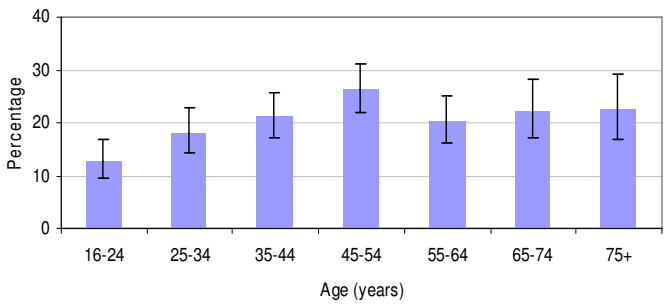
Volunteering: Percentage who volunteered at least 5/6 times in the past year, by age



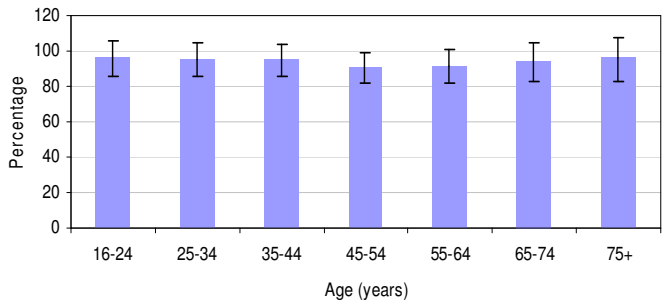
Involvement in local community: Percentage who feel involved a great deal or a fair amount, by age



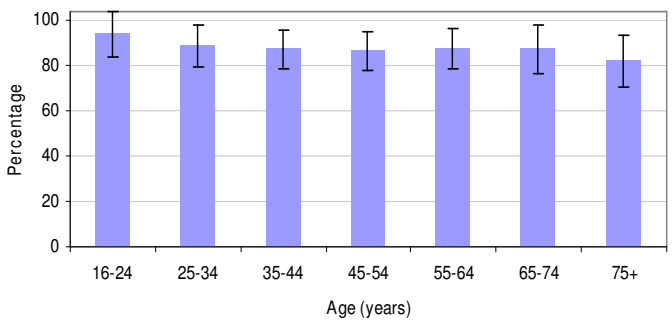
Influencing local decisions: Percentage who strongly agree/agree they can influence local decisions, by age



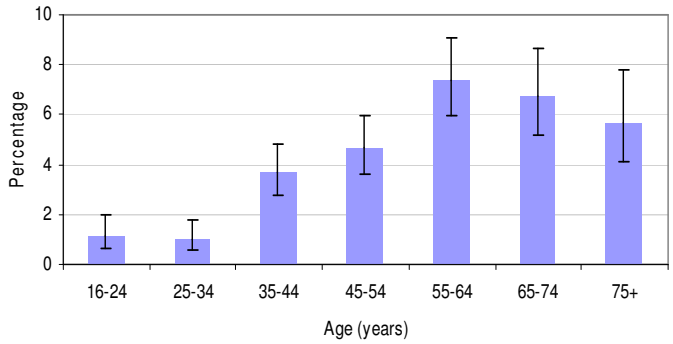
Social contact: Percentage who have contact with friends or relatives not living with them, by age



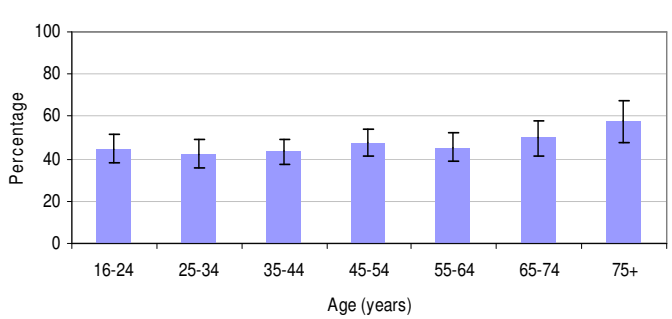
Social support: Percentage who reported having three or more people to rely on in a crisis, by age



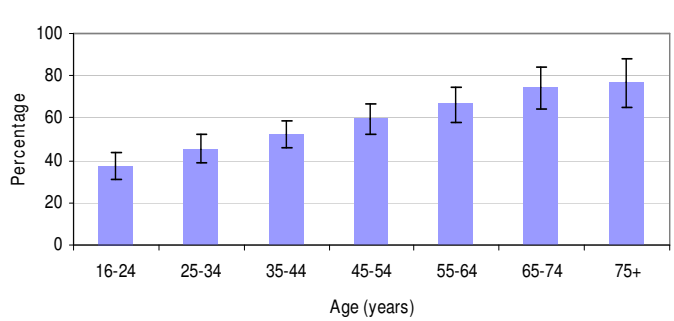
Caring: Percentage who provide 20+ hours of unpaid care per week, by age



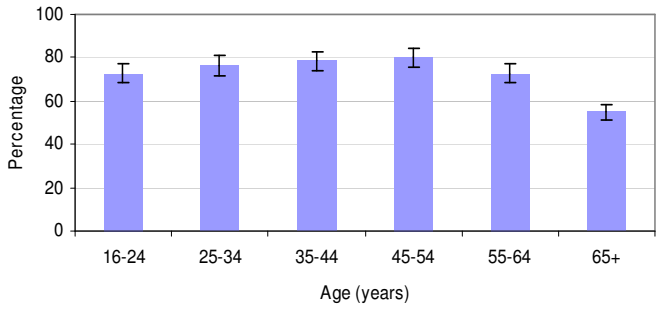
General trust: Percentage who agree that most people can be trusted, by age



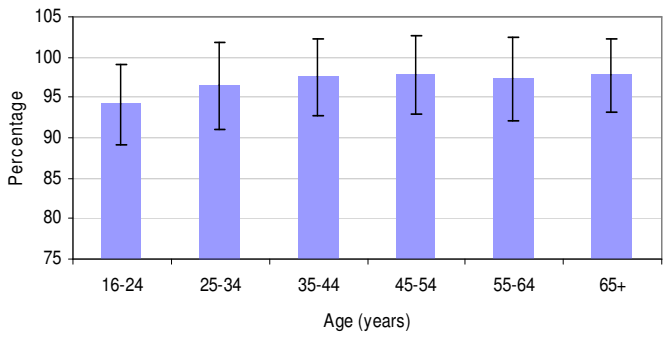
Neighbourhood trust: Percentage who trust most people in their neighbourhood, by age



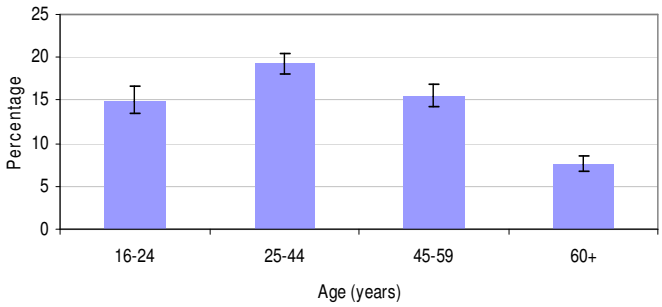
Neighbourhood safety: Percentage feeling safe when walking alone in their neighbourhood after dark, by age



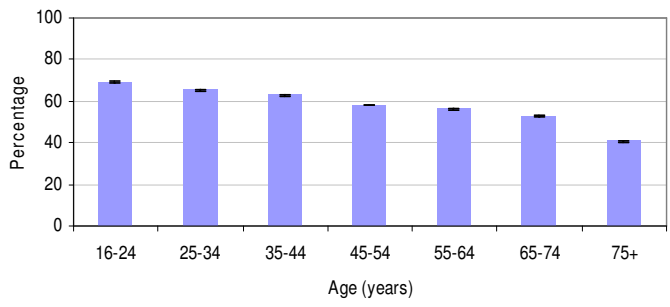
Home safety: Percentage who feel safe when home alone at night, by age



Non-violent neighbourhood crime: Percentage who have been a victim of non-violent crime locally, by age

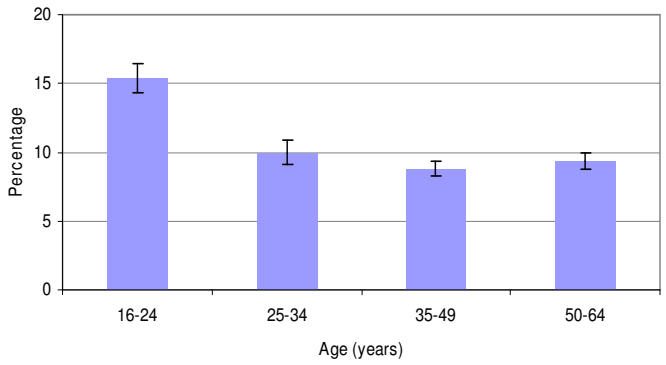


Perception of local crime: Percentage who perceive crime to be common in their local area, by age

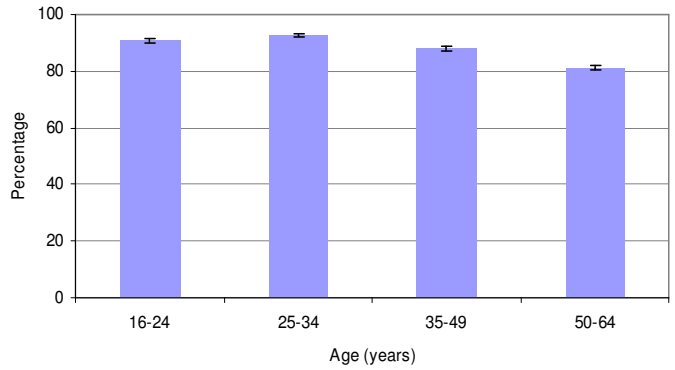


Structural

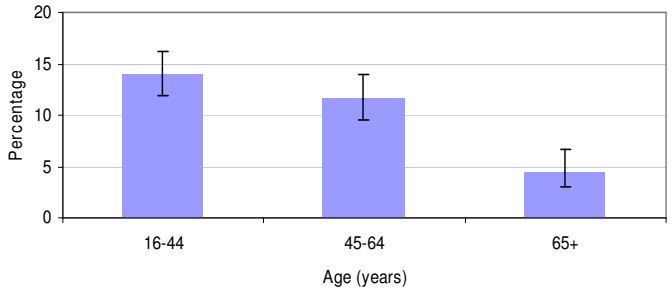
Worklessness: Percentage classified as unemployed and wanting to work, by age



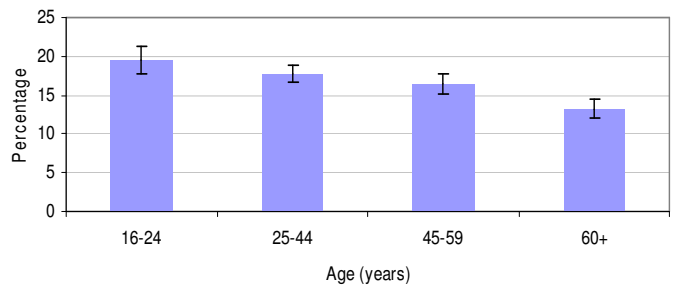
Education: Percentage with at least one academic/vocational qualification, by age



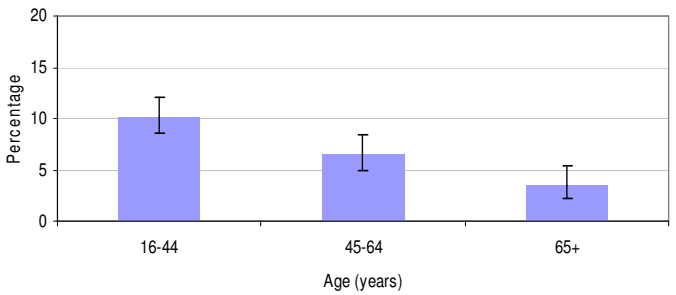
Discrimination: Percentage who reported being unfairly treated or discriminated against, by age



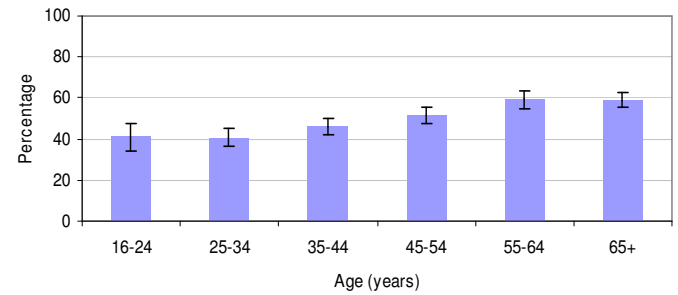
Racial discrimination: Percentage who think that racial discrimination is a big problem, by age



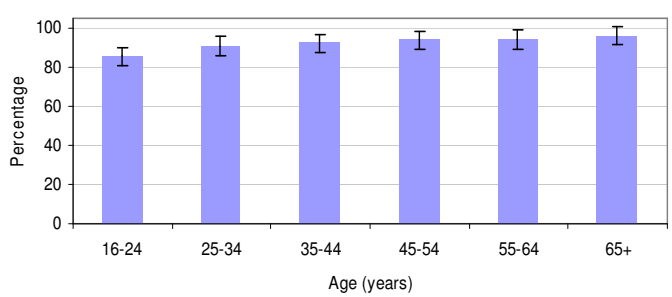
Harassment: Percentage who have personally experienced harassment or abuse, by age



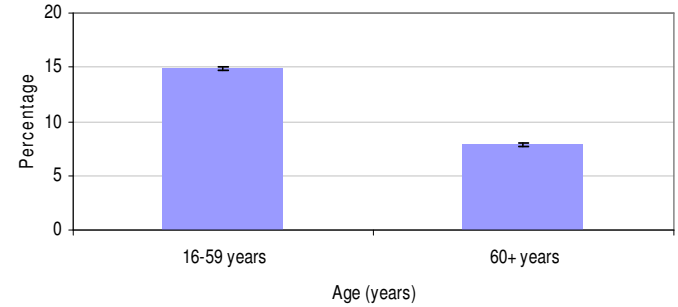
Financial management: Percentage managing very/quite well financially, by age



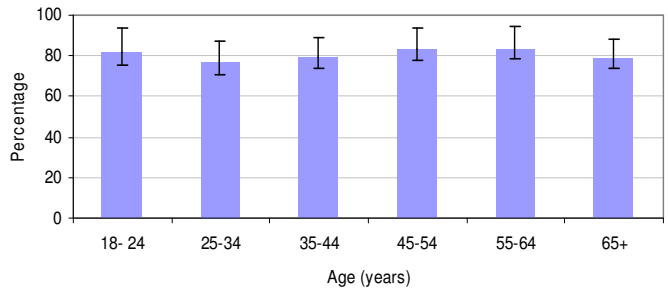
Neighbourhood satisfaction: Percentage rating their neighbourhood as a good place to live, by age



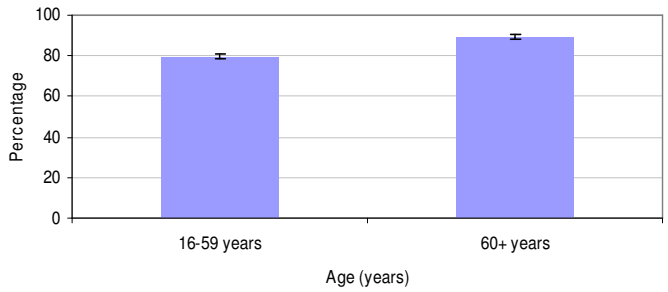
Noise: Percentage bothered by noise when home indoors, by age



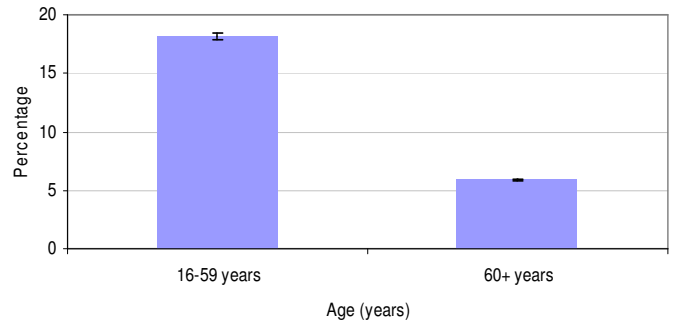
Escape facility: Percentage who have somewhere in their local area they can go to escape from problems/stress, by age



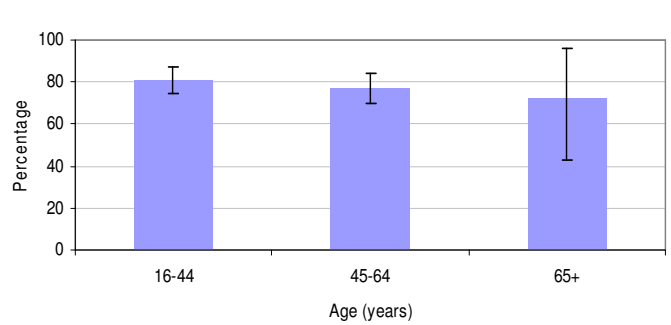
House condition: Percentage rating the condition of their house or flat as very/fairly good, by age



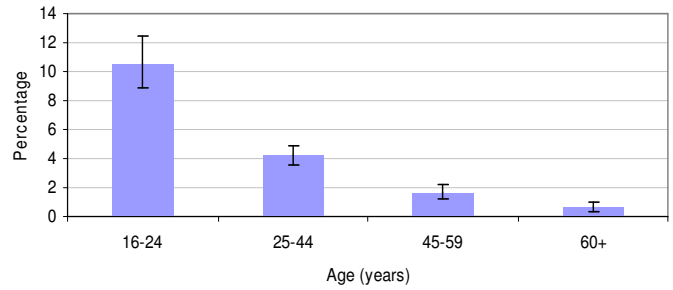
Overcrowding: Percentage who feel their home has too few rooms, by age



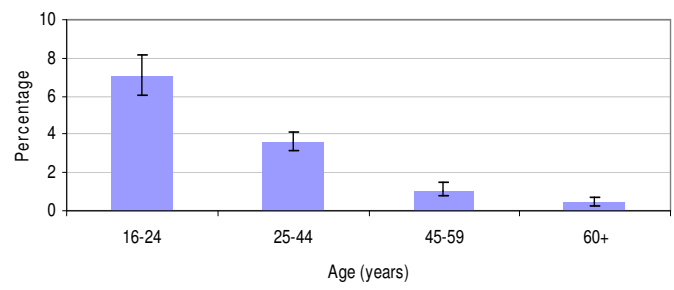
Colleague support: Percentage who agree that they get the help and support they need from work colleagues, by age



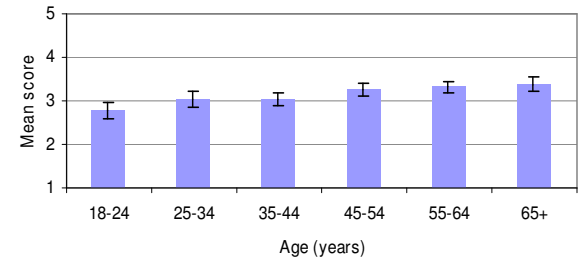
Partner abuse: Percentage physically or emotionally abused by a partner/ex-partner, by age



Neighbourhood violence: Percentage who have experienced violence locally, by age



Attitude to violence: Mean score on the attitude to violence scale (1 'not wrong at all' to 5 'very seriously wrong'), by age



Mental health
Mental wellbeing, measured by WEMWBS, was broadly U-shaped in distribution, declining from age 16–24 to 45–54, rising to 65–74 before falling to the lowest mean score among those aged 75+. Mean scores were highest in adults aged 65–74, 55–64 and young adults aged 16–24 (mean scores 50.9, 50.3 and 50.2 respectively) and lowest in those aged 75+ (48.6) and 45–54 (48.8). Scores in all three of the highest scoring age groups were significantly higher than both of the lowest scoring groups. Mean scores for life satisfaction showed the same U-shaped distribution followed by a dip in those aged 75+. Scores were the highest among those aged 65–74, 55–64 and 16–24 (8.0, 7.7 and 7.8 respectively) and lowest among the middle aged (35–44 years 7.5, 45–54 years 7.4). Scores in the two highest scoring groups, 65–74 years and 16–24 years, were both significantly higher than those among the two lowest scoring groups, 45–54 years and 35–44 years.

In relation to mental health problems, common mental health problems (indicated by a score of 4 or more on the GHQ-12) varied significantly with age. Those aged 65–74 and 55–64 were least likely to report a possible mental health problem (9% and 12% respectively) while those aged 45–54, 35–44 and 16–24 most likely to do so (17%, 16% and 16% respectively). Possible alcohol dependency decreased with increasing age. Fifteen percent of 16- to 24-year-olds scored 2+ on the CAGE questionnaire indicating possible alcohol dependency in the previous three months, declining to 3% in those aged 75+. Psychoactive substance-related deaths were highest in 25- to 34-year-olds (21.9 per 100,000) and fell with increasing age thereafter to 0.3 per 100,000 adults aged 55+. Suicide rates followed a bell-shaped curve, highest among those aged 35–44 (26.2 deaths per 100,000 population), falling to 16.0 per 100,000 aged 16–24 and 10.0 per 100,000 aged 65+, the lowest observed rate.

Contextual factors associated with mental health

Individual
The proportion of adults (no longer in continuous full-time education) who participated in some type of adult learning (taught or non-taught) in the previous year declined linearly with age. Adult learning was highest in those aged 16–24 and 25–34 (55% and 54% respectively), falling to 50% in adults aged 35–49 and 46% in those aged 50-59/64.[ix] Compliance with the weekly recommendation for physical activity was highest in the youngest adults and decreased linearly with age: 50% in adults aged 16–24 decreasing to 8% in those aged 75+. The proportion of adults who reported eating five or more portions of fruit and vegetables in the previous day fluctuated with age. The lowest levels were reported in the youngest adults, 17% in those aged 16–24, rising to 23%, 22% and 22% in those aged 25–34, 35–44 and 45–54 respectively, and at their highest in the oldest adults, 28%, 26% and 25% in those aged 55–64, 65–74 and 75+ respectively.

[ix] Indicators from the Annual Population Survey (adult learning, worklessness and education) are based on women aged 16-59 and men aged 16-64. The oldest age band therefore includes women aged 50-59 and men aged 50-64.

Alcohol consumption within the recommended weekly limits was lowest in adults aged 16–24 (70%) and increased almost linearly with age to 93% in those aged 75+. The highest proportions of adults adhering to the recommended weekly alcohol consumption limits were observed for those aged 35–44, 65–74 and 75+ (78%, 84% and 93% respectively). The proportion of adults who used drugs in the past year was highest in adults aged 16–24 (20%) and decreased linearly with age to 3% in those aged 45–54 and less than 1% in those aged 55+.

Self-reported health decreased linearly with age. Ninety percent of adults aged 16–24 described their health as good or very good compared with 53% of those aged 75+. Long-standing physical conditions or disabilities (both non-limiting and limiting) increased linearly with age. Long-standing physical conditions or disabilities increased from 16% in 16- to 24-year-olds to 68% in those aged 75+; the corresponding figures for limiting long-standing physical conditions or disabilities were 9% and 55%.

Community

Volunteering (defined as volunteering at least five or six times in the past year) was lowest in adults aged 25–34 and 75+ (both 15%) and most common in those aged 35–44, 45–54 and 55–64 (27%, 24% and 25% respectively). Involvement in the local community increased almost linearly with age: 20% in those aged 16–24 and 25–34, around one quarter of those aged 35–44, 45–54 and 55–64, and around one third of the oldest adults (34% of 65- to 74-year-olds and 37% of those aged 75+). The proportion of adults who felt they could influence local decisions was lowest in adults aged 16–24 (13%), highest in those aged 45–54 (26%), falling to around one fifth in all three older age groups.

The relationship between weekly social contact and age was broadly U-shaped in distribution, declining from 96% in those aged 16–24 to a low of 91% for those aged 45–54 and then rising again to 96% for those aged 75+.

The proportion of adults reporting having three or more people to rely on in a crisis (social support) declined almost linearly with age from 94% of 16- to 24-year-olds to 83% of those aged 75+. The proportion of adults providing 20+ hours of unpaid care per week (caring) increased almost linearly with age from 1% of those aged 16–24 and 25–34, rising sharply to 7% of those aged 55–64 and 65–74 and 6% of those aged 75+.

General trust fluctuated with age but, broadly speaking, was lower in younger adults, ranging from 42% to 48% among the age groups spanning 16 to 64 years, and higher in older adults (50% and 58% among those aged 65–74 and 75+ respectively). Neighbourhood trust increased linearly with age, from 37% in the youngest adults (16–24 years) to 77% in the oldest (75+).

Perception of neighbourhood safety, feeling safe when walking alone in their neighbourhood after dark, increased from age 16–24 (73%) to age 45–54 (80%) before declining in those aged 55–64 (73%) and then falling steeply in

those aged 65+ (55%). Home safety, feeling safe when home alone at night, was lowest in adults aged 16–24 (94%) and fluctuated between 97% and 98% in all older age groups (25–34, 35–44, 45–54, 55–64 and 65+). The percentage of adults who reported having been a victim of non-violent neighbourhood crime rose from 15% of adults aged 16–24 to a peak of 19% in 25- to 44-year-olds and then declining to 16% in 45- to 59-year-olds and 8% in those aged 60+. The proportion who perceive crime to be common in their local area was negatively correlated with age, being highest in 16- to 24-year-olds (69%) and falling stepwise to its lowest value in adults aged 75+ (41%).

Structural

Worklessness was highest among adults aged 16–24 (15%) and declined with age to 9% for 35- to 49-year-olds and 50- to 59/64-year-olds. Educational qualifications were more common in younger adults than older adults: 91% of 16- to 24-year-olds and 93% of 25- to 34-year-olds reported having at least one educational qualification compared with 88% of 35- to 49-year-olds and 81% of 50- to 59/64-year-olds.[x]

Discrimination, racial discrimination and harassment were all negatively linearly associated with age. The proportion of adults who reported having been discriminated against or harassed was highest in adults aged 16–44 (14% and 10% respectively) and lowest in individuals aged 65+ (4% and 3% respectively). The proportion of adults who view racial discrimination as a big problem in Scotland declined from 19% of 16- to 24-year-olds to 13% of those aged 60+.

The proportion of adults reporting that their household managed well financially (financial management) increased with age, being lowest in adults aged 16–24 and 25–34 (both 41%) and highest in those aged 55–64 and 65+ (both 59%).

Neighbourhood satisfaction increased linearly with age, with 86% of 16- to 24-year-olds rating their neighbourhood as a very/fairly good place to live compared with 96% of adults aged 65+. Older adults (aged 60+) were approximately half as likely to report being bothered by noise when home indoors compared to their younger counterparts (aged 16-59) (8% and 15% respectively). Older adults (aged 60+) were also more likely to rate the condition of their home as very/fairly good than those aged 16–59 (89% and 80% respectively). Adults aged 16–59 were three times more likely than older adults (aged 60+) to report that overcrowding was a problem in their home (18% and 6% respectively).

Measured on a scale from zero (extremely dissatisfied) to 10 (extremely satisfied), satisfaction with work–life balance was highest in older adults and lower in young and middle-aged adults (mean scores 7.8 65+ years,

[x] Indicators from the Annual Population Survey (adult learning, worklessness and education) are based on women aged 16-59 and men aged 16-64. The oldest age band therefore includes women aged 50-59 and men aged 50-64.

6.8 55–64 years, 6.4 or 6.1 16–24 though to 45-54 years). Adults aged 35–44 and 45–54 were most likely to report frequent unrealistic time pressures at work (demand, 30%); those aged 16–24 and 55+ were least likely to do so (18%). The proportion of adults who reported that they get adequate support from colleagues was negatively correlated with age (81% 16–44 years, 77% 45–64 years, 72% 65+ years). Partner abuse and neighbourhood violence also showed a negative linear association with age, being greatest in adults aged 16–24 (11% and 7% respectively) and lowest in adults aged 60+ plus (1% and <1% respectively). Perception of violence as being wrong increased linearly with age (mean scores on the 'attitude to violence' scale increased from 2.8 for adults aged 18–24 to 3.4 for adults aged 65+, measured on a scale of 1 to 5 where 1 is 'not wrong at all' to 5 'very seriously wrong').

3.3.3 Inequalities by area deprivation

Of all the equality dimensions examined, inequalities in mental health were most common by deprivation, 44 out of 50 indicators (88%). Significant linear differences between SIMD quintiles were found for all eight analysed indicators of mental health, all eight individual indicators and all but one of the 12 community indicators (social contact). Of the 17 structural indicators that varied significantly by SIMD, the relationship was linear for 16 and non-linear for overcrowding.

There was no significant difference (linear or non-linear) between SIMD quintiles for the following six indicators:

- Community – social contact
- Structural – discrimination, work-related stress, manager support at work, colleague support at work, attitude to violence (Table 8).[xi]

The rest of this section focuses on those indicators for which there is a significant difference between SIMD quintiles.

Mental health

Both measures of mental wellbeing (overall mental wellbeing and life satisfaction) showed a negative linear relationship with deprivation in that they were lowest in the most deprived quintile and increased stepwise to the least deprived quintile. All six reportable indicators for mental health problems showed the reverse trend. Each was most common in the most deprived quintile and fell to the lowest value in the least deprived quintile (Prevalence of anxiety and depression was the same in the 2nd and 3rd quintiles but the reductions were otherwise stepwise).

Contextual factors associated with mental health

Individual

All of the negative individual measures (drug use, long-standing physical condition or disability and limiting long-standing physical condition or disability) were highest in the most deprived quintile and declined towards the least deprived. The relationship was linear for limiting long-standing physical condition or disability and near linear for long-standing physical condition or disability. The prevalence of drug use was very similar in the 1st and 2nd quintiles, 10% and 9%, falling to 5% or 6% in the 3rd, 4th and 5th quintiles. Conversely, three of the five positive measures (adult learning, healthy eating and self-reported health) were inversely related to deprivation; they increased linearly from the most to the least deprived quintile. Compliance with the weekly recommendations for physical activity was highest in the 4th, 5th and

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[xi] Although statistically significant non-linear associations were found for manager support at work and attitude to violence, they have not been included as significant results as the trends did not vary with SIMD quintile in a way that suggests any systematic socioeconomic advantage or disadvantage. Manager support was highest in the 3rd, 1st and 5th quintiles (72%, 66% and 65% respectively) and lowest in the 2nd quintile (58%). Variation in attitude to violence was small with mean scores of 3.1, 3.2, 3.1, 3.3 and 3.1 from the most to least deprived quintiles.

2nd quintiles (41%, 38% and 38% respectively) and lowest in the 1st and 3rd (35% and 34%). The only positive measure to buck the trend in terms of an inverse relationship with deprivation was alcohol consumption. Compliance with the recommended weekly limits for alcohol consumption was highest in the two most deprived quintiles and reduced thereafter.

Community
Of the eight significant positive community measures, all decreased linearly with greater deprivation or were lowest in the most deprived quintile and highest in the least deprived quintile: volunteering, involvement in local community, influencing local decisions, social support, general trust, neighbourhood trust, neighbourhood safety and home safety. Caring was most common among those living in more deprived areas (1st to 3rd quintiles) and lowest in the least deprived (4th and 5th quintiles). Of the two negative community measures, perception of local crime increased linearly with increasing deprivation and non-violent neighbourhood crime did so near linearly.

Structural
Of the nine positive structural measures that varied linearly by SIMD, all were inversely related to deprivation, i.e. lowest in the most deprived quintile and highest in the least deprived. Education, financial management, neighbourhood satisfaction, access to an escape facility, access to greenspace and good house condition increased stepwise from the most to the least deprived quintiles, with financial inclusion evening out in the 4th and 5th quintiles. Work–life balance and control at work were lowest in the 1st and 2nd quintiles (most deprived) and highest in the 5th (least deprived).

In terms of negative structural indicators, demand at work was the only one inversely related to deprivation, i.e. worst in the least deprived quintile. Reported levels of demand were highest in the 4th and 5th (least deprived) quintiles and lowest in the 1st and 2nd (most deprived). All other 'undesirable' structural indicators were positively associated with deprivation. Worklessness and noise were lowest in the least deprived quintile and increased stepwise to the most deprived. Racial discrimination, harassment, partner abuse and neighbourhood violence were all lowest in either the 4th and 5th (least deprived) or 3rd, 4th and 5th quintiles and highest in the 1st and 2nd quintiles (most deprived). A significant non-linear association was found between deprivation and overcrowding, with overcrowding least common in the two least deprived quintiles (11% in the 5th quintile and 12% in the 4th) and higher in the three most deprived areas (15%, 14% and 16% in the 1st–3rd quintiles respectively).

How big is the deprivation gap in mental health?
The following two spine charts (Spines 7 and 8) show the relative differences in mental health and associated contextual factors between those living in the most and least deprived quintiles of Scotland, expressed as relative risk. Spine 7 presents the differences by indicator domain while Spine 8 ranks them according to the direction and size of the effect.

Those living in Scotland's most deprived quintile fared worse than those living in the least deprived quintile on 42 of the 50 indicators analysed for inequalities (84%) (Spine 8). In order, from the greatest to smallest relative risk, these are:

	Relative risk	Absolute difference
1. psychoactive substance-related deaths (26.0 vs 2.2 deaths per 100,000 adults)	12.11	23.8 deaths per 100,000 adults
2. suicide (30.8 vs 7.9 deaths per 100,000 adults)	3.91	22.9 deaths per 100,000 adults
3. worklessness (19% vs 5%)	3.48	14 % points
4. noise (20% vs 7%)	2.92	13 % points
5. anxiety (13% vs 5%)	2.74	8 % points
6. neighbourhood violence (5% vs 2%)	2.69	3 % points
7. depression (13% vs 5%)	2.63	8 % points
8. partner abuse (5% vs 2%)	2.21	3 % points
9. common mental health problems (21% vs 10%)	2.09	11 % points
10. caring (6% vs 3%)	1.90	3 % points
11. alcohol dependency (14% vs 8%)	1.87	6 % points
12. limiting long-standing physical condition or disability (32% vs 17%)	1.85	15 % points
13. perception of local crime (79% vs 45%)	1.73	34 % points
14. non-violent neighbourhood crime (20% vs 12%)	1.64	8 % points
15. drug use (10% vs 6%)	1.54	4 % points
16. neighbourhood trust (35% vs 75%)	0.47	-40 % points
17. racial discrimination (22% vs 15%)	1.49	7 % points
18. harassment (9% vs 6%)	1.48	3 % points
19. financial management (37% vs 68%)	0.54	-31 % points
20. volunteering (14% vs 27%)	0.54	-13 % points
21. healthy eating (17% vs 28%)	0.58	-11 % points
22. long-standing physical condition or disability (43% vs 31%)	1.39	12 % points
23. general trust (33% vs 54%)	0.62	-21 % points
24. overcrowding (15% vs 11%)	1.35	4 % points
25. adult learning (40% vs 60%)	0.66	-20 % points
26. involvement in local community (22% vs 33%)	0.66	-11 % points
27. neighbourhood safety (57% vs 81%)	0.70	-24 % points
28. escape facility (65% vs 89%)	0.73	-24 % points
29. self-reported health (65% vs 88%)	0.74	-23 % points
30. greenspace (64% vs 85%)	0.76	-21 % points
31. control (54% vs 71%)	0.77	-17 % points
32. influencing local decisions (18% vs 24%)	0.77	-6 % points
33. education (75% vs 96%)	0.78	-21 % points

34. neighbourhood satisfaction (79% vs 99%)	0.79	-20 % points
35. house condition (75% vs 91%)	0.83	-16 % points
36. life satisfaction (7.1 vs 8.0)*	0.88	-0.9*
37. physical activity (35% vs 38%)	0.91	-3 % points
38. mental wellbeing (47.8 vs 51.3)**	0.93	-3.5**
39. social support (85% vs 91%)	0.94	-6 % points
40. work–life balance (6.2 vs 6.6)*	0.94	-0.4*
41. home safety (93% vs 99%)	0.94	-6 % points
42. financial inclusion (96% vs 100%)	0.96	-4 % points

*On a scale of 0 to 10
**On a scale from 14 to 70

Those living in the most deprived quintile fared better than those in the least deprived quintile for only two indicators (Spine 8). They were less likely to have unrealistic time pressures at work (22% vs 27%) and more likely to comply with the weekly recommendations for alcohol consumption (80% vs 73%).

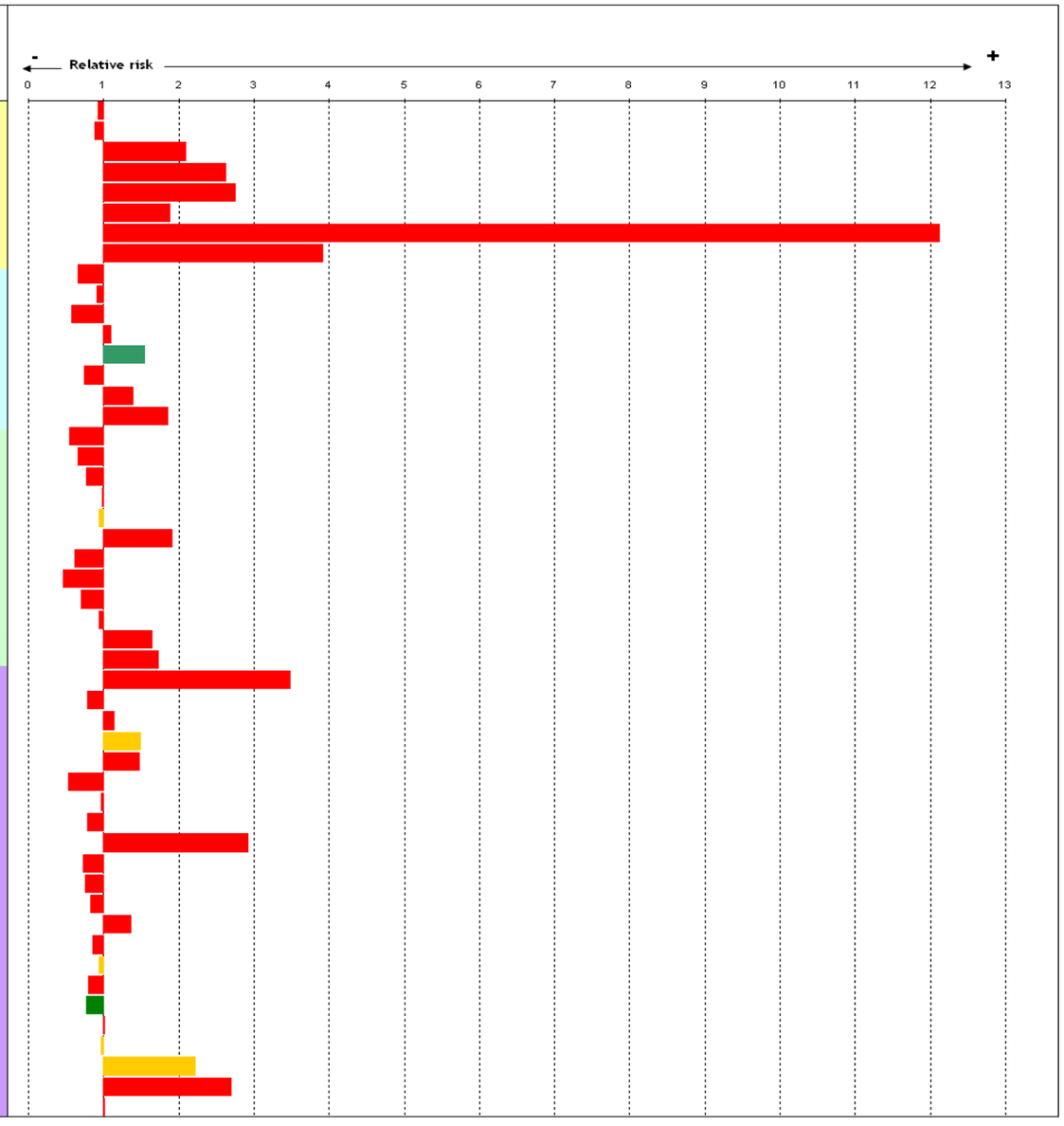
	Relative risk	**Absolute difference**
1. demand (22% vs 27%)	0.80	5 % points
2. alcohol consumption (80% vs 73%)	1.09	7 % point

Spine 7. Difference in mental health between the most and least deprived SIMD quintiles, ordered by indicator domain (most recent year)

Significantly better in the most deprived quintile compared with the least deprived
No significant difference between most and least deprived quintiles
Significantly worse in the most deprived quintile compared with the least deprived

Contextual factors associated with mental health

Domain	Construct	Indicator	Unit	Point estimate (most deprived quintile)	Point estimate (least deprived quintile)	Percentage difference	Relative risk	P-value	Year
Mental Health	Mental wellbeing	Mental wellbeing[a]	Mean	47.8	51.3	-7.0	0.93	0.00	2009
	Mental wellbeing	Life satisfaction[a]	Mean	7.1	8.0	-11.5	0.88	0.00	2009
	Mental health problems	Common mental health problems	%	20.5	9.8	109.1	2.09	0.00	2009
	Mental health problems	Depression	%	13.5	5.1	162.6	2.63	0.00	2009
	Mental health problems	Anxiety	%	12.6	4.6	174.5	2.74	0.00	2009
	Mental health problems	Alcohol dependency	%	14.4	7.7	87.4	1.87	0.00	2009
	Mental health problems	Psychoactive substance-related deaths	EASR	26.0	2.2	1111.2	12.11	†	2009
	Mental health problems	Suicide	EASR	30.8	7.9	290.6	3.91	†	2009
Individual	Learning & development	Adult learning	%	39.7	60.2	-34.1	0.66	†	2009
	Healthy living	Physical activity	%	34.8	38.1	-8.6	0.91	0.02	2009
	Healthy living	Healthy eating	%	16.6	28.5	-41.9	0.58	0.00	2009
	Healthy living	Alcohol consumption	%	79.6	73.0	9.1	1.09	0.01	2009
	Healthy living	Drug use	%	9.9	6.5	53.9	1.54	0.00	2009/10
	General health	Self-reported health	%	64.8	87.6	-26.0	0.74	0.00	2009
	General health	Long-standing physical condition or disability	%	42.7	30.7	38.9	1.39	0.00	2009
	General health	Limiting long-standing physical condition or disability	%	32.3	17.5	85.0	1.85	0.00	2009
Community	Participation	Volunteering	%	14.5	26.6	-45.6	0.54	0.00	2008
	Participation	Involvement in local community	%	21.6	32.5	-33.5	0.66	0.00	2009
	Participation	Influencing local decisions	%	18.2	23.6	-22.6	0.77	0.01	2009
	Social networks	Social contact	%	94.6	95.9	-1.3	0.99	0.43	2009
	Social support	Social support	%	85.2	90.8	-6.2	0.94	0.00	2009
	Social support	Caring	%	5.9	3.1	90.1	1.90	0.00	2009
	Trust	General trust	%	33.1	53.8	-38.5	0.62	0.00	2009
	Trust	Neighbourhood trust	%	34.9	75.1	-53.5	0.47	0.00	2009
	Safety	Neighbourhood safety	%	56.7	80.6	-29.6	0.70	0.00	2008
	Safety	Home safety	%	93.0	98.8	-5.9	0.94	0.00	2009
	Safety	Non-violent neighbourhood crime	%	19.8	12.1	63.7	1.64	0.00	2009/10
	Safety	Perception of local crime	%	78.6	45.4	72.9	1.73	0.00	2009/10
Structural	Social inclusion	Worklessness	%	18.8	5.4	248.1	3.48	†	2009
	Social inclusion	Education	%	74.6	95.6	-22.0	0.78	†	2009
	Discrimination	Discrimination	%	12.5	11.0	13.6	1.14	0.35	2009
	Discrimination	Racial discrimination	%	21.7	14.6	48.7	1.49	0.00	2009/10
	Discrimination	Harassment	%	9.5	6.4	47.5	1.48	0.01	2009
	Financial security/debt	Financial management	%	36.6	68.0	-46.2	0.54	0.00	2008
	Financial security/debt	Financial inclusion	%	96.0	99.7	-3.7	0.96	0.00	2008
	Physical environment	Neighbourhood satisfaction	%	78.6	99.3	-20.8	0.79	0.00	2008
	Physical environment	Noise	%	20.1	6.9	191.6	2.92	0.00	2009
	Physical environment	Escape facility	%	65.1	89.0	-26.9	0.73	0.00	2009
	Physical environment	Greenspace	%	64.3	84.7	-24.1	0.76	0.00	2008
	Physical environment	House condition	%	75.3	91.1	-17.4	0.83	0.00	2009
	Physical environment	Overcrowding	%	15.4	11.3	35.5	1.35	0.00††	2009
	Working life	Stress	%	13.6	15.9	-14.3	0.86	0.34	2009
	Working life	Work-life balance	Mean	6.2	6.6	-6.1	0.94	0.03	2009
	Working life	Demand	%	21.6	27.1	-20.2	0.80	0.04	2009
	Working life	Control	%	54.3	70.8	-23.3	0.77	0.00	2009
	Working life	Manager support	%	65.9	65.4	0.9	1.01	0.03††	2009
	Working life	Colleague support	%	77.8	80.0	-2.7	0.97	0.96	2009
	Violence	Partner abuse	%	5.2	2.4	121.0	2.21	0.00	2009/10
	Violence	Neighbourhood violence	%	4.9	1.8	169.0	2.69	0.00	2009/10
	Violence	Attitude to violence	Mean	3.1	3.1	0.8	1.01	0.02††	2009

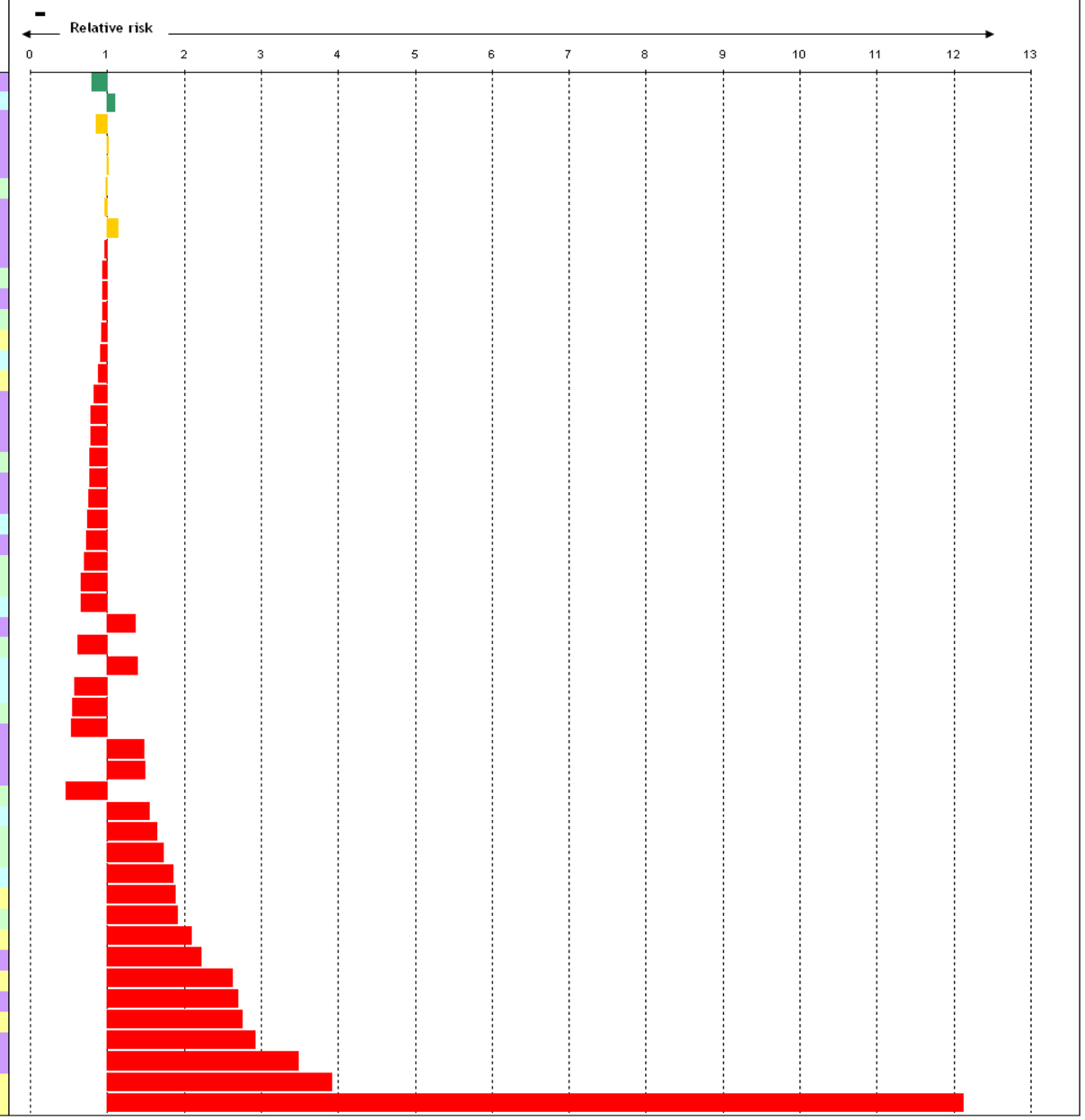


Notes
1. This spine chart shows the relative risk between the most and least deprived SIMD quintiles, i.e. (the estimate for the most deprived quintile divided by the estimate for the least deprived quintile.
2. P-values show whether there is a significant difference (linear or non-linear) between the five SIMD groups. P-values less than 0.05 were deemed statistically significant.
3. All green bars represent indicators where the most deprived quintile fares significntly better than the least deprived, red bars represent indicators where the most deprived quintile fares significantly worse than the least deprived quintile, orange bars represent indicators where there is no significant difference betwen the quintiles.
4. EASR - European Age-Standardised Rate per 100,000 population.
5. Equalities analysis not undertaken for three indicators: indicators for spirituality and emotional intelligence have yet to be agreed, income inequality could not be disaggregated due to discloure risk associated with small sample size.
†Comparison of confidence intervals was used to ascertain a statistically significant trend between the most and least deprived quintiles. Differences were deemed significant where there was no overlap of confidence intervals.
†† No significant linear trend was evident for this indicator, but there was a significant non-linear difference between the SIMD quintiles.

Spine 8. Difference in mental health between the most and least deprived SIMD quintiles, ranked by direction and size of difference (most recent year)

Significantly better in the most deprived quintile compared with the least deprived
No significant difference between most and least deprived quintiles
Significantly worse in the most deprived quintile compared with the least deprived

Construct	Indicator	Unit	Point estimate (most deprived quintile)	Point estimate (least deprived quintile)	Percentage difference	Relative risk	P-value	Year
Working life	Demand	%	21.6	27.1	-20.2	0.80	0.04	2009
Healthy living	Alcohol consumption	%	79.6	73.0	9.1	1.09	0.00	2009
Working life	Stress	%	13.6	15.9	-14.3	0.86	0.34	2009
Working life	Manager support	%	65.9	65.4	0.9	1.01	0.03††	2009
Violence	Attitude to violence	Mean	3.1	3.1	0.8	1.01	0.02††	2009
Social networks	Social contact	%	94.6	95.9	-1.3	0.99	0.43	2009
Working life	Colleague support	%	77.8	80.0	-2.7	0.97	0.96	2009
Discrimination	Discrimination	%	12.5	11.0	13.6	1.14	0.35	2009
Financial security/debt	Financial inclusion	%	96.0	99.7	-3.7	0.96	0.00	2008
Safety	Home safety	%	93.0	98.8	-5.9	0.94	0.00	2009
Working life	Work-life balance	Mean	6.2	6.6	-6.1	0.94	0.03	2009
Social support	Social support	%	85.2	90.8	-6.2	0.94	0.00	2009
Mental wellbeing	Mental wellbeing	Mean	47.8	51.3	-7.0	0.93	0.00	2009
Healthy living	Physical activity	%	34.8	38.1	-8.6	0.91	0.02	2009
Mental wellbeing	Life satisfaction	Mean	7.1	8.0	-11.5	0.88	0.00	2009
Physical environment	House condition	%	75.3	91.1	-17.4	0.83	0.00	2009
Physical environment	Neighbourhood satisfaction	%	78.6	99.3	-20.8	0.79	0.00	2008
Social inclusion	Education	%	74.6	95.6	-22.0	0.78	†	2009
Participation	Influencing local decisions	%	18.2	23.6	-22.6	0.77	0.01	2009
Working life	Control	%	54.3	70.8	-23.3	0.77	0.00	2009
	Greenspace	%	64.3	84.7	-24.1	0.76	0.00	2008
General health	Self-reported health	%	64.8	87.6	-26.0	0.74	0.00	2009
Physical environment	Escape facility	%	65.1	89.0	-26.9	0.73	0.00	2009
Safety	Neighbourhood safety	%	56.7	80.6	-29.6	0.70	0.00	2008
Participation	Involvement in local community	%	21.6	32.5	-33.5	0.66	0.00	2009
Learning & development	Adult learning	%	39.7	60.2	-34.1	0.66	†	2009
Physical environment	Overcrowding	%	15.4	11.3	35.5	1.35	0.00††	2009
Trust	General trust	%	33.1	53.8	-38.5	0.62	0.00	2009
General health	Long-standing physical condition or disability	%	42.7	30.7	38.9	1.39	0.00	2009
Healthy living	Healthy eating	%	16.6	28.5	-41.9	0.58	0.00	2009
Participation	Volunteering	%	14.5	26.6	-45.6	0.54	0.00	2008
Financial security/debt	Financial management	%	36.6	68.0	-46.2	0.54	0.00	2008
Discrimination	Harassment	%	9.5	6.4	47.5	1.48	0.01	2009
Discrimination	Racial discrimination	%	21.7	14.6	48.7	1.49	0.00	2009/10
Trust	Neighbourhood trust	%	34.9	75.1	-53.5	0.47	0.00	2009
Healthy living	Drug use	%	9.9	6.5	53.9	1.54	0.00	2009/10
Safety	Non-violent neighbourhood crime	%	19.8	12.1	63.7	1.64	0.00	2009/10
Safety	Perception of local crime	%	78.6	45.4	72.9	1.73	0.00	2009/10
General health	Limiting long-standing physical condition or disabi	%	32.3	17.5	85.0	1.85	0.00	2009
Mental health problems	Alcohol dependency	%	14.4	7.7	87.4	1.87	0.00	2009
Social support	Caring	%	5.9	3.1	90.1	1.90	0.00	2009
Mental health problems	Common mental health problems	%	20.5	9.8	109.1	2.09	0.00	2009
Violence	Partner abuse	%	5.2	2.4	121.0	2.21	0.00	2009/10
Mental health problems	Depression	%	13.5	5.1	162.6	2.63	0.00	2009
Violence	Neighbourhood violence	%	4.9	1.8	169.0	2.69	0.00	2009/10
Mental health problems	Anxiety	%	12.6	4.6	174.5	2.74	0.00	2009
Physical environment	Noise	%	20.1	6.9	191.6	2.92	0.00	2009
Social inclusion	Worklessness	%	18.8	5.4	248.1	3.48	†	2009
Mental health problems	Suicide	EASR	30.8	7.9	290.6	3.91	†	2009
Mental health problems	Psychoactive substance-related deaths	EASR	26.0	2.2	1111.2	12.11	†	2009



Notes
1. This spine chart shows the relative risk between the most and least deprived SIMD quintiles, i.e. (the estimate for the most deprived quintile divided by the estimate for the least deprived quintile.
2. P-values show whether there is a significant difference (linear or non-linear) between the five SIMD groups. P-values less than 0.05 were deemed statistically significant.
3. All green bars represent indicators where the most deprived quintile fares significntly better than the least deprived, red bars represent indicators where the most deprived quintile fares significantly worse than the least deprived quintile, orange bars represent indicators where there is no significant difference betwen the quintiles.
4. EASR - European Age-Standardised Rate per 100,000 population.
5. Equalities analysis not undertaken for three indicators: indicators for spirituality and emotional intelligence have yet to be agreed, income inequality could not be disaggregated due to discloure risk associated with small sample size.
†Comparison of confidence intervals was used to ascertain a statistically significant trend between the most and least deprived quintiles. Differences were deemed significant where there was no overlap of confidence intervals.
†† No significant linear trend was evident for this indicator, but there was a significant non-linear difference between the SIMD quintiles.

4. Discussion

Further work is required to establish two adult indicators (spirituality and emotional intelligence) and no data were available for one indicator (deliberate self-harm). Some data were therefore available for 51 out of the 54 indicators in the set. This permitted point prevalence to be calculated for all 51, equalities analysis for 50 and examination of change over time for 29. Equalities analysis covered gender, age and area-based deprivation (SIMD).

4.1 Trends over time

Taken overall, the picture over the last decade can be summed up as broadly stable, with a promising level of positive change and only a small, but important, number of negative trends.

Time trend data were available for five out of the nine indicators of mental health. One indicator of mental health has improved:

- rates of suicide.

Two indicators of mental health show no significant change:

- life satisfaction
- common mental health problems.

Two indicators of mental health have worsened:

- possible alcohol dependency
- deaths from mental and behavioural disorders due to psychoactive substance use.

Time trend data are not yet available for four indicators of mental health (mental wellbeing, depression, anxiety and deliberate self-harm) leaving a fair amount of uncertainty regarding how adult mental health in Scotland has changed over recent years.

Of the 45 indicators covering the contextual factors associated with mental health, time trend data were available for 24. Two showed divergent trends for men and women, bringing the total number of results to 26. Half, 13 out of 26, showed no significant change over the period of analysis:

Individual level

- healthy eating (men)

Community level

- involvement in local community (women)
- social contact
- social support

Structural level

- income inequality
- worklessness
- noise
- house condition
- overcrowding

- work-related stress
- demand at work
- control at work
- colleague support at work.

An improvement was seen in 10 of the contextual indicators analysed over time. Listed from the greatest to smallest percentage difference within the individual and structural domains, these are:

Individual level
- physical activity
- healthy eating (women)
- alcohol consumption
- self-reported health
- adult learning

Community level
- home safety

Structural level
- financial management
- education
- financial inclusion
- neighbourhood satisfaction.

Just three contextual indicators have worsened over the last decade. Listed from the greatest to smallest percentage difference within the community domain, these are:

Community level
- involvement in local community (men)
- neighbourhood safety

Structural level
- manager support at work.

Comparing the results of the time trend analysis in this report with those in the 2009 release,[11] the direction of significance (no significant difference/significantly improved/significantly worsened) was the same for 19 of the 29 indicators. Ten have changed direction, but four of these have also changed data source and/or methodology so the observed change may well reflect those alterations rather than a real change in the direction of travel. There has been no change in data source or survey methodology for the remaining six, suggesting a genuine shift in the direction of change over the period of measurement prior to the 2009 report compared to that preceding the 2012 report. Involvement in the local community among men and neighbourhood safety have both shifted into the worsening category while the rest have moved from improvement or worsening to no significant change.

For the 11 indicators that show a positive change, suicide and 10 contextual factors, there is continuing scope for action to secure further improvement. This is particularly so where the scale of change is modest. For four of the indicators – home safety, neighbourhood satisfaction, adult learning and

financial inclusion - the change, though statistically significant, was only one or two percentage points over a period of years. Data from other sources show similarly small but significant improvements.[15-18] In terms of absolute differences, the greatest improvements were seen for financial management, physical activity (up 10 and nine percentage points respectively but at 52% and 41% both show considerable scope for ongoing improvement), and education (up six percentage points from 82% to 88%). The reduction in suicide is also notable – down 3.9 deaths per 100, 000 population.

While few indicators have deteriorated, five in total, two of these are for mental health, a disproportionate share, and three are for contextual factors. The worsening trends in mental health (psychoactive substance-related deaths and alcohol dependency) are particularly worrying. Deaths from mental and behavioural disorders due to psychoactive substance use have increased from 6.2 to 10.4 deaths per 100,000 population and possible alcohol dependency has risen to one in ten people. The Government recognises the need to tackle both alcohol and drug misuse as priorities;[20-23] continuing action remains important. The trend for manager support at work, down 12 percentage points from 74% to 62%, also merits attention. The trends for neighbourhood safety and male involvement in the local community should be monitored closely to see how they unfold. The change in neighbourhood safety was very small – one percentage point – and may reflect year-to-year variability rather than a genuine downward trend. The data showing a reduction in male involvement in the local community are quite old (SHoS 2000 to 2003), newer trend data are needed and will be available at the time of the next report (SHeS 2009 onwards).

To improve Scotland's mental health, priority should be given to the three indicators where there is solid evidence of worsening in the period of measurement: psychoactive substance-related deaths, alcohol dependency and manager support at work. Trends in neighbourhood safety and male involvement in the local community should be monitored to confirm if the worsening observed in this report is reflective of real or recent change respectively. Action should also be focused on the fifteen indicators which have not showed any significant change with the aim of turning them into areas of improvement. Finally, there is scope for further improvement on many of the indicators which have already improved, particularly healthy eating among women, physical activity, adult learning and financial management (none of which exceeded 52% at the last point of measurement) and suicide.

There remain substantial opportunities to improve mental health and the conditions in which it can flourish to enable Scotland's population to reach its full potential. A range of national policies 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.[20-31] 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.'[28]

4.2 Inequalities in Scotland's mental health

The report highlights clear inequalities in mental health and associated contextual factors among the adult population in Scotland, by socioeconomic status, age and gender, especially for mental health and the individual-level contextual factors.

Of the 50 indicators analysed for equalities, 44 varied significantly by SIMD. A poorer state of mental health and less favourable contextual factors were associated with greater socioeconomic disadvantage for 42. Only two – unrealistic time pressures at work (demand) and alcohol consumption – were more favourable in more deprived areas.

Forty-three indicators differed significantly by age and 31 did so by gender. However, no gender difference was observed in either measure of mental wellbeing, which is surprising given that significant differences were observed between men and women for every indicator of mental health problems. As more data accumulate in the area of mental wellbeing measurement, this paradox will be an important topic to explore for the insights it might provide for health improvement action.

The repetition of inequalities across a wide range of mental health and contextual indicators demonstrates the need for both targeted and population-wide strategies, to ensure more equal opportunities and outcomes between genders, ages and socioeconomic groups as well as overall improvement in mental health and the conditions that foster it.[30] The existence of substantial inequalities in both person- and area-based indicators suggests that targeting should also be guided by both personal and area characteristics. Consistent data are lacking on other dimensions of equality, which therefore remain largely uncharted territory.

4.3 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 adult mental health in Scotland (covering both mental wellbeing and mental health problems) and the contextual factors associated with it at the individual, community and structural levels. Along with the accompanying chart file (available at www.scotpho.org.uk/scotlandsmentalhealthadults2012),[12] 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 second in the series, this report builds on the first[11] to give a picture of where Scotland's adult mental health is improving and where we need to focus attention at national level, both in terms of flat-lining or worsening trends over time and inequalities between population subgroups.

The availability of data has improved considerably since the last report. Another two indicators have been defined, corresponding questions developed and incorporated into surveys so that point prevalence was calculated for a total of 51 out of the 54 indicators and equalities analysis for 50, thus enabling assessment of overall population mental health and inequalities across almost the full spectrum of indicators. This is a marked improvement from the first report which included point prevalence estimates for 45 indicators and equalities analysis for 44.

Although the adult indicator set was developed in order to monitor adult mental health at a national level, the programme of work has stimulated considerable interest in their use at local level. For example, the Glasgow Centre for Population Health used the indicators to publish a profile of adult mental health in Greater Glasgow and Clyde.[31]

Updates to this report will be published once every four years, each generating a comprehensive, robust and consistent view of adult mental health in Scotland at the national level. As data availability improves and time series lengthen, our understanding of Scotland's adult mental health can be re-examined and refined, but with the constant benefit of a systematic, theory-based framework to organise the indicators.

Limitations

Pending sufficient data points becoming available from questions introduced to national surveys in 2008, the time trend analyses in this report were constrained by a lack of data. In total, some time trend data were available for 29 out of the 54 indicators with interim sources being used for nine of those. Time series were most frequently absent for indicators covering the community- and individual-level contextual factors, leaving greater uncertainty about progress in these areas.

Time trend analysis was further constrained by relatively short time series. The aim was to examine change in the last decade whereas time spans actually ranged from three to 11 years and were most common for seven and four years.

It will take several years before there is enough data to allow time trend analysis across the full indicator set. However, the level of availability reflected in this report represents considerable improvement from that of the first when interim data sources were used for 19 of the 47 indicators analysed and for 12 of the 33 for which trends over time were examined.

Further work is required to complete the indicator set. The concept behind the indicators for spirituality and emotional intelligence indicator have yet to be fully defined, suitable questions identified or developed and an appropriate data collection source(s) identified.

Small sample sizes prevented stratification of the data beyond the protected characteristics of gender and age. With increasing pressures on survey resources this is unlikely to change any time in the near future.

Local use of the indicator set is limited by the very few data currently available at the required geographic levels. The revised SHeS (2008 onwards) has improved the situation – in line with the final recommendations from the indicator development work, extra measures of mental health were added to the survey and a larger sample has enabled reporting at individual health board level at least once every four years with the option of boosting for extra precision or more frequent reporting. A separate briefing paper outlines the sub-national geographies at which data for the national indicators are available.[32] Nonetheless, for some indicators and smaller geographies only local surveys/other data collection will be able to provide the necessary data.

4.4 Future work

4.4.1 Maintenance and ongoing development of the indicators

Ownership of the indicators rests with NHS Health Scotland (for both the adult and children and young people (CYP) sets).[33,34] In terms of ongoing maintenance and sustainability, the Scottish Government has undertaken to ensure that the relevant national surveys continue to collect the data required for the indicators, while NHS Health Scotland will lead on reviewing and revising the indicators to ensure that they remain up-to-date in terms of the evidence base and/or any changes to national data collection. Further discussions between the Scottish Government and NHS Health Scotland are to take place regarding completion of the indicator sets and filling of any data gaps. Maintenance and further development of the indicators will be overseen by a national steering group to be set up and run by NHS Health Scotland.

Towards the end of the current financial year, NHS Health Scotland will undertake a small-scale evaluation to assess awareness of and user satisfaction with this report among the target audience.

4.4.2 Supporting local use

Although the indicators were commissioned and developed to monitor mental health at the national level, considerable interest has been expressed in their use locally. As mentioned above, NHS Health Scotland has already published a briefing paper identifying the sub-national geographies at which data for the national indicators are available.[32] To provide local areas with further support, work is currently underway to produce a web resource setting out how local areas can use the indicators to measure mental wellbeing specifically, to be published on www.wellscotland.info in autumn 2012. This is being led by NHS Health Scotland via local engagement work undertaken through its Mental Health Improvement Programme. The resource is being developed in conjunction with those leading mental health improvement at local level and will feature examples of local use, related information, guidance and resources.

5. Conclusions

This report is the second in a series to monitor the mental health of adults in Scotland. Drawing on a rigorously developed and sustainable set of national indicators, it provides a comprehensive and up-to-date insight into adult mental health (covering both mental wellbeing and mental health problems) and associated contextual factors for anyone working in the field of mental health improvement or other policy areas where there is a link to mental health. This report builds on the first to give a picture of where Scotland's adult mental health is improving and where we need to focus attention at national level, both in terms of flat-lining or worsening trends over time and inequalities between population subgroups.

Overall, the picture over the last decade can be summed up as broadly stable, with a promising level of positive change and only a small, but important, number of negative trends.

Time trend data were available for five out of the nine indicators of mental health. One indicator of mental health has improved:

- rates of suicide.

Two indicators of mental health show no significant change:

- life satisfaction
- common mental health problems.

Two indicators of mental health have worsened:

- possible alcohol dependency
- deaths from mental and behavioural disorders due to psychoactive substance use.

Time trend data are not yet available for four indicators of mental health (mental wellbeing, depression, anxiety and deliberate self-harm) leaving a fair amount of uncertainty regarding how adult mental health in Scotland has changed over recent years.

Of the 45 indicators covering the contextual factors associated with mental health, time trend data were available for 24. Two showed divergent trends for men and women, bringing the total number of results to 26.

Ten contextual factors have improved:

Individual level

- physical activity
- healthy eating (women)
- alcohol consumption
- self-reported health
- adult learning

Community level

- home safety

Structural level
- financial management
- education
- financial inclusion
- neighbourhood satisfaction.

Although statistically significant, change for several of these contextual factors amounted to only one or two percentage points over a period of years. This applied to adult learning, home safety, financial inclusion and neighbourhood satisfaction. In terms of absolute differences, the largest improvements were seen for financial management, physical activity and education.

Thirteen contextual factors show no significant change:

Individual level
- healthy eating (men)

Community level
- involvement in local community (women)
- social contact
- social support

Structural level
- income inequality
- worklessness
- noise
- house condition
- overcrowding
- work-related stress
- demand at work
- control at work
- colleague support at work.

Three contextual factors have worsened:
- men's involvement in the local community
- neighbourhood safety
- manager support at work.

The data suggesting a reduction in male involvement in the local community are quite old (2000 to 2003) while the change in neighbourhood safety was small – one percentage point – and may simply reflect year-to-year variability rather than a genuine downward trend. Both of these trends should be monitored to confirm if the worsening observed in this report is reflective of recent (male involvement in the local community) or real change (neighbourhood safety).

To improve Scotland's mental health, priority should be given to the three indicators where there is solid evidence of worsening over the last decade or so: psychoactive substance-related deaths, alcohol dependency and manager support at work. The trends for deaths from mental and behavioural disorders due to psychoactive substance use and alcohol dependency are of particular concern. Action should also be focused on the 15 indicators which have not showed any significant change with the aim of turning them into areas of

improvement. Finally, there is scope for further improvement on many of the indicators which have already improved, particularly healthy eating among women, physical activity, adult learning, financial management and suicide.

The report also highlights clear inequalities in mental health within the Scottish population, by socioeconomic status, age and gender. Socioeconomic inequalities were particularly extensive; of the 50 indicators for which equalities analysis was possible, a poorer state of mental health and less favourable contextual factors were associated with greater socioeconomic disadvantage for 42. Only two indicators – unrealistic time pressures at work (demand) and drinking within the weekly alcohol limits – were more favourable in more deprived areas. Age was associated with differences in mental health and associated contextual factors for 43 indicators and gender associated with differences for 31. No gender difference was observed in either measure of mental wellbeing, which is surprising given that significant differences were observed between men and women for every indicator of mental health problems. As more data accumulate in the area of mental wellbeing measurement, this paradox will be an important topic to explore for the insights it might provide for health improvement action.

The breadth and complexity of the adult indicators demonstrates that a very wide range of policies, strategies, actions, organisations and individuals have a role to play in creating a mentally flourishing Scotland. We hope that this report will contribute to that process by adding to our understanding of adult 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, ultimately facilitating more effective 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; and, in the longer term, that the indicator set will be reflected in future mental health policy.

Updates to this report will be produced once every four years.

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All web links were verified as working on 5 October 2012.

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Appendix 1. Indicator measures and data limitations

Domain	Indicator	Measure	Limitations of the data
Mental health	Mental wellbeing	Mean adult score on the Warwick–Edinburgh Mental Well-being Scale	The Scottish Health Survey (SHeS) provides annual WEMWBS data for adults aged 16+ from 2008 onwards. Time trend analysis was not performed for this indicator as insufficient data points were available at the time of analysis (2008 and 2009).
	Life satisfaction	Mean adult score of how satisfied individuals are with their life as a whole nowadays	*Interim source for time trends: European Social Survey (ESS)* The ESS was designed to produce robust results at EU member state (e.g. at UK) level. Scottish sample sizes are small (fewer than 200 people in 2002 and 2004, and fewer than 300 people in 2006, limiting its ability to detect real differences over time. The SHeS 2009 has been used to test for differences between subgroups (age, gender and SIMD) as it has a larger sample size than the ESS. This data source will also be used to calculate differences over time in future surveys.
	Common mental health problems	Percentage of adults who score four or more on the GHQ-12	The GHQ-12 looks at deviation from the 'usual functioning' in the last few weeks and does not detect chronic mental health problems. There is also some evidence that the GHQ-12 works less well for older people. Data for adults aged 16+ are only available for three survey years: 2003, 2008 and 2009.
	Depression	Percentage of adults who have a symptom score of two or more on the depression section of the Revised Clinical Interview Schedule (CIS-R)	This measure has been included in the SHeS from 2008 onwards. Data are collected annually but are reported biennially to increase sample size and levels of precision (the CIS-R is administered in the nurse module which has a smaller sample size than the survey core). Time trend analysis was not performed for this indicator as insufficient data points were available at the time of analysis. The sample size for the number of adults who scored two or more on the depression section of the CIS-R in both 2008 and 2009 is small. When broken down further by population subgroups such as gender, age or SIMD the power to detect real differences is low. To minimise this limitation, estimates

Domain	Indicator	Measure	Limitations of the data
			produced for CIS-R score by subgroup are given for 2008 and 2009 combined.
Mental Health	Anxiety	Percentage of adults who have a score of two or more on the anxiety section of the Revised Clinical Interview Schedule (CIS-R)	As above for depression.
	Alcohol dependency	Percentage of adults who score 2 or more on the CAGE questionnaire	The CAGE questionnaire is not a diagnostic tool and does not allow alcohol dependence to be diagnosed conclusively; rather it detects only possible alcohol dependency.
	Psychoactive substance-related deaths	Deaths per 100,000 adults in the past year from 'mental and behavioural disorders due to psychoactive substance use'	Small numbers of deaths restricted the analysis that could be reliably undertaken by subgroups of the population.
	Suicide	Deaths per 100,000 adults in the past year from intentional self-harm and of undetermined intent	Small numbers of deaths restricted the analysis that could be reliably undertaken by subgroups of the population. Deaths from mental and behavioural disorders due to psychoactive substance use will be subsumed within the number of recorded suicides from 2011 onwards. Suicide data prior to 2011 will not be directly comparable with data published after this time. More information is available from the National Records of Scotland website.[13]
	Deliberate self-harm	Percentage of adults who in the past year have deliberately harmed themselves but not with the intention of killing themselves	Questions relating to deliberate self-harm will be included in the SHeS from 2008 onwards. As for anxiety and depression, data are collected annually but are reported biennially to increase sample size and levels of precision (the questions are administered in the nurse module which has a smaller sample size than the survey core). However, this report does not include any data related to this measure as the indicator refers to deliberate self-harm in the *past year*. The question referring to *when* the respondent self-harmed was mistakenly omitted from the 2008-2011 survey and won't be included until 2012 onwards.

	Domain	Indicator	Measure	Limitations of the data
Contextual factors associated with mental health	Individual	Adult learning	Percentage of adults (no longer in continuous full-time education) who participated in some type of adult learning (taught or non-taught) in the last year	Adult learning figures exclude those people who have undertaken job related training or education in the last three months. However, may still include people who have undertaken job related training or education more than three months ago.
		Physical activity	Percentage of adults who met the recommended level of physical activity for adults in the previous four weeks	The physical activity question was first included in the SHeS in 1998 and in that year, and the subsequent survey carried out in 2003, bouts of 15 minutes or more were recorded. The SHeS was brought into line with the Government guidelines of 'bouts of exercise of 10 minutes or more' from 2008 onwards and this should be noted when looking at changes in physical activity across time.
	Individual	Healthy eating	Percentage of adults who ate five or more portions of fruit and vegetables in the previousday	Small numbers restricted equalities analysis to gender, age and SIMD.
		Alcohol consumption	Percentage of adults whose usual weekly consumption of alcohol in the past year was within the recommended weekly limits (i.e. 21 units or fewer for men and 14 units or fewer for women)	The Office for National Statistics published updated conversion factors for converting drink volumes to units of alcohol in December 2007. These are based upon the strength of alcohol products in 2006 and have been applied to the original estimates from the 2003 SHeS as well as subsequent surveys carried out in 2008 and 2009. Time trend data from the SHeS are therefore only comparable across three time points; 2003, 2008 and 2009. This revised methodology was not applied to the SHeS prior to 2003 so data prior to this will not be comparable.
		Drug use	Percentage of adults (aged 16-59) who have taken drugs in the last 12 months	Figures presented in this report will underestimate true prevalence due to lower representation in surveys of problem drug users, respondent concerns about the implications of admitting illegal activity and recall issues. Time trend analysis was not undertaken due to insufficient data points at the time of analysis.
		Self-reported health	Percentage of adults who perceive their health in general to be good or very good	Small numbers restricted equalities analysis to gender, age and SIMD.
		Long-standing physical condition or disability	Percentage of adults who have a long-standing physical condition or disability	The definition of 'longstanding' changed in 2008; data prior to this date will not be directly comparable. Differences over time will be presented in future reports as more data become available.

	Domain	Indicator	Measure	Limitations of the data
		Limiting long-standing physical condition or disability	Percentage of adults who have a long-standing physical condition or disability that limits their daily activities	The definition of 'longstanding' changed in 2008; data prior to this date will not be directly comparable. Differences over time will be presented in future reports as more data become available.
		Spirituality	Indicator not yet established	
		Emotional intelligence	Indicator not yet established	
Contextual factors associated with mental health	Community	Volunteering	Percentage of adults who reported volunteering at least five or six times in the past year	Time trend data for this indicator are not comparable due to a change in the question format between surveys
		Involvement in local community	Percentage of adults who feel involved in their local community a great deal or a fair amount	*Interim source for time trends: Scottish Household Survey (SHoS)* Involvement in the local community was not recorded by the SHoS after 2003. From 2009, the new source for this indicator is the SHeS. A time trend using SHeS data will be available in future reports as more data from this survey become available.
		Influencing local decisions	Percentage of adults who strongly agree or disagree that they can influence decisions affecting their local area	The question used for this indicator was first introduced to the SHeS in 2009 and so time trend data are not currently available. These will be reported in future reports.
		Social contact	Percentage of adults who have contact (in person, by phone, letter, email or through the internet) at least once a week with family, friends or neighbours who do not live with them	*Interim source for time trends: Well? What do you think?* Estimates from the Scottish Health Survey are not directly comparable with previous estimates from the "Well? What do you think?" survey due to differences in the definition of the measure
		Social support	Percentage of adults with a primary support group of three or more to rely on for comfort and support in a personal crisis	*Interim source for time trends: Well? What do you think?* Estimates from the Scottish Health Survey are not directly comparable with previous estimates from the "Well? What do you think?" survey due to differences in the definition of the measure.
		Caring	Percentage of adults who provide 20 or more hours of care per week to a member of their household or to someone not living with them, excluding help provided in the course of employment	Data from the SHeS are not directly comparable to SHoS data previously reported in *Scotland's Mental Health and its Context: Adults 2009.* Time trend analysis was not performed for this indicator as insufficient data points from the SHeS were available at the time of analysis.
		General trust	Percentage of adults who trust most people	Data presented here are from the Scottish Health Survey and are not directly comparable with previously published estimates from the General Household Survey. Time trend analysis was not performed for this indicator as insufficient

	Domain	Indicator	Measure	Limitations of the data
				data points from the SHeS were available at the time of analysis.
		Neighbourhood trust	Percentage of adults who trust most people in their neighbourhood	At the time of analysis data were only available for 2009. Time trend analyses will be presented in subsequent reports when more data are available.
		Neighbourhood safety	Percentage of adults who feel very or fairly safe walking alone in their neighbourhood after dark	The SHoS is currently the best data source of data for this indicator. However, more robust questions on safety are being developed for the Scottish Crime and Justice Survey and may be a better data source in the future. If this is the case then this indicator may need to be revised accordingly.
		Home safety	Percentage of adults who feel very or fairly safe when at home alone at night	The SHoS is currently the best data source of data for this indicator. However, more robust questions on safety are being developed for the Scottish Crime and Justice Survey and may be a better data source in the future. If this is the case then this indicator may need to be revised accordingly.
		Non-violent neighbourhood crime	Percentage of adults who have been a victim of non-violent crime occurring locally	It is not currently possible to undertake time trend analysis due to limited data. This will be made available in future reports.
		Perception of local crime	Percentage of adults who perceive crime to be very or fairly common in their local area	No time trend data are currently available as there are currently only two time points. This will be revised in future reports.

	Domain	Indicator	Measure	Limitations of the data
Contextual factors associated with mental health	Structural	Income inequality	The Gini coefficient	It has not been possible to look at equalities for the Gini coefficient because of risk of disclosure and sample size when disaggregating the Family Resources Survey into smaller units.
		Worklessness	Percentage of adults (women aged 16-59 and men aged 16-64), excluding students, who are unemployed or economically inactive and who want to work	Comparison of confidence intervals was used to ascertain statistically significant differences across equality groupings and over the time-series, this was due to limitations in data availability precluding further analysis.
		Education	Percentage of adults (women aged 16-59 and men aged 16-64) with at least one academic or vocational educational qualification	Comparison of confidence intervals was used to ascertain statistically significant differences across equality groupings and over the time-series, this was due to limitations in data availability precluding further analysis.
		Discrimination	Percentage of adults who report having been unfairly treated or discriminated against in the past year	Time trend analysis is not currently possible. This will be made available in future reports.
		Racial discrimination	Percentage of adults who think that racial discrimination is a big problem in Scotland	It is not currently possible to undertake time series analysis for this indicator. This will be made available in future reports.
		Harassment	Percentage of adults who have personally experienced harassment or abuse in the past year	Data are currently only available for one year, precluding time trend analysis. This will be available in future reports.
		Financial management	Percentage of households managing very or quite well financially these days	The SHoS did not ask this question between April 2003 and December 2004. The estimate represents data collected between January and March 2003.
		Financial inclusion	Percentage of households with access to a bank account, building society account, credit union account or post office card account	Respondents were asked about credit union accounts only from 2002 and post office card accounts from 2004, creating discontinuity in the time series. To account for this, two time series trends are shown; the first is from 2004 to 2008 and incorporates bank accounts, building society accounts, credit union accounts and post office accounts. The second includes only bank and building society accounts and has been included for continuity with the time series chart produced in the 2009 report.
		Neighbourhood satisfaction	Percentage of adults who rate their neighbourhood as a very or fairly good place to live	Small numbers restricted equalities analysis to gender, age and SIMD.

Contextual factors associated with mental health	Structural	Noise	Percentage of adults who are bothered often or fairly often by noise when home indoors	Comparison of confidence intervals was used to ascertain statistically significant differences for differences over time due to limitations in data availability.
		Escape facility	Percentage of adults (aged 18+) who agree or strongly agree that they have somewhere they can go to escape problems/stresses (not home/garden).	This is a new indicator therefore it is not currently possible to produce a time series. This will be available in future reports.
		Greenspace	Percentage of adults who feel that they have a safe and pleasant park, green or other area of grass in their neighbourhood, excluding private garden space, which they and their family can use	This question has only recently been introduced to the Scottish Household Survey, currently precluding time-series analysis.
		House condition	Percentage of adults rating the condition of their house or flat as very or fairly good	Comparison of confidence intervals was used to ascertain statistically significant differences over the time series; this was due to limitations in data availability precluding further analysis.
		Overcrowding	Percentage of adults who feel their home has too few rooms	Comparison of confidence intervals was used to ascertain statistically significant differences over the time series; this was due to limitations in data availability precluding further analysis.
		Stress	Percentage of adults who find their job very or extremely stressful	*Interim source for time trends: Psychosocial Working Conditions Survey (PWCS)* Although no significant difference over time has been identified through analysis of the PWCS data for 2004-2007, it should be noted that this may in part be due to the small Scottish sample size. Improved estimates will be available from the Scottish health Survey and included in future reports.
		Work–life balance	Mean score for how satisfied adults are with their work–life balance (paid work)	Time trend analysis was not performed for this indicator as insufficient data points were available. Time trend data (from the *Scottish Health Survey)* are available from 2009 onwards. Time trend estimates and analysis will be presented in future reports.
		Demand	Percentage of adults who often or always have unrealistic time pressures at work	*Interim source for time trends: Psychosocial Working Conditions Survey (PWCS)* The PWCS is a British survey with a very small Scottish sample size; therefore its ability to detect differences over time is limited. The inclusion of the question in the SHeS will provide better time trend data in the future.
		Control	Percentage of adults who often or always have a	*Interim source for time trends: Psychosocial Working*

Contextual factors associated with mental health			choice in deciding the way that they do their work	*Conditions Survey (PWCS)* The PWCS is a British survey with a very small Scottish sample size; therefore its ability to pick up on differences over time is limited. The inclusion of the question in the SHeS will provide better time trend data in the future.
		Manager support	Percentage of adults who strongly or tend to agree that their line manager encourages them at work	*Interim source for time trends: Psychosocial Working Conditions Survey (PWCS)* Due to a change in data source for this indicator to the SHeS, it is not currently possible to present a time trend using this source. Time trend information will be available in future reports.
		Colleague support	Percentage of adults who strongly or tend to agree that they get the help and support they need from colleagues at work	*Interim source for time trends: Psychosocial Working Conditions Survey (PWCS)* It is not presently possible to provide estimates of change over time from the SHeS as this indicator has only recently been included in this survey. The interim data source (PWCS) was used instead to provide an estimate of change over time. The PWCS is a British survey with a very small Scottish sample size. This limits its ability to detect real change over time. A breakdown of this indicator across time will be available in future reports from the Scottish Health Survey.
		Partner abuse	Percentage of adults reporting being physically or emotionally abused by a partner or an ex-partner in the past year	Changes in the SCVS/SCJS survey methodology over time means that it is not currently possible to produce a time trend for this indicator.
		Neighbourhood violence	Percentage of adults who have experienced violence, excluding violence by a household member, occurring locally in the past year	It is not currently possible to analyse this indicator across time however this will be made available in future reports where possible.
		Attitude to violence	Mean adult score on attitudes to violence scale. Measured on a five-point scale where one indicates that the respondent views violence as “not wrong at all” to five where violence is viewed as “very seriously wrong.”	As this indicator has only recently been developed, time trend data are not yet available.

Appendix 2. Age groups used for age analysis

No. of age groups	Age bands (years)	Indicators
Two	16-59, 60+	House condition Noise Overcrowding
Three	16-44, 45-64, 65+	Anxiety Colleague support Control Depression Discrimination Harassment Manager support
Four - a	16-24, 25-34, 35-49, 50-59 women/50-64 men	Adult learning Education Worklessness
Four - b	16-24, 25-44, 45-59, 60+	Neighbourhood violence Non-violent neighbourhood crime Partner abuse Racial discrimination
Five	16-24, 25-34, 35-44, 45-54, 55+	Demand Drug use Psychoactive substance-related deaths Stress
Six	16-24, 25-34, 35-44, 45-54, 55-64, 65+	Attitude to violence* Escape facility* Financial inclusion Financial management Home safety Neighbourhood safety Neighbourhood satisfaction Suicide Work–life balance
Seven	16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75+	Alcohol consumption Alcohol dependency Caring Common mental health problems General trust Greenspace Healthy eating Influencing local decisions Involvement in local community Life satisfaction Limiting long-standing physical condition or disability Long-standing physical condition or disability Neighbourhood trust Perception of local crime Physical activity Mental wellbeing Self-reported health Social contact Social support Volunteering

*Attitude to violence and escape facility refer to adults aged 18-24 rather than 16-24 as the source survey (Scottish Social Attitudes Survey) targets adults aged 18+.

Appendix 3. Changes in survey methodology for indicators that have changed direction since the 2009 report

	2009			2012			
Indicator	**Source**	**Years**	**Age range**	**Source**	**Years**	**Age range**	**Methodological differences**
Common mental health problems	SHeS	1995-2003	16-64	SHeS	2003-2009	16+	Age range
Healthy eating (men)	HEPS	1996-2007	16-74	SHeS	2003-2009	16+	Data source and age range
Alcohol consumption	SHeS	1995-2003	16-64	SHeS	2003-2009	16+	Age range and alcohol conversions factors (2009 report based on original, 2012 based on revised)
Self-reported health	SHeS	1995-2003	16-64	SHeS	2003-2009	16+	Age range
Involvement in local community	SHoS	2000-2002	16+	SHoS	2000-2003	16+	None
Worklessness	LFS/APS	1999-2006	16-59/64	LFS/APS	1999-2009	16-59/64	None
House condition	SHCS	1996-2005/06	16+	SHCS	2004/05-2009	16+	None
Overcrowding	SHCS	1996-2005/06	16+	SHCS	2004/05-2009	16+	None
Neighbourhood safety	SHoS	2002-2006	16+	SHoS	2002-2008	16+	None

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