Student Health and Wellbeing In Wales: Report of the 2017/18 Health Behaviour in School-aged Children Survey and School Health Research Network Student Health and Wellbeing Survey

Y RHWYDWAITH YMCHWIL IECHYD MEWN YSGOLION
SCHOOL HEALTH RESEARCH NETWORK

hbsc
HEALTH BEHAVIOUR IN SCHOOL-AGED CHILDREN
WORLD HEALTH ORGANIZATION COLLABORATIVE CROSS-NATIONAL STUDY

Student Health and Wellbeing In Wales: Report of the 2017/18 Health Behaviour in School-aged Children Survey and School Health Research Network Student Health and Wellbeing Survey

Gillian Hewitt

Rebecca Anthony

Graham Moore

G.J. Melendez-Torres

Simon Murphy

May 2019

Citation: Hewitt G., Anthony R., Moore G., Melendez-Torres G.J., Murphy S. (2019) Student Health and Wellbeing In Wales: Report of the 2017/18 Health Behaviour in School-aged Children Survey and School Health Research Network Student Health and Wellbeing Survey. Cardiff University, Cardiff, UK

Contents

Tables and figures

Tables (Methods)

Figures and Tables (Findings)

All Local Health Board data are presented in the tables listed below.

Chapter 3: General health and wellbeing

Chapter 4: School life

Chapter 5: Family life and friendships

Chapter 6: Relationships

Chapter 7: Smoking, drinking and drug-taking

Chapter 8: Gambling

Tables (Appendices)

Young people's foreword

Advice Leading to Public Health Advancement

ALPHA

DECIPHer's research advisory group of young people

We are a group of young people aged 14-25 who advise researchers by discussing and debating our views on public health topics and the research they plan to carry out. The group formed in DECIPHer[a] in 2010 with the aim of bringing together young people with a range of experiences and opinions, to help make sure research reflects what is important to us. Ultimately, this helps to improve ours and other young people's health.

We have been involved with the School Health Research Network (SHRN) since its inception in 2013, helping to shape survey questions and disseminate findings. The work undertaken with SHRN is revolutionary and ground-breaking. Many Public Health conditions show their first signs in childhood and can potentially develop into conditions which may require consistent care throughout adulthood. It is therefore vital to equip us with the knowledge, information and guidance to have a say in matters that directly affect us and giving us the ability to help shape our lives.

It is essential in this climate to obtain information to address uncertainties and limitations with public health. The availability to receive bespoke and tailored public health data for each school in Wales is extremely beneficial; it gives us the ability to have a say in shaping our lives and our futures. The SHRN organisation is an enormously valuable tool for providing robust health and wellbeing data for schools, regional and national stakeholders. It helps schools and students like us to understand health research evidence and gives us the means to implement projects and programmes, to improve areas of public health that need addressing.

Without this national organisation skills, knowledge, understanding and attitudes towards public health would not be where they are today. We need to continue to strive to recognise areas of public health which have a direct effect on us and involve us, young people, at every step. Our generation has a lot to give and we cannot afford to not have our voices heard.

[a] The Centre for the Development and Evaluation of Complex Interventions for Public Health Improvement (DECIPHer) at Cardiff University

Acknowledgements

First and foremost we are grateful to the young people who completed the survey and to the schools and teachers who administered it and continue to support the School Health Research Network (SHRN).

We are also grateful to ALPHA, DECIPHer's young people's advisory group, for writing a foreword to this report and for all their support and advice over the course of SHRN's development.

The survey was funded by Health and Care Research Wales (via the National Centre for Population Health and Wellbeing Research), with additional contributions from the Health & Social Services and Education & Public Services departments, Welsh Government. We thank Chris Roberts and Richard Thurston from Welsh Government for their ongoing support of SHRN.

Finally, we extend our thanks to the Gambling Commission for permission to use their questions in the survey and to Holly Kitson, Olivia Michelmore, Steve Ginnis, Jane Stevens and Julia Pye at Ipsos MORI.

The Health Behaviour in School-aged Children Survey is an international study carried out in collaboration with the World Health Organization. The International Coordinator of the 2017/18 study was Jo Inchley (previously University of St Andrews, now University of Glasgow) and the Data Bank Manager was Oddrun Samdal (University of Bergen). A complete list of participating researchers can be found at www.hbsc.org.

The School Health Research Network is a partnership between The Centre for the Development and Evaluation of Complex Interventions for Public Health Improvement (DECIPHer) at Cardiff University, Wales Institute of Social & Economic Research, Data & Methods (WISERD), Welsh Government, Public Health Wales and Cancer Research UK, funded by Health and Care Research Wales via the National Centre for Population Health and Wellbeing Research and Public Health Wales. Its early development was supported by a Medical Research Council partnership grant (MR/L002787/1).

The work was undertaken with the support of DECIPHer, a UKCRC Public Health Research Centre of Excellence. Joint funding (MR/KO232331/1) from the British Heart Foundation, Cancer Research UK, Economic and Social Research Council, Medical Research Council, the Welsh Government and the Wellcome Trust, under the auspices of the UK Clinical Research Collaboration, is gratefully acknowledged.

Queries relating to this report should be addressed to shrn@cardiff.ac.uk

Picture credits: Monmouth Comprehensive School, Monmouthshire (top row) and St. Richard Gwyn Catholic High School, Flintshire (bottom row).

1 Introduction

Health and wellbeing of secondary school aged children in Wales

Adolescence is a critical life-course period for young people's health and wellbeing where the social influences upon health begin to shift from being largely within the family to include peers, the media, education, and for older adolescents, employment[1].

Previous Health Behaviour in School-aged Children (HBSC) surveys indicate some significant improvements in the health and wellbeing of adolescents in Wales over the last 10 to 25 years, e.g. rates of weekly smoking and drinking alcohol have declined, as has the proportion of students who report first sex at a young age[2]. Other areas, however, have shown no improvement, e.g. overall life satisfaction and physical activity, or significantly worsened, e.g. self-rated health.

The potential for schools to positively influence young people's health and wellbeing is well recognised and recent research from Wales has challenged concerns that devoting resources to health improvement activity in schools might be at the expense of educational attainment[3]. Wales has one of the most extensive health promoting school programmes in the world, the Welsh Network of Healthy School Schemes, which supports schools to implement the World Health Organization's health promoting schools framework. This encourages schools to strengthen their capacity as healthy settings for living, learning and working by promoting health through the curriculum and the wider school environment.

It is, however, a time of change for health and wellbeing in education in Wales with a number of key policy developments over the last three years that have endorsed schools' and other statutory agencies' roles in protecting and promoting adolescent health and wellbeing. These include the Violence against Women, Domestic Abuse and Sexual Violence (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015, a new common inspection framework for schools with greater focus on wellbeing, and comprehensive curriculum reform. The new curriculum, currently in development, will aim to implement the recommendations of the Successful Futures report[4], including that one of four core purposes of the curriculum should be that children develop as 'healthy, confident individuals' and that one of the six areas of learning and experience which form the structure of the curriculum should be health and wellbeing.

Schools, however, are one of many influences on young people's health and wellbeing and the findings presented in this report will be of value to the wide range of statutory and third sector agencies whose remits include the protection and promotion of health and wellbeing.

The School Health Research Network

The School Health Research Network (SHRN) was established in 2013 and is a partnership between Welsh Government, Public Health Wales, Cancer Research UK, the Wales Institute of Social and Economic Research, Data and Methods (WISERD) and Cardiff University[5]. School membership in 2017/18 was 212, including all maintained secondary and middle schools in Wales. The Network is led by the Centre for the Development and Evaluation of Complex Interventions for Public Health Improvement (DECIPHer) at Cardiff University.

The Network aims to improve young people's health and wellbeing by:

- Providing robust health and wellbeing data for local, regional and national stakeholders;

- Working with policy-makers and practitioners from health, education and social care to co-produce high quality school based health and wellbeing research for Wales;
- Facilitating the translation of school health and wellbeing research evidence into practice; and
- Building capacity for evidence informed practice within the school health community

The Student Health and Wellbeing Survey underpins the Network's first aim and takes place every two years. In the same school year, Network schools also complete a School Environment Questionnaire to provide data on school health policies and practices. The content of both surveys reflects current policy, practice and research data needs. All schools that take part in the student survey receive a Student Health and Wellbeing Report and regional reports are produced for Local Authorities.

Survey data are also used for research into health and wellbeing in the school setting[6-8]. Findings from this research are fed back to schools and to the wider school health system via Research Briefs and webinars. Further information about the Network can be found on its website: www.shrn.org.uk

The Health Behaviour in School-aged Children Survey

The World Health Organization (WHO) collaborative, cross-national Health Behaviour in School-aged Children (HBSC) study began in 1983 and currently includes 45 countries and regions across Europe and North America. Every four years participating countries undertake a nationally representative survey of young people aged 11, 13 and 15 years, with questions covering health and wellbeing, social environments and health behaviours.

Wales has taken part in every round of the HBSC since 1985 and the resultant data has been a key source of information on child and adolescent health, providing national, international and local data to a wide range of stakeholders. Previous national reports for Wales are available on the Welsh Government website and the 2013/14 National Report includes an analysis of trends from 1985/86 to 2013/14[2].

The 2013/14 HBSC Survey in Wales was instrumental to the establishment of SHRN, providing health and wellbeing data that could be fed back to participating schools. SHRN's Student Health and Wellbeing Survey, based on the HBSC Survey but conducted every two years, now provides more timely health and wellbeing data for stakeholders in Wales, whilst providing a data collection infrastructure into which the international HBSC Survey can be embedded every four years.

2017/18 Student Health and Wellbeing Survey, incorporating the HBSC Survey

The main objectives of the 2017/18 survey were:

- to provide an in-depth understanding of young people's health and wellbeing, including the social determinants of health and the health and wellbeing among the whole population, and among subgroups, such as looked after young people;
- to inform policy and practice to improve young people's lives;
- to disseminate findings to various groups, for example Welsh Government policy makers, local government, the NHS, schools and researchers; and
- to undertake national and international research on health and wellbeing and the social context of health among young people.

The survey collected self-reported data in the classroom setting, with school staff instructed to provide students with privacy as they completed the survey, due to the sensitive nature of some of the questions. Data were collected from students in school years 7 to 11 in all participating schools. Schools that had students in years 12 and 13 could include them if they chose and their data was included in the school's Student Health and Wellbeing Report, but this report includes students in years 7 to 11 only.

The Student Health and Wellbeing Survey was conducted online in 2015/16, but this is the first time the HBSC Survey in Wales has been delivered electronically, so its methodology is different to previous HBSC Surveys in Wales. Key differences from previous rounds of the HBSC survey include questions in the online format being forced answer (although there was always a response option of 'I do not want to answer') whereas on a paper questionnaire, students could omit questions they did not want to answer. Furthermore, due to the number of schools taking part, the survey was administered by schools themselves, rather than by research fieldworkers who in previous years visited schools to undertake data collection. The international HBSC study, however, is now conducted using a mixture of electronic and paper data collection across participating countries, so the change in approach in Wales does not diminish international comparability. A comparison of completing a similar survey (the Scottish Schools Adolescent Lifestyle and Substance Use Survey) on paper or online found that whilst there were more missing answers when completed online, there were no differences by mode of completion in student response rate, representativeness and findings for nearly all key measures[9].

The high school level response rate for the survey (see 'Response rates' in chapter 2) can be attributed to the relationship SHRN has established with its member schools through a range of engagement activities, particularly provision of an individualised Student Health and Wellbeing Report for each school that participates in the survey. Furthermore, the large sample means that findings at the Local Health Board (LHB) level are more robust and, for the first time, findings can be presented by ethnicity.

An infographic to accompany this report is available on the SHRN website (www.shrn.org.uk) along with other survey briefing papers. These include the wellbeing of young people in Wales and the health and wellbeing of looked after young people (forthcoming). Data from the HBSC Survey in Wales will also be reported in the next international HSBC report (www.hbsc.org/publications/international/).

2 Methods

The Student Health and Wellbeing Survey takes place every two years to ensure that member schools and SHRN's policy and practice partners get timely data, whilst at the same time offering a data collection infrastructure into which the four-yearly HBSC Survey can be embedded, thereby allowing Wales to remain part of the international study. All SHRN member schools are invited to take part in the survey and by the end of October 2017, all maintained mainstream schools were members.

The survey followed the international 2017/18 HBSC survey protocol, developed by the international network of HBSC study researchers. Further detail is available at www.hbsc.org

Questionnaire design

The questionnaire was based on the mandatory core HBSC questionnaire containing 44 questions, including three questions on electronic media communication, the HBSC special topic area for 2017/18. National items were then added to meet policy, practice and research data requirements in Wales. These came from a number of sources. Schools suggested areas of health and wellbeing they wanted included at SHRN's annual summer events; researchers proposed questions to advance specific areas of research; and policy partners proposed questions needed for national monitoring and surveillance. Where possible, optional packages of questions from the HBSC were used to meet national data needs to facilitate cross-national analyses across a wider range of variables. Questions pertaining to the findings presented in this report are in the annex.

The large sample of students in years 7 to 11 (n=103,971) meant that not all students needed to answer all questions in order to produce robust national estimates. The capacity of the questionnaire was therefore increased by having three routes through it, with students randomly allocated to a route on entering the survey (see next section). Some questions were included in all routes, e.g. demographics and items included in schools' Student Health and Wellbeing Reports, whilst others were included in only one or two of the routes. All the mandatory HBSC items were in one route.

Questionnaire items on sexual behaviour were included for all students in years 11, 12 and 13, but schools could opt to include them for years 9 and/or 10 as well. Only results pertaining to year 11 are reported herein.

Questionnaire items that collected identifiable data in a subsample of schools (see description of pilot project in next section) were at the end of the questionnaire.

The longest route through the questionnaire was piloted in May 2017 to ensure it could be completed within one lesson.

Sampling design and procedures

The HBSC Survey is designed to be nationally representative with the school as the sampling unit. To create a sample for the HBSC Survey whilst maximising the capacity of the questionnaire, as described above, the HBSC route through the survey did not need to be used in all schools. A nationally representative sample of 'HBSC schools' was therefore drawn.

Sampling for HBSC schools was undertaken in May 2017 using the SHRN membership at the time (n=203, including 97% of all maintained mainstream secondary schools) as the sampling frame plus independent schools with at least 150 students in years 7 to 11 that were not already members of SHRN (n=10). A disproportionate design was used that expected to achieve a minimum of 8.5

schools per LHB, using an 85% response rate. The sample was stratified by LHB and within LHB by deciles of percentage of students entitled to free school meals.

When registering for the survey, SHRN member schools indicated whether they would be willing to take part in a project to pilot collecting identifiable information for use in longitudinal and data linkage research. Forty-two schools were randomly selected from consenting non-HBSC group schools to take part in this pilot. The findings from this pilot project are not reported here.

Schools were encouraged to include all students in year groups 7 to 11 and to always survey mixed ability classes.

On entering the questionnaire, students were randomly allocated to a route, which determined which questions were visible to them as they progressed through the questionnaire. Students in HBSC schools were allocated to the HBSC route or to one of the other two routes (SHRN1 and SHRN2) on a 3:1:1 basis. Students in non-HBSC schools were allocated to SHRN1 or SHRN2 on a 1:1 basis. Final sample sizes for the three routes are given in the next section.

Response rates

Two hundred and sixteen schools were invited to take part in the survey (210 SHRN member schools and 6 independent schools drawn for the HBSC sample) and 193 (89%) did so. There were 103,971 student participants from a total student body of 142,631 in the 193 schools(a 73% response rate), so the overall response rate was 65%. Student participation and response rates by year group are shown in Table 2.1, showing similar response rates from years 7 to 9, but a marked drop thereafter.

Table 2.1: Sample and student response rate by year group

	Year 7	Year 8	Year 9	Year 10	Year 11	Total
Number of participants	22 634	22 421	22 208	19 704	17 004	103 971
Response rate	76%	76%	78%	70%	64%	73%

One hundred and fifty students were withdrawn by their parents.

Final samples sizes within the three routes through the survey were 29,063 (HBSC), 37,363 (SHRN1) and 37,545 (SHRN2). Characteristics of the sample with respect to gender, family affluence, ethnicity and LHB are given in the annex.

Weighting

While the HBSC sub-sample is weighted by age, gender and local authority within the international report, the larger overall SHRN survey taken as a whole matched the population of Wales more closely than did this sub-sample. Hence, no survey weights were applied.

Administration of survey in schools

The survey was completed by students online, in one sitting and its administration was managed by the school, using their own IT equipment. Schools were sent an electronic pack of information about the survey in September 2017. This included detailed instructions for the school's survey lead, additional briefings for classroom teachers who would be overseeing the survey and the school IT manager and a form on which to record parent withdrawals. Shortly afterwards, they were sent an electronic link to the survey that was unique to their school.

Schools had the whole of the autumn term (September to December) to complete the survey and were asked to include all of their students in years 7 to 11. If schools had students in years 12 and 13, they could also be included if the school wished and their data were fed back to schools in the Student Health and Wellbeing Reports, but they are not reported here.

Schools were instructed to always survey mixed ability classes in case they were unable to survey the whole year group and to organise classrooms to ensure privacy for students. Supervising staff were asked to remain at the front of the classroom unless a student asked for help.

If a whole class was interrupted whilst taking the survey, e.g. because of a fire alarm or IT failure, the school was instructed not to let the class re-start, but to contact the research team for advice. If the interruption happened early in the lesson and it was possible to identify the interrupted class's data in the data file, the school was instructed to re-survey the class and the incomplete surveys were removed during data cleaning. If not, the school was instructed not to let the class repeat the survey and the data was retained and cleaned following the agreed protocol (see next section).

Data cleaning

Coding of responses was conducted according to HBSC protocol guidelines.

Data were then cleaned by the survey contractor according to an agreed set of steps. These included removing participants that had not proceeded beyond a specified question, which was approximately one-third of the way through the questionnaire.

Ethics, recruitment and consent

The survey was approved by the Cardiff University School of Social Sciences Research Ethics Committee.

A briefing about the survey was given at the SHRN events for member schools in June 2017. These were held in North, West and South Wales and attended by staff representatives from 118 schools. Following this, survey registration packs were sent to all SHRN member schools. These packs contained information about the survey, a draft questionnaire, presentation slides for schools to use with staff and students and a registration form, which schools were asked to return before the end of term in July 2017.

Independent schools that were drawn in the HBSC sample were approached directly by the SHRN manager and invited to participate in September 2017.

In September, all schools that had registered for the survey were sent a second pack which included letters for parents and the finalised questionnaire.

Schools were asked to use two of three methods to notify parents of the survey at least a week in advance. These were a letter sent home with the students, an electronic copy of the letter emailed directly to parents and a text message notifying parents that they should have received a letter and to contact the school if they had not. The letter told parents they could withdraw their child(ren) if they did not want them to take part (opt-out consent) by notifying the school. Schools were told to share the questionnaire with parents if they asked to see it.

Schools were provided with slides about the survey to show to students in advance. Schools in the pilot project to collect identifiable information were also provided with a video to show students in advance. Further information was included at the start of the questionnaire, before students reached the first question. The first question asked for their consent to take part and if they declined, the survey automatically closed.

The questionnaire was forced answer, meaning students could not move on to the next page without answering every question on the current page. Every question apart from the consent question, however, had 'I do not want to answer' as a response option.

Presentation of findings

This report presents findings on a wide range of variables that were included in the questionnaire. The questions pertaining to these variables are listed in the Annex. Variables that are not reported here may be included in future short briefing reports.

In most instances, overall responses to the questionnaire item are presented and then a binary indicator is defined. For each indicator results are presented by: gender; school year; family affluence; ethnicity; and LHB[b]. The HBSC Family Affluence Scale (FAS) has been employed to estimate young people's socio-economic status, based on a set of questions which measure the material conditions of the household in which young people live[10 11]. FAS 1 indicates low affluence households, FAS 2 medium affluence and FAS 3 high affluence households. (See note on FAS in the annex.)

The base size for each question is presented with the charts. Wide variation in base sizes is due to questions being on one, two or three of the routes through the survey.

Results are not presented by ethnicity where only Year 11 students are reported, due to low numbers in some ethnicity categories. In other instances where base sizes fall below 100, this is noted by the relevant figure or table.

Results for students who responded 'I do not want answer' to the gender question are not shown in figures reporting a gender breakdown (see note in the annex), but these students' responses are included in all other figures.

The questionnaire item on ethnicity included the option of 'I do not want to answer'. Students who selected this response are included in figures presenting data by ethnicity, as the 'Prefer not to say' group. Non-response to this item was low in the 2013/14 HBSC survey (0.5%), where students left the question unanswered if they did not want to respond, but much higher in 2017/18 (3%), where they were the largest group after White British (see Annex table A1). Providing the 'I do not want to

[b] All analyses by LHB are based on the boundaries that were in place before the reconfiguration of LHBs in April 2019. Future publications will take account of these changes.

answer' option appears to have led to a less trivial degree of non-response and, given the size of this group, their data are therefore included.

Given the large sample it is likely that differences that carry no policy or practice relevance will be statistically significant, therefore no statistical testing has been carried out on the results presented in the report.

For presentational purposes the scale of each axis is set relative to the data being presented. Care should therefore be taken when reading the figures, to ensure that small differences are not over-interpreted due to the scaling. Readers should also be aware that small discrepancies in percentages are due to rounding.

Analysis of trends is not included in this report, but will likely be the subject of a future briefing paper. In the meantime, trends in key indicators from 1985/86 to 2013/14 are reported in the 2013/14 HBSC report for Wales[2], available on the Welsh Government website.

3 General health and wellbeing

Introduction

Improving people's health and wellbeing has been identified as one of the most important current public health issues[12]. Prevention of emotional and behavioural problems and promotion of positive wellbeing in children and young people, as well as reduction of child and adolescent health inequalities, are national priorities in Wales. The importance of these goals has been emphasised in the Wellbeing of Future Generations (Wales) Act 2015, which focuses on improving the social, economic, environmental and cultural wellbeing of Wales.

Adolescents' appraisal of their overall subjective wellbeing, includes physical and non-physical health. As outlined in the introduction, previous Health Behaviour in School-aged Children surveys indicate some aspects of adolescent health and wellbeing, such as overall life satisfaction and physical activity, have shown no improvement over time. Furthermore, other aspects, such as self-rated health, have worsened.

Many aspects of adolescents' lives are associated with health and wellbeing, including eating and sleeping, screen usage and social media, and physical activity levels.

Good nutrition is beneficial to health and wellbeing at all ages[13]. Adolescence is a time of rapid physical growth increases, requiring energy and nutrients. Poor dietary patterns, such as skipping breakfast, insufficient intake of fruits and vegetables, and frequent consumption of food or drinks with high sugar content, can persist into adulthood and have been associated with a wide range of illnesses such as cardiovascular diseases, cancer, osteoporosis, iron-deficiency anaemia and a lower resistance to infections[14].

Good dietary patterns can prevent chronic diseases[14], including obesity[15]. Figures suggest rates of childhood obesity more than doubled between 1984 and 2002[16]. Obesity in adolescents can significantly affect psychological health and wellbeing, leading to body dissatisfaction and low self-esteem[17], as well as bullying and peer rejection[18].

Sleep is an essential part of everyday functioning, however, insufficient sleep is common among youth and adolescents around the world and can have multiple, negative consequences[19]. Longitudinal and survey data indicate that adolescents with unrestricted sleep opportunities obtain over nine hours of sleep on average[20]. However, millions of adolescents worldwide achieve insufficient sleep (e.g. less than eight hours), especially on school nights[19]. Lack of sleep in adolescence is associated with fatigue, anxiety and depressed mood and lower life satisfaction[21].

Delays in bedtime among youth as they get older can be attributed to a number of biological, psychosocial and environmental causes[22], including the use of screen-based activities that often delay bedtime or shorten total sleep time. Screen time includes the use of social media, which whilst it has benefits, such as social support and knowledge acquisition, has also been associated with poor mental health among young people[23].

In terms of active and sedentary behaviours, systematic reviews have established that daily physical activity, particularly moderate-to-vigorous intensity physical activity, is important for both the current and future health of children and adolescents, including lower blood pressure, obesity, bone mineral density and depression[24].

Findings

Students in all year groups were asked a range of questions regarding their health and wellbeing, including aspects such as their life satisfaction, loneliness, sleeping, eating and physical activity habits, social media usage and volunteering. The findings suggest there are a number of reasons to be optimistic about young people's wellbeing in Wales. Most adolescents are happy with their lives and do not usually feel lonely during the summer holidays. However, there are notable inequalities in these outcomes. Females report lower wellbeing and life satisfaction scores than males. Wellbeing and life satisfaction reduce as adolescents progress through school. In addition, this report shines a spotlight on socioeconomic inequalities in these outcomes. Adolescents from less affluent households report lower levels of wellbeing and life satisfaction.

General Health and Wellbeing

Current health

Most adolescents were positive about their current health, with 25% reporting that they are experiencing excellent health and 53% experiencing good health. Around one in five, however, reported that they have fair or poor health (Figure 3.1). The degree to which adolescents rated their health as fair or poor differed by gender and family affluence, with females and those from lower family affluence families more likely to rate their health as fair or poor. There was also a stark increase in adolescents rating their health as fair or poor with increasing year group, particularly between students in years 8 and 9 (Figure 3.2) and for female students (Figure 3.4).

Adolescents from Pakistani, Bangladeshi and White Gypsy/Traveller backgrounds were most likely to rate their health as fair or poor, whilst those from White British, African and Other backgrounds were least likely to do so (Figure 3.3).

There was some variation in ratings of health by LHB (Table 3.1). Adolescents living in Betsi Cadwaladr and Aneurin Bevan LHB were most likely to rate their health as fair or poor (23%) and those in Powys LHB the least likely (19%). The size and direction of the difference between males and females varied across health boards.

Life satisfaction

Young people scored their life satisfaction using the Cantril ladder[25]. A picture of a ladder was shown and students were asked to rate their life satisfaction from 0 (worst possible life) through to 10 (best possible life). Over 80% of adolescents rated their life as 6 or over (Figure 3.5). Life satisfaction differed by gender and family affluence, with fewer females and those from lower family affluence families rating their life satisfaction 6 or above. This was also strongly related to age, with the number of adolescents rating their life satisfaction as 6 or above decreasing with age (Figure 3.6). Figure 3.8 shows that the decline in life satisfaction with age was more pronounced for females than males.

Adolescents from White British and Indian backgrounds were most likely to rate their life satisfaction as being 6 or above, whilst those from White Gypsy/traveller backgrounds were least likely to do so (Figure 3.7).

More adolescents from Powys reported their life satisfaction as 6 or more compared to other local health boards (86%), but variation across the LHBs was small. In all LHBs females were less likely to report their life satisfaction as 6 or more compared with males (Table 3.2).

Wellbeing

Mental wellbeing was measured using the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS[26]), a scale covering both a person's happiness and the extent to which a person is fully functional. Scores range from 7 to 35 and the mean score for all adolescents who responded (*N* = 94,476) was 23.94 (SD = 5.38).

Adolescents' average mental wellbeing scores differed by gender and family affluence, with females and those from lower family affluence families reporting lower scores. There was also a slight decrease in scores with increasing year group (Figure 3.10). Females had lower wellbeing scores than males and this difference was more apparent among older year groups (Figure 3.12).

There was a small degree of variation in wellbeing scores across different ethnic groups (Figure 3.11). There was no variation in wellbeing scores across LHBs, although across LHBs females consistently had slightly lower scores (Table 3.3).

Young people's voice

Fourteen percent of adolescents strongly agreed with the statement '*adults usually listen to the views of children and young people before making decisions that affect them*' compared to 12% of adolescents who strongly disagreed with the statement (Figure 3.13).

Males were slightly more likely than females to agree or strongly agree with the statement, although the difference was small. Adolescents from low and medium family affluence levels were less likely to agree or strongly agree with the statement. There was a stark decline with age in the proportion who agreed or strongly agreed with the statement (Figure 3.14). There were differences between year groups by gender, however, with females more likely to agree or strongly agree with the statement in year 7 but less likely to agree or strongly agree by year 11 (Figure 3.16).

The proportion of adolescents who agreed or strongly agreed with the statement ranged widely from 33% among those from White Gypsy/Traveller backgrounds to 54% of those from Indian backgrounds (Figure 3.15).

At the LHB level the proportion of adolescents who agreed or strongly agreed with the statement ranged from 47% in Abertawe Bro Morgannwg and Cardiff and Vale to 52% in Powys. There were small differences by gender in the proportion who agreed, with fewer females generally agreeing with the statement (Table 3.4).

Summer holiday loneliness

Students were asked how often they felt lonely during the most recent summer holidays. The majority (42%) stated that they never felt lonely, compared to 7% who were always lonely (Figure 3.17).

The proportion of adolescents who never or rarely felt lonely during the summer holidays differed by gender and family affluence, with females and those from lower family affluence more likely to feel lonely. Never or rarely feeling lonely declined with age, from 76% in year 7 to 60% by year 11 (Figure 3.18).

Again, the proportion of adolescents who never or rarely felt lonely during the summer holidays ranged widely from 73% among those of Indian backgrounds to 59% of those from White Irish backgrounds (Figure 3.19).

There was very little difference in the proportion of adolescents who never or rarely got lonely during the summer holidays across the LHBs, ranging from 68% in Aneurin Bevan to 71% in Cardiff and Vale, however females were consistently lonelier (Table 3.5).

Health complaints

Health complaints are common during adolescence and include psychological (e.g. irritability, nervousness and feeling low) as well as physical symptoms, such as aches (head, stomach and back) and dizziness. Adolescents were asked to report on health complaints that occurred more than once a week in the last six months. Nearly one third of pupils (31%) reported irritability or sleep issues, compared to 10% reporting stomach aches (Figure 3.21). More than half (62%) of adolescents reporting having less than two health complaints occurring more than once a week in the last six months (Figure 3.22).

There were large family affluence differences, with those from lower family affluence categories more likely to report two or more health complaints in the last 6 months (Figure 3.23). Results showed increases with age in the proportion of adolescents with two or more health complaints, from 30% in year 7 to 47% in year 11 (Figure 3.23). Females were more likely than males to have two or more health complaints in all years, but this difference was particularly striking among older year groups (Figure 3.25).

There was large variation by ethnic background from 26% of adolescents with an Indian background reporting two or more health complaints through to 62% of those with White Gypsy/traveller backgrounds (Figure 3.24). There was also some variation across the LHBs, ranging from 35% in Cardiff and Vale to 40% in Aneurin Bevan, with females consistently reporting two or more health complaints more often than males (Table 3.6).

Long-term illness or disability

Nearly 1 in 5 adolescents (19%) reported having a long-term illness or disability diagnosed by a doctor (Figure 3.26). There were no differences on the basis of gender and family affluence differences were small (Figure 3.27). Results showed small, inconsistent gender differences across year groups (Figure 3.29).

There were very small age-related differences, with 20% of adolescents reporting a disability in year 7 and 18% in year 11 (Figure 3.27). There was some variation in the proportion of adolescents with a long-term illness or disability by ethnic group, ranging from 17% of adolescents from an African background to 32% of adolescents from a White Gypsy/traveller background (Figure 3.28). In terms of LHB, results showed only small differences which ranged from 17% in Powys to 20% in Abertawe Bro Morgannwg (Table 3.7).

Long-term illness or disability affecting school attendance and participation

Of those who reported a long-term illness or disability, there were differences on the impact it had on school attendance and participation. Results showed that 38% of affected females reported it impacting on their school attendance and/or participation compared with 32% of males (Figure 3.31), but the size and direction of this difference differed by year group (Figure 3.33).

There was an increase with age, with 31% of year 7 students with a long-term illness or disability reporting an impact on school compared to 42% by year 11. There were differences too by family affluence, with a disability or long-term illness impacting on school attendance and participation more for adolescents from the lowest family affluence category (Figure 3.31). There was some variation by ethnic group, ranging from 28% of adolescents with a Chinese background to 53% of adolescents from a White Gypsy/traveller background reporting a long-term illness or disability affecting school participation and/or attendance (Figure 3.32). In terms of LHB, results showed only small differences which ranged from 34% in Cwm Taf and Hywel Dda to 37% in Powys, with females consistently more likely to report an impact on school than males (Table 3.8).

Medically attended injuries

More than half of adolescents (55%) reported no injuries where they had to be treated by a doctor or nurse in the past 12 months (Figure 3.34). Half of males had been injured compared to 40% of females (Figure 3.35) and this gender gap was consistent across the year groups (Figure 3.37). There were only small age differences in injuries and the pattern was inconsistent (Figure 3.35). Adolescents from low and medium family affluence levels were less likely to have had an injury which needed treatment compared to those in the highest family affluence category (Figure 3.35).

The proportion of adolescents who needed treatment for an injury ranged widely from 33% among adolescents with an Indian background to 60% of those from White Gypsy/traveller backgrounds (Figure 3.36).

At the LHB level, results showed differences ranging from 42% of adolescents in Betsi Cadwaladr through to 49% in Powys who needed treatment for an injury, with females consistently less likely to report injuries which needed treatment than males (Table 3.9).

Sleeping habits

Adolescents reported usual school night bedtimes ranging from before 9pm through to 2am or later (Figure 3.38). Usual school night bedtimes differed by gender and family affluence, with more males (26% compared to 23% of females) and those from lower family affluence families reporting usually going to bed after 11pm. There were also increases in usual school night bedtime after 11pm with increasing year group, from 9% of year 7 students through to 42% of year 11 students (Figure 3.39). As noted, males were more likely than females to report going to bed after 11pm on a typical school night, however these differences widened with age (Figure 3.41).

Nearly half of adolescents (48%) from White Gypsy/traveller backgrounds reported going to bed after 11pm on school nights, whilst those from White British and Indian backgrounds were least likely to report this (20% and 24% respectively) (Figure 3.40).

There was some variation in school night bedtimes by LHB (Table 3.10). Adolescents living in Betsi Cadwaladr were most likely to go to bed after 11pm on a typical weekday (27%) and those in Powys the least likely (20%). The difference between males and females varied across all health boards, with females consistently reporting earlier school night bedtimes.

Night-time screen use and social media

Night-time screen use

Adolescents reported the latest time they looked at an electronic screen before going to sleep on a school night, which similar to bedtime ranged from before 9pm through to 2am or later (Figure 3.42). Similar to bedtimes, latest screen use differed by gender and family affluence, with more males (33% compared to 28% of females) and those from lower family affluence categories reporting latest use after 11pm. There were also increases in latest screen use after 11pm with increasing year group, from 15% of year 7 students through to nearly half (46%) of year 11 students (Figure 3.43). Males were again more likely than females to report latest screen use after 11pm on a typical school night and these differences were more apparent with increasing age (Figure 3.45).

Similar to bedtime, over half of adolescents (55%) from White Gypsy/traveller backgrounds reported latest screen use after 11pm, whilst those from White British and Indian backgrounds were least likely to report this (30% and 23% respectively) (Figure 3.44).

There was some variation in reported latest screen use by LHB (Table 3.11). Adolescents living in Betsi Cadwaladr were most likely to last look at a screen after 11pm on a typical school night (33%), compared to those in Powys LHB who were the least likely (24%). The difference between males and females again varied across all health boards, with females consistently less likely to report last using a screen after 11pm.

Problematic Social Media Use

The short (9-item) version of the Social Media Disorder scale was included in the survey in order to measure the prevalence of problematic social media use[27]. Scores ranged from 0 to 9 (Figure 3.46) and the mean score for all adolescents who responded (*N* = 19,237) was 2.25 (SD = 2.51). In accordance with the cut-off point for Internet Gaming Disorder in the DSM-5, at least five or more (out of nine) criteria must be met (including at least one of three problem areas), to be classified as meeting the threshold for 'problematic user of social media'.

The percentage of those classified as 'problematic social media users' differed by gender, with more females classified as problematic than males (20% compared to 15%). There was a general increase in problematic users with increasing year group (Figure 3.47), although this decreased again from year 10 to year 11. Of note, there were differences between year groups by gender, with females less likely to be classified as problematic users in year 7, but more likely to be in all other year groups (Figure 3.49). There were no differences across family affluence categories (Figure 3.47).

There was some variation across different ethnic groups. Those from Indian backgrounds were least likely to be classified as problematic users (15%) and those from White Gypsy/Traveller backgrounds the most likely (38%) (Figure 3.48). There was also some variation across all LHBs, ranging from 15% in Powys to 20% in Cwm Taf, although across LHBs percentages were consistently higher in females (Table 3.12).

Physical activity, time spent sedentary and weight

Physical activity

The Chief Medical Officer for Wales recommends that all children and young people should engage in moderate to vigorous intensity physical activity for at least 60 minutes and up to several hours every day[28]. The number of days adolescents were physically active for at least 60 minutes in the past 7 days ranged from 5% who were active for 0 days through to 18% who were active for all seven days (Figure 3.50).

Physical activity differed across gender, age and family affluence. Nearly 1 in 4 males (23%) had been physically active for at least 60 minutes every day, compared to 14% of females (Figure 3.51) and this pattern was consistent across the year groups (Figure 3.53). There was a stark decline with age in the proportion who were physically active every day, with over a quarter (26%) physically active in year 7 compared to 12% in year 11. Adolescents from the highest family affluence levels were most likely to have been active for all seven days (Figure 3.51).

The proportion of adolescents who were active every day ranged widely from 15% among adolescents with a Chinese background to 29% of those from White Gypsy/traveller backgrounds (Figure 3.52).

At the LHB level, results showed small differences ranging from 17% in Aneurin Bevan through to 20% in Hywel Dda, with females consistently reporting much lower levels of physical activity every day than males (Table 3.13).

Active travel

Adolescents stated how they usually got to school. The majority (38%) used a bus, train, tram, underground or boat to get to school, closely followed by walking (33%) (Figure 3.54). Of those who walked or cycled to school, there were some differences by gender and family affluence.

There were small gender differences, with 36% of males travelling to school by walking or cycling compared to 32% of females (Figure 3.55) and this was consistent across the year groups (Figure 3.57). There were only small differences by age in transport to school and the pattern was inconsistent (Figure 3.55). Adolescents from low and medium family affluence levels were more likely to travel to school by walking or cycling (42% and 35% respectively), in comparison with those from a high affluence category (31%) (Figure 3.55).

There was a small degree of variation across different ethnic groups. Those from Pakistani, Indian and Arab backgrounds had the lowest percentage of active transport to school and those from White Other and Chinese backgrounds had the highest percentage (Figure 3.56).

At the LHB level, results showed large differences ranging from 23% in Hywel Dda to 42% in Cardiff & Vale, with females consistently reporting less active transport to school than males (Table 3.14).

Sedentary behaviour

Approximately 1 in 10 adolescents reported sitting for about 7 hours or more on weekdays (Figure 3.58). There were small gender differences, with 11% of males compared to 9% of females sitting for 7 or more hours a day (Figure 3.59) and these small differences were fairly consistent across year groups (Figure 3.61).

There was an increase with age in the proportion who reported sitting for about 7 hours or more on weekdays, doubling from 7% in year 7 to 14% by year 11. There was also an increase with family affluence levels, with adolescents from the lowest family affluence category more likely to report sitting for about 7 hours or more than adolescents from medium and high family affluence categories (Figure 3.59). There were also differences across ethnic groups. Adolescents from Indian and White British backgrounds had the lowest percentage of sitting for more than 7 hours a day and those from White Gypsy/traveller, Caribbean or black and Arab backgrounds had the highest percentage (Figure 3.60). At the LHB level, results showed small differences ranging from 8% of adolescents in Powys to 12% in Cwm Taf, with females consistently reporting slightly less time sitting than males (Table 3.15).

BMI

BMI (body mass index) is a measure of whether a person is a healthy weight for their height. Based on a person's height and weight calculation[c] the NHS categorizes people into being: underweight, healthy weight, overweight or obese. Just under one in five of adolescents were considered overweight or obese (Figure 3.62).

There were gender differences, with 19% of males and 15% of females considered overweight or obese (Figure 3.63), and this pattern was consistent across the year groups (Figure 3.65), with differences more apparent in years 7, 10 and 11. There were small differences by age, but more notable differences by family affluence, with one quarter of adolescents from the lowest family affluence level classified as being overweight or obese, compared with 15% of those from the highest family affluence category (Figure 3.63).

There were also large differences across ethnic groups, although small base sizes should be noted. Over a third of adolescents with Bangladeshi backgrounds were classified as overweight or obese (40%), compared with only 6% of those from Chinese backgrounds (Figure 3.64).

At the LHB level, results showed small differences ranging from 16% in Betsi Cadwaladr to 20% in Cwm Taf, with more males consistently classified as overweight or obese (Table 3.16).

Eating and drinking patterns

Breakfast (weekdays)

Over half of adolescents (52%) had breakfast every weekday, however approximately 1 in 5 (22%) never ate breakfast (Figure 3.66). There were stark differences by gender, age and family affluence levels. Some three-fifths of males (60%) ate breakfast every weekday, compared to 45% of females (Figure 3.67) and these differences were present across all year groups, but widened between years 7 and 9 (Figure 3.69). There were large age and family affluence differences, with the percentage of

[c] Weight in kilograms divided by height in metres squared

adolescents eating breakfast every weekday reducing with age and increasing with family affluence level (Figure 3.67).

There was a some variation across different ethnic groups. Those from Indian backgrounds had the highest percentage of eating breakfast every weekday (69%) compared to those from White Gypsy/traveller backgrounds who had the lowest proportion (36%) (Figure 3.68).

At the LHB level, results showed differences ranging from 49% of adolescents in Cwm Taf to 58% in Powys, with females consistently less likely to report eating breakfast every weekday (Table 3.17).

Fruit consumption

The amount of times adolescents usually ate fruit per week ranged from 5% who never ate fruit through to nearly 1 in 5 (19%) who ate fruit more than once a day (Figure 3.70).

Fruit consumption differed across gender, age and family affluence. One third of males (33%) ate fruit at least daily compared to 37% of females and this pattern of females being more likely to consume fruit daily than males was consistent across year groups (Figures 3.71 and 3.73). There was a stark decline with age in the proportion who consumed fruit daily, reducing from 41% in year 7 to 29% in year 11. Only a quarter (25%) of adolescents from the lowest family affluence levels ate fruit at least daily, compared with 41% of those from the highest family affluence levels (Figure 3.71).

The proportion of adolescents who consumed fruit at least daily ranged from 27% among adolescents with a White Gypsy/traveller background to 44% of those from Indian backgrounds (Figure 3.72). At the LHB level, results showed small differences ranging from 31% in Cwm Taf to 40% in Cardiff & Vale, with females consistently reporting more frequent fruit consumption than males (Table 3.18).

Vegetable consumption

The amount of times adolescents usually ate vegetables per week ranged from 6% who never consumed vegetables through to nearly 1 in 5 (19%) who ate vegetables more than once a day (Figure 3.74).

Vegetable consumption showed similar results to fruit consumption, with one third of males (33%) reporting that they ate vegetables at least daily compared to 39% of females (slightly more than fruit) and again this pattern was consistent across the year groups (Figures 3.75 and 3.77). In contrast to fruit consumption, there was a smaller decline in vegetable consumption with age, reducing from 37% in years 7 and 8 to 34% in years 10 and 11. Similar to fruit consumption, only a quarter (25%) of adolescents from the lowest family affluence levels consumed vegetables at least daily, compared with 42% of those from the highest family affluence levels (Figure 3.75).

The proportion of adolescents who consumed vegetables at least daily ranged from 28% among adolescents with Pakistani and Bangladeshi backgrounds to 50% of those from Chinese backgrounds (Figure 3.76).

At the LHB level, results again showed some differences ranging from 29% in Cwm Taf LHB to 43% in Powys, with females consistently more likely to report daily vegetable consumption than males (Table 3.19).

Eating sweets

The amount of times adolescents usually ate sweets per week ranged from 2% who never ate sweets to 11% who ate sweets more than once a day (Figure 3.78).

Very small differences were observed across genders and year groups (Figures 3.79 and 3.81). There was an increase in the proportion who ate sweets daily from year 7 (22%) to year 9 (25%), but this then plateaued. Only very small differences were seen across family affluence levels (Figure 3.79).

The proportion of adolescents who consumed sweets at least daily ranged from 19% among adolescents with a Chinese background to 41% of those from White Gypsy/traveller backgrounds (Figure 3.80).

At the LHB level, results showed small differences ranging from 19% in Powys LHB to 26% in Cwm Taf, with very similar rates of eating sweets at least daily across genders (Table 3.20).

Soft drinks containing sugar

The same proportion of adolescents (10%) never drank soft drinks or drank soft drinks more than once a day (Figure 3.82).

Differences were observed across genders, with males more likely to drink soft drinks at least daily (21%) compared to females (16%) and this pattern was consistent across the year groups (Figures 3.83 and 3.85). Results showed a small increase in age in the proportion who drank soft drinks at least daily from years 7 and 8 (17%) to years 9 to 11 (20%). There were large differences across family affluence levels, with nearly a quarter (24%) of adolescents from the lowest family affluence levels drinking soft drinks at least daily, compared with 20% of those from medium and 16% from high family affluence levels (Figure 3.83).

The proportion of adolescents who drank soft drinks at least daily ranged from 12% among adolescents with an Indian or Chinese background to 40% of those from White Gypsy/traveller backgrounds (Figure 3.84).

At the LHB level, results showed differences ranging from 13% in Powys to 24% in Cwm Taf, with females consistently less likely to drink soft drinks at least daily than males (Table 3.21).

Energy drinks

Almost two-thirds (60%) of adolescents never drank energy drinks, however 4% drank energy drinks more than once a day (Figure 3.86).

Of those who drank energy drinks at least daily, differences were observed across gender, age and family affluence. Males reported drinking energy drinks at least daily (7%) more frequently than females (4%) and this pattern was consistent across the year groups (Figures 3.87 and 3.89). There was very little variation in the proportion who drank energy drinks at least daily by year group. Only very small differences were seen across family affluence levels, with those from lower family affluence families more frequently reporting daily energy drink consumption (Figure 3.87).

There were small differences in the proportion of adolescents who drank energy drinks at least daily across most ethnic groups (5% to 14%), however 29% of those from White Gypsy/traveller backgrounds reported drinking energy drinks at least daily (Figure 3.88).

At the LHB level, results showed very small differences ranging from 4% of adolescents drinking energy drinks at least daily in Powys to 7% in Cwm Taf, with females consistently reporting less daily energy drink consumption than males (Table 3.22).

Oral hygiene

Brushing teeth

Nearly three-quarters (73%) of adolescents reported that they brushed their teeth more than once per day, whilst only 1% reported that they never brush their teeth (Figure 3.90).

Of those who reported brushing their teeth at least daily, small differences were observed across gender and family affluence. More females (98%) than males (95%) reported brushing their teeth at least daily (Figure 3.91), and this pattern of males reporting less daily teeth brushing was consistent across year groups (Figure 3.93). Results showed some differences across family affluence levels, with those from lower family affluence families reporting less daily teeth brushing (93%), compared to 96% of those from medium and 98% from high family affluence levels (Figure 3.91). There were inconsistent differences by year group, with no overall pattern (Figure 3.91).

There were some differences in the proportion of adolescents who cleaned their teeth daily across ethnic groups, ranging from 82% of those from White Gypsy/traveller backgrounds to 97% from White British or Arab backgrounds (Figure 3.92).

At the LHB level, results showed very small differences ranging from 95% of adolescents brushing their teeth daily in Hywel Dda to 97% in Cardiff & Vale, with females consistently reporting more daily teeth brushing than males (Table 3.23).

Volunteering

Volunteering

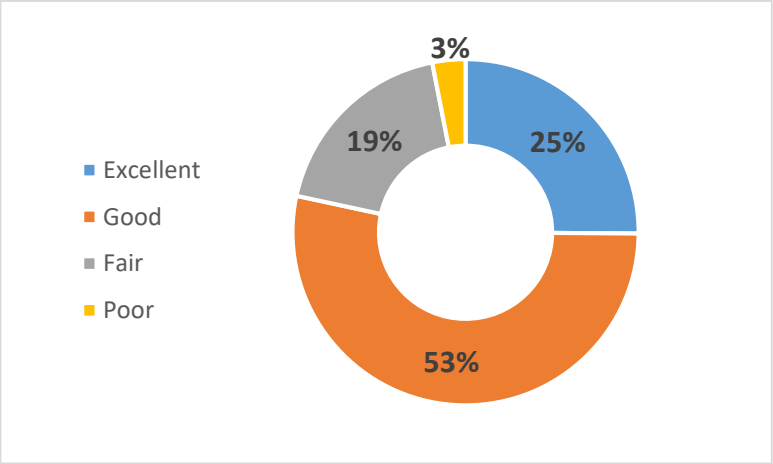
Over three-quarters (77%) of adolescents reported not doing any volunteering, with the majority of those who volunteered doing so outside school (Figure 3.94). Of those who volunteered there were only small gender differences, with males less likely to partake in volunteering than females (22% compared to 24%) and this difference became more noticeable from year 9 onwards (Figures 3.95 and 3.97). There were inconsistent age differences, with partaking in volunteering appearing to decrease from year 7 (26%) to year 9 (20%) but then increase again in years 10 and 11 (25% and 24% respectively) (Figure 3.95).

Results showed some differences across family affluence levels, with those from higher affluence families more likely to report volunteering (27%) than low (18%) or medium (20%) affluence families.

There were small differences in the proportion of adolescents who volunteered across ethnic groups, ranging from 20% of those from Bangladeshi backgrounds to 27% of those from White Irish backgrounds (Figure 3.96).

At the LHB level, results showed small differences ranging from 20% of adolescents partaking in volunteering in Cwm Taf to 26% in Powys. More females than males volunteered in all LHBs, except Cardiff & Vale, which had the same proportion of males and females (24%) volunteering, and Powys, where males were more likely to volunteer (Table 3.24).

Figure 3.1. Current health



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (28,477)

Figure 3.2. Percentage of students who rate their health as fair or poor by gender, year group and family affluence

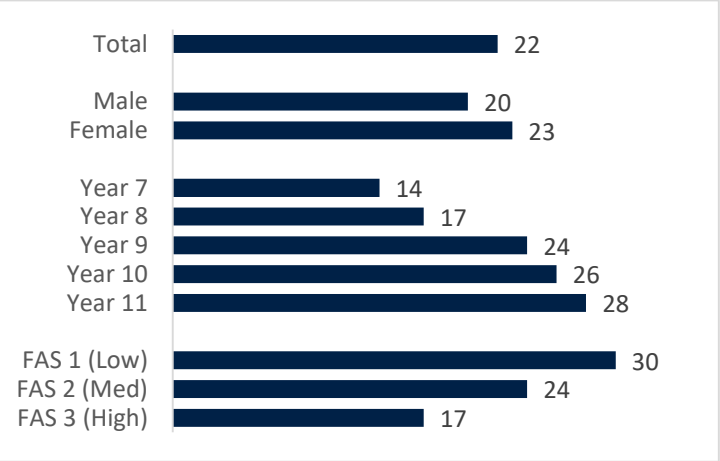


Figure 3.3. Percentage of students who rate their health as fair or poor by ethnic group

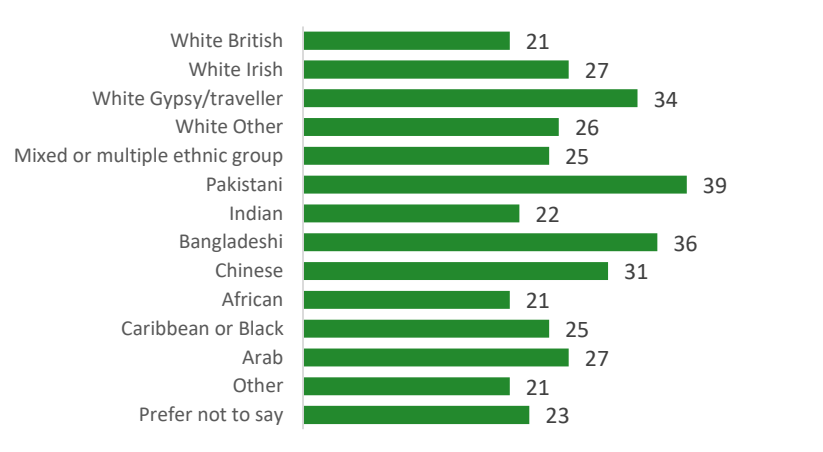


Figure 3.4. Percentage of students who rate their health as fair or poor by gender and year group

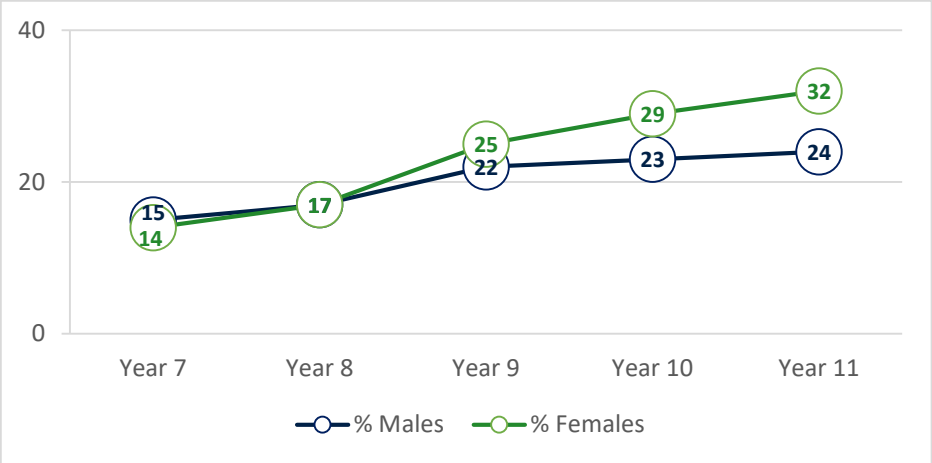


Table 3.1. Percentage of students who rate their health as fair or poor by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	21	20	22
Aneurin Bevan	23	20	24
Betsi Cadwaladr	23	21	24
Cardiff & Vale	21	18	22
Cwm Taf	21	21	20
Hywel Dda	21	20	21
Powys	19	17	20

Figure 3.5. Life satisfaction

Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (101,192)

Figure 3.6. Percentage of students who rated their life satisfaction as 6 or above by gender, year group and family affluence

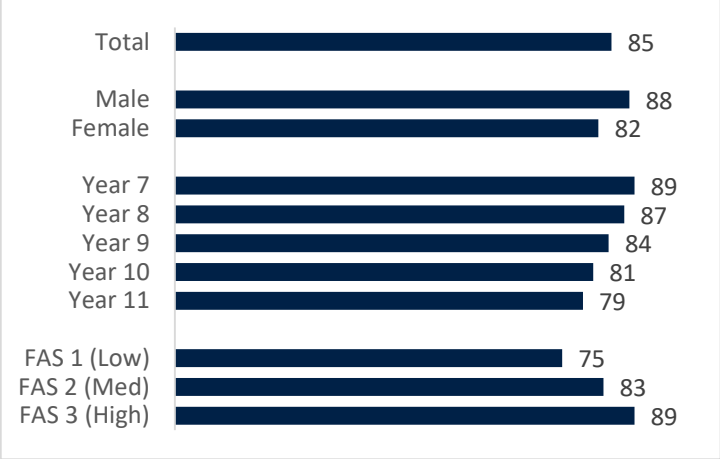


Figure 3.7. Percentage of students who rated their life satisfaction as 6 or above by ethnic group

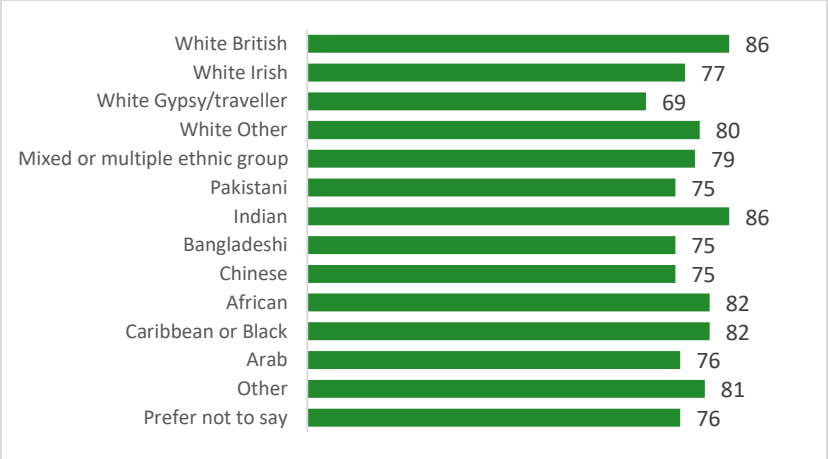


Figure 3.8. Percentage of students who rated their life satisfaction as 6 or above by gender and year group

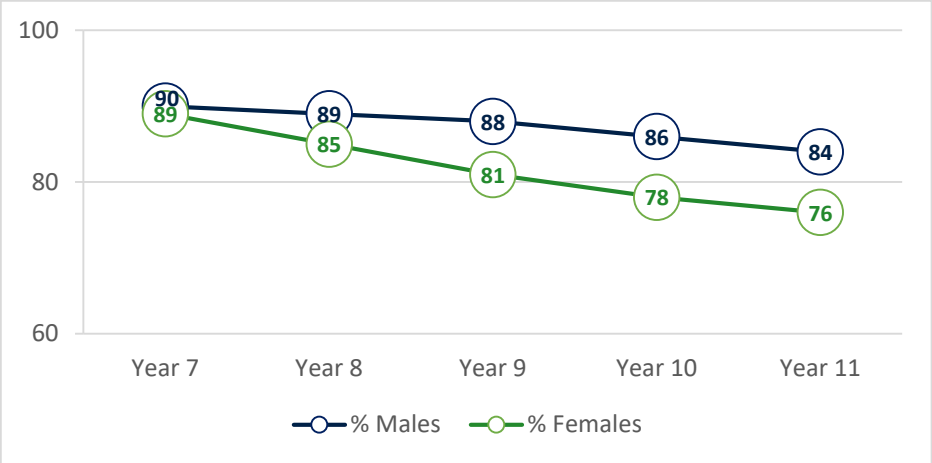
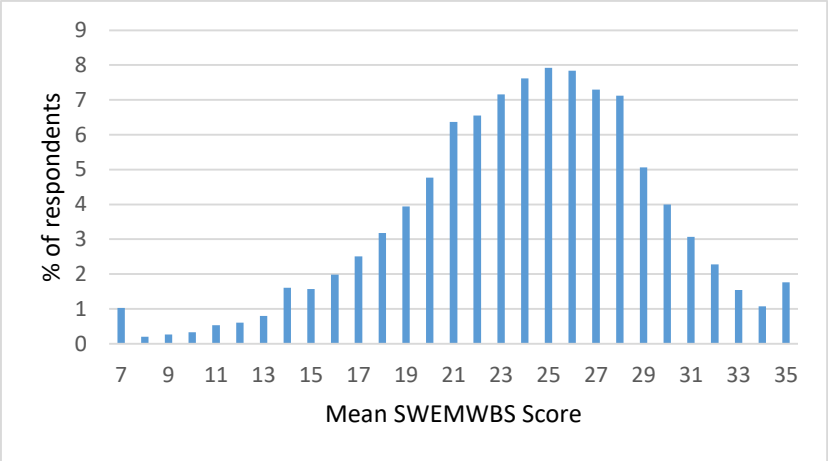


Table 3.2. Percentage of students who rated their life satisfaction as 6 or above by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	85	88	83
Aneurin Bevan	83	87	81
Betsi Cadwaladr	84	87	82
Cardiff & Vale	85	88	83
Cwm Taf	85	87	83
Hywel Dda	85	88	83
Powys	86	89	83

Figure 3.9. SWEMWBS Scores



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (94,476)

Figure 3.10. Mean SWEMWBS score by gender, year group and family affluence

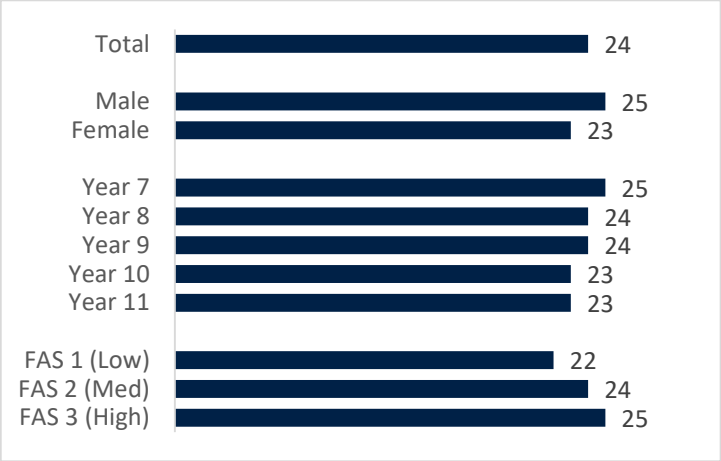


Figure 3.11. Mean SWEMWBS score by ethnic group

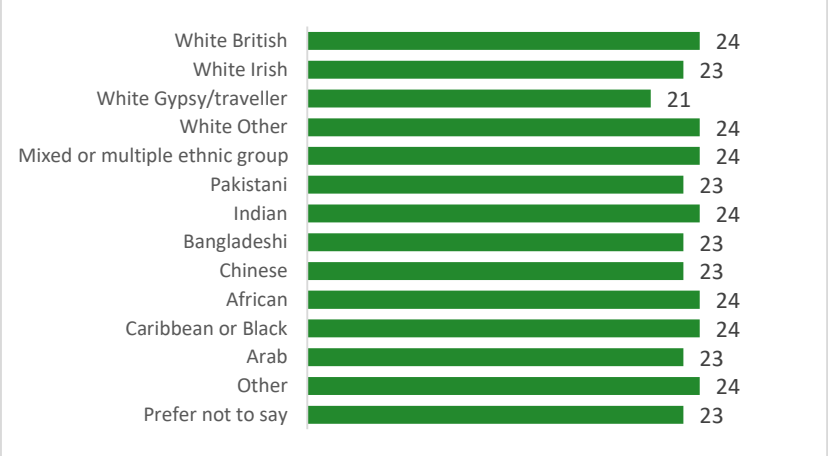


Figure 3.12. Mean SWEMWBS score by gender and year group

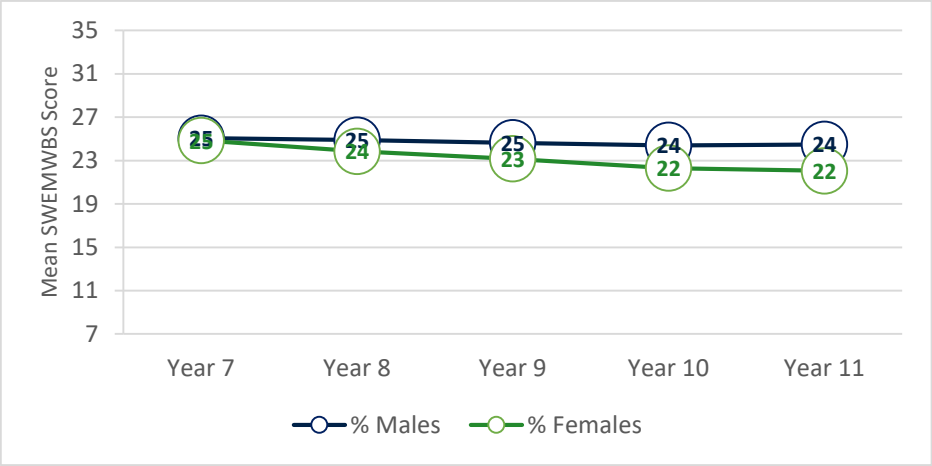
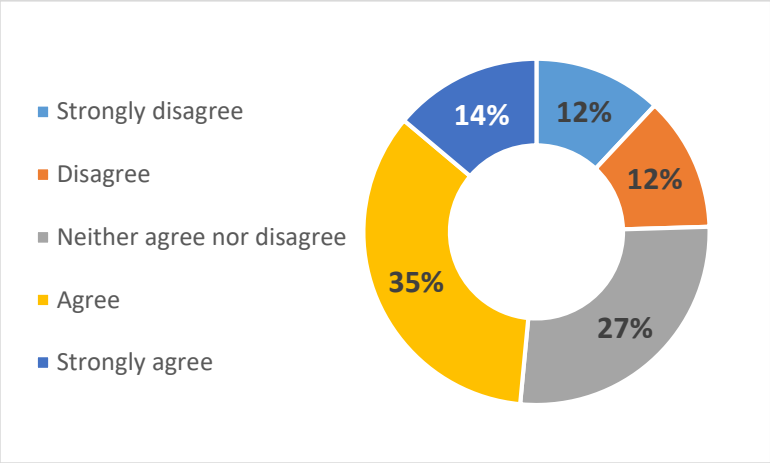


Table 3.3. Mean SWEMWBS score by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	24	25	23
Aneurin Bevan	24	25	23
Betsi Cadwaladr	24	25	23
Cardiff & Vale	24	25	24
Cwm Taf	24	24	23
Hywel Dda	24	25	23
Powys	24	25	23

Figure 3.13. Belief that adults usually listen to the views of children and young people before making decisions that affect them



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (29,039)

Figure 3.14. Percentage who agree that adults listen by gender, year group and family affluence

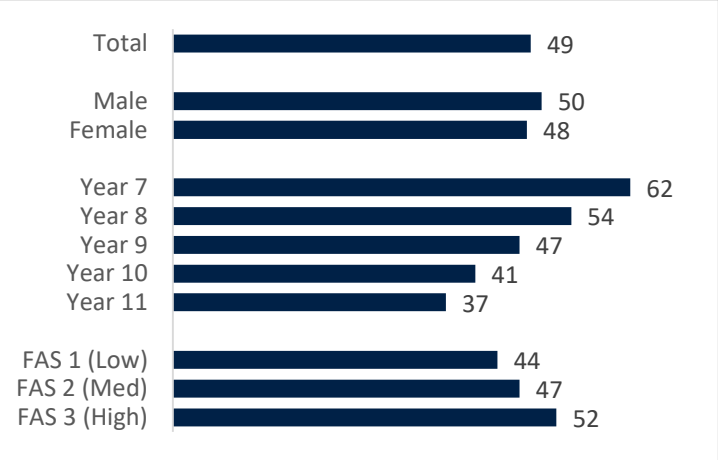


Figure 3.15. Percentage who agree that adults listen by ethnic group

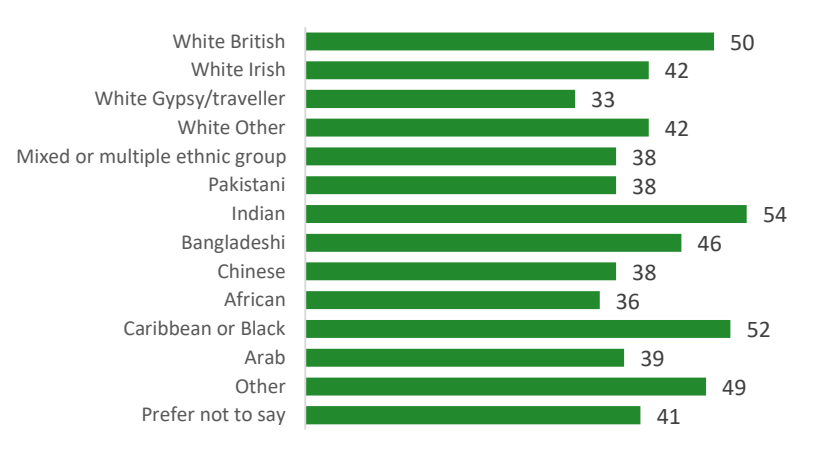


Figure 3.16. Percentage who agree that adults listen by gender and year group

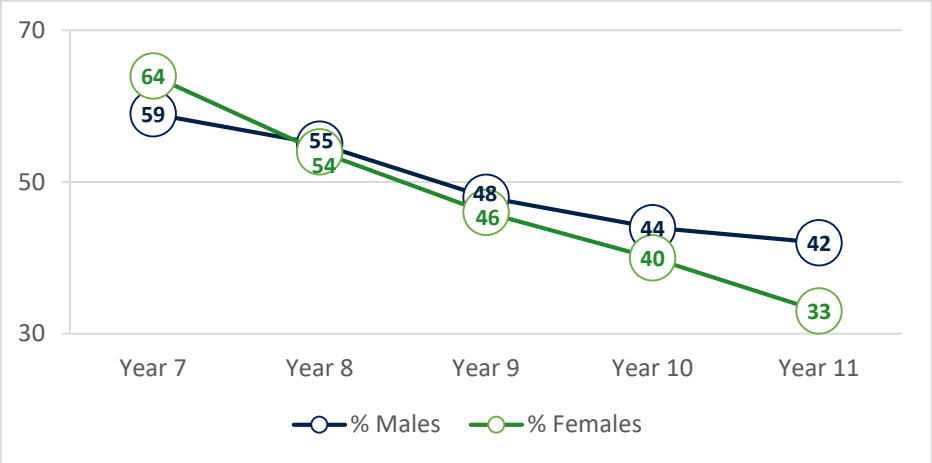
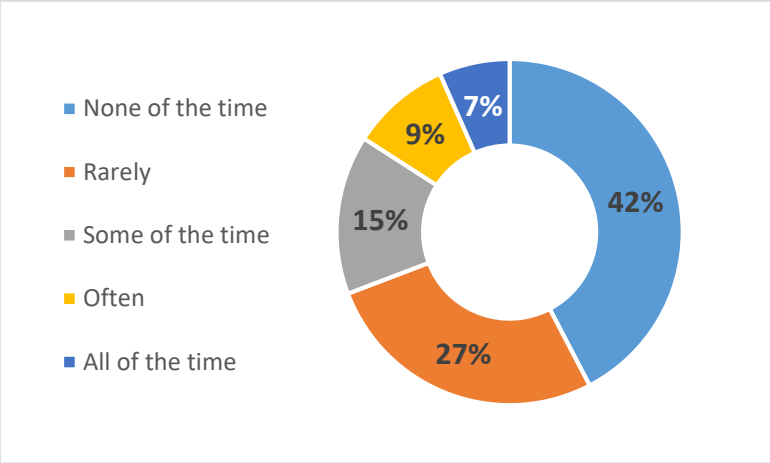


Table 3.4. Percentage who agree that adults listen by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	47	49	47
Aneurin Bevan	48	50	46
Betsi Cadwaladr	48	48	48
Cardiff & Vale	47	49	46
Cwm Taf	51	51	51
Hywel Dda	51	53	50
Powys	52	55	48

Figure 3.17. Frequency of loneliness during the last summer holidays



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (101,447)

Figure 3.18. Percentage who never or rarely felt lonely during the last summer holidays by gender, year group and family affluence

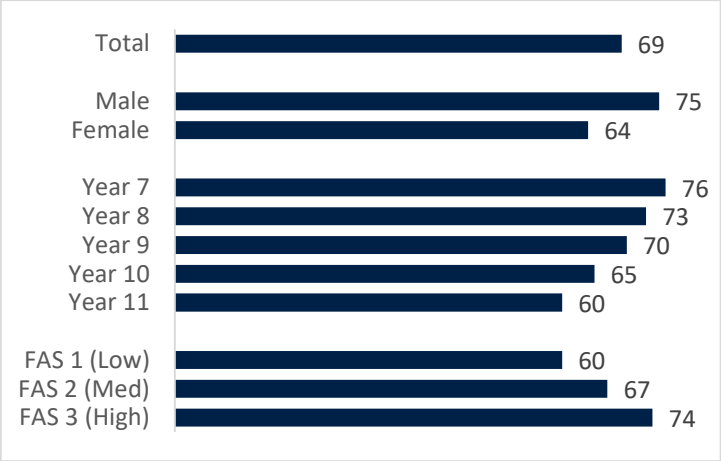


Figure 3.19. Percentage who never or rarely felt lonely during the last summer holidays by ethnic group

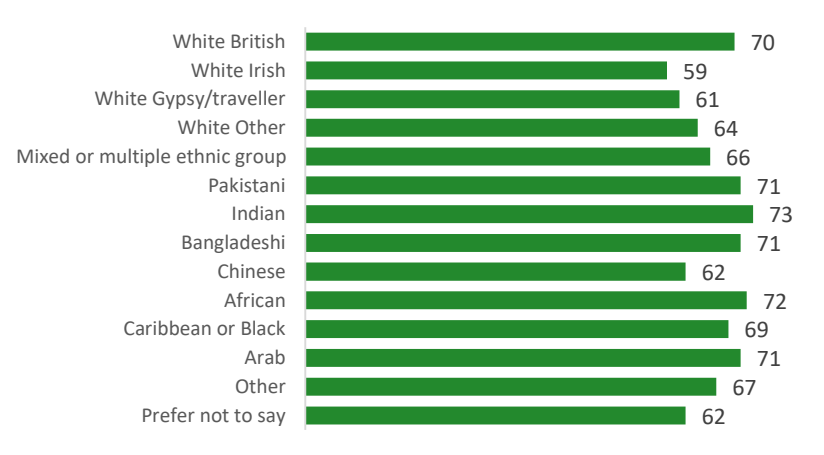


Figure 3.20. Percentage who never or rarely felt lonely during the last summer holidays by gender and year group

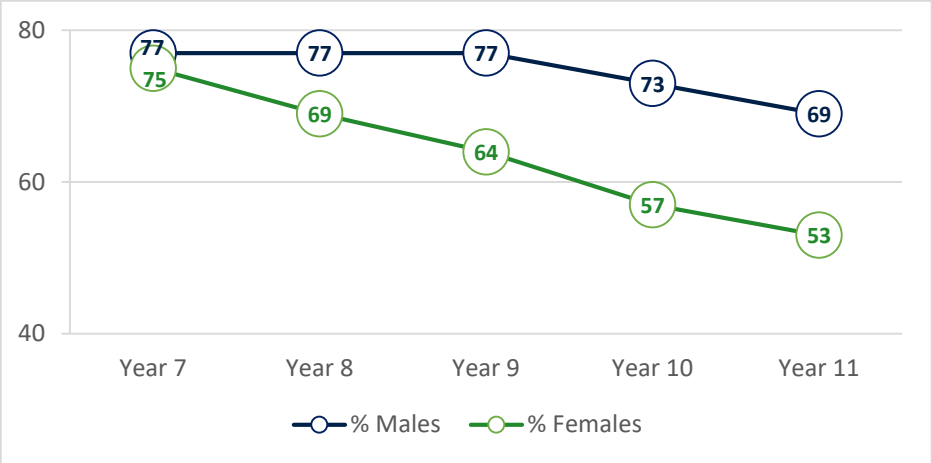
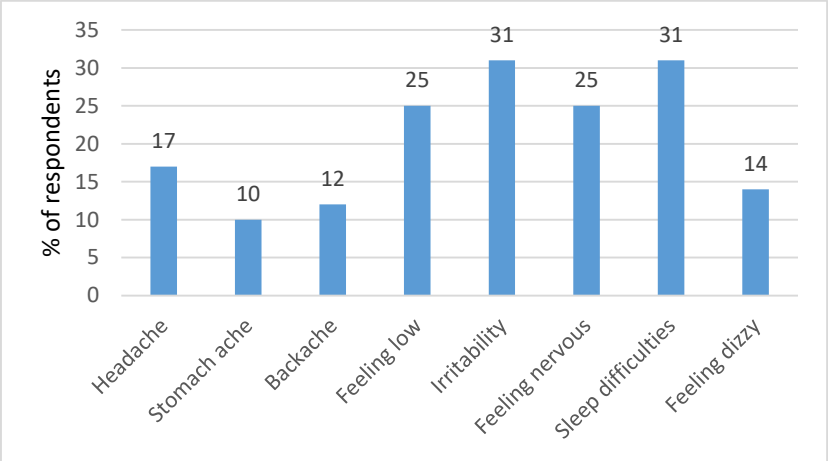


Table 3.5. Percentage who never or rarely felt lonely during the last summer holidays by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	69	75	63
Aneurin Bevan	68	74	62
Betsi Cadwaladr	69	75	64
Cardiff & Vale	71	77	66
Cwm Taf	70	74	66
Hywel Dda	70	76	65
Powys	70	74	66

Figure 3.21. Health complaints occurring more than once a week in the last 6 months



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (28,040 to 100,282 depending on health complaint; 26,497 for subsequent figures and table)

Figure 3.22. Percentage with two or more health complaints occurring more than once a week in the last six months

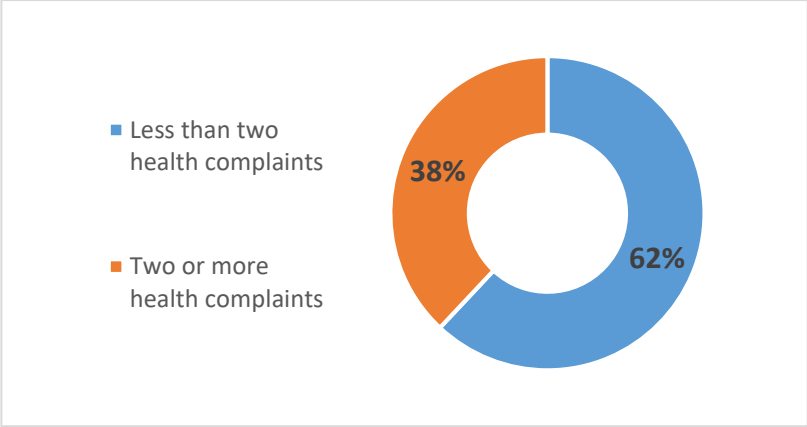


Figure 3.23. Percentage with two or more health complaints by gender, year group and family affluence

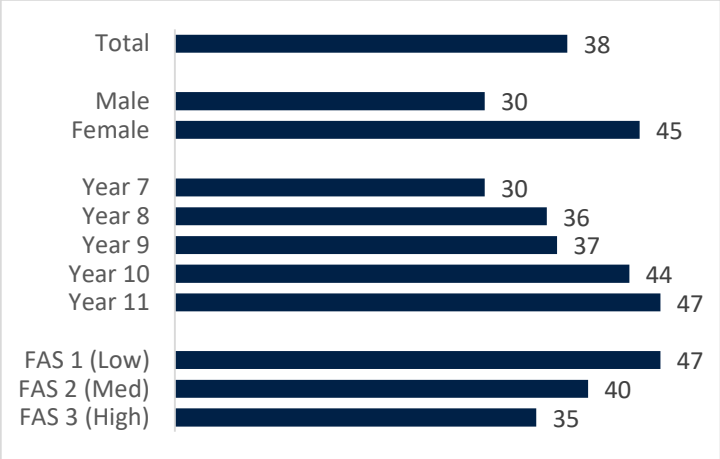


Figure 3.24. Percentage with two or more health complaints by ethnic group

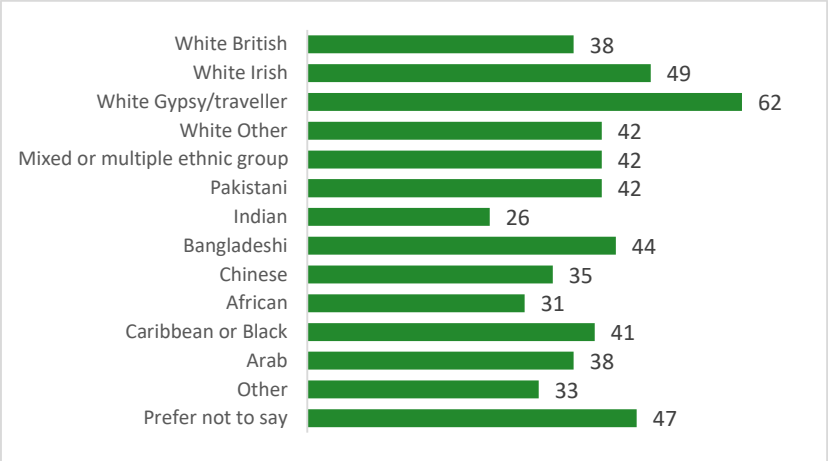


Figure 3.25. Percentage with two or more health complaints by gender and year group

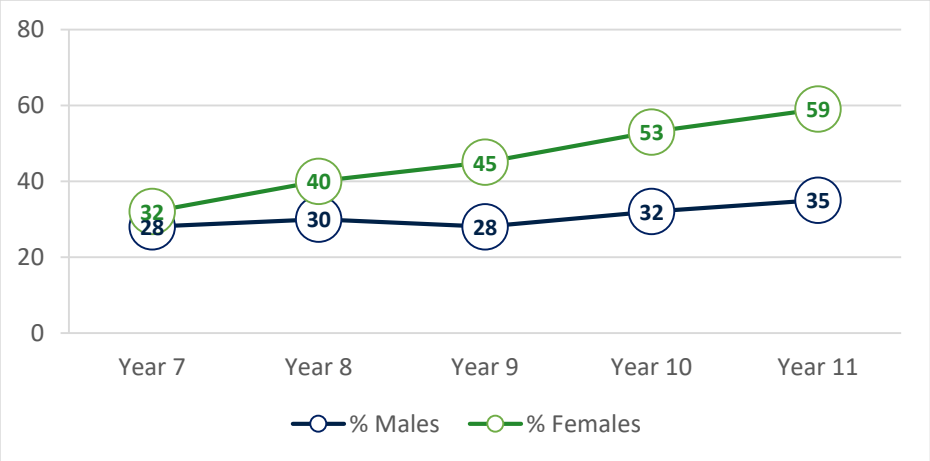
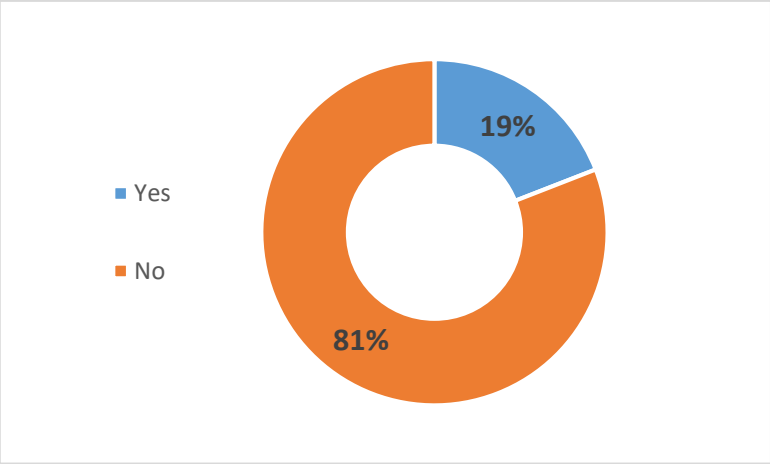


Table 3.6. Percentage with two or more health complaints by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	38	30	45
Aneurin Bevan	40	31	47
Betsi Cadwaladr	39	31	47
Cardiff & Vale	35	29	41
Cwm Taf	39	32	45
Hywel Dda	38	30	44
Powys	37	31	42

Figure 3.26. Long-term illness or disability diagnosed by a doctor



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (27,366)

Figure 3.27. Percentage with a long-term illness or disability by gender, year group and family affluence

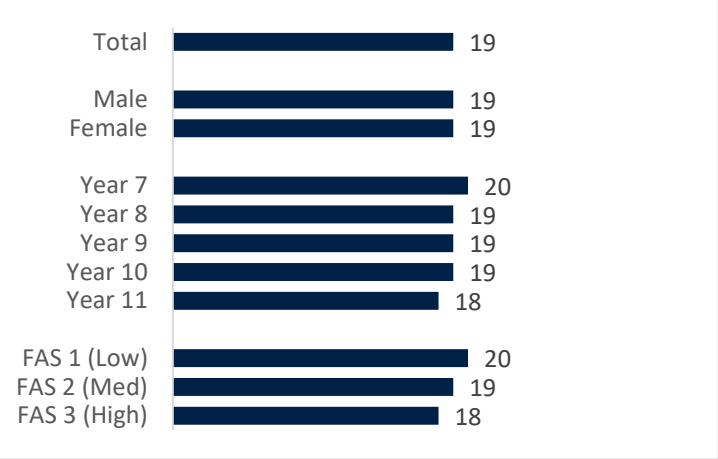


Figure 3.28. Percentage with a long-term illness or disability by ethnic group

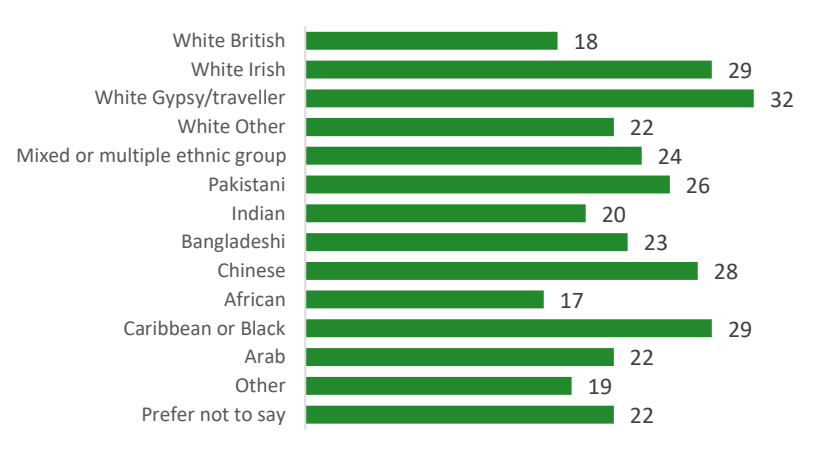


Figure 3.29. Percentage with a long-term illness or disability by gender and year group

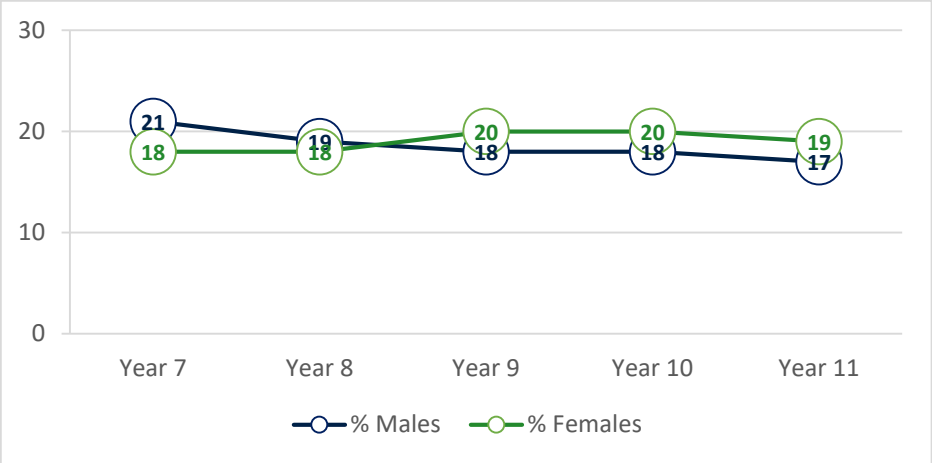
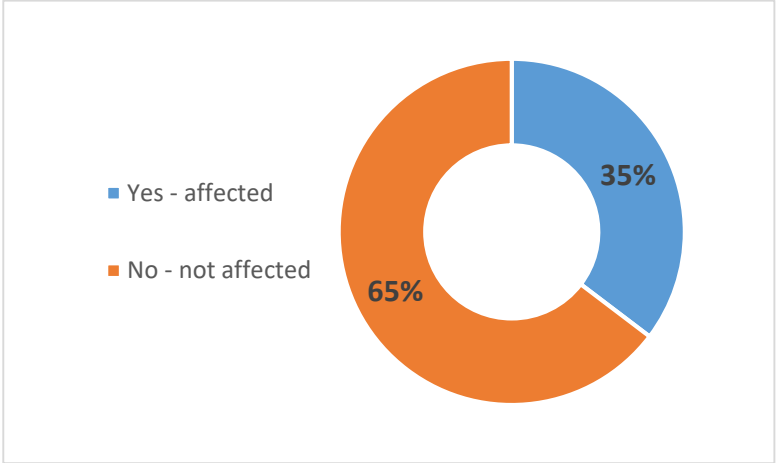


Table 3.7. Percentage with a long-term illness or disability by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	20	21	20
Aneurin Bevan	19	19	18
Betsi Cadwaladr	18	18	18
Cardiff & Vale	19	18	20
Cwm Taf	19	20	19
Hywel Dda	19	19	19
Powys	17	17	16

Figure 3.30. Percentage of those with a long-term illness or disability who reported that it affects their attendance and participation at school



Base: All respondents in years 7 to 11 who gave an answer and reported that they had a long-term illness or disability, surveyed between September and December 2017 (4,741)

Figure 3.31. Percentage of those with a long-term illness or disability who reported that it affects their attendance and participation at school by gender, year group and family affluence

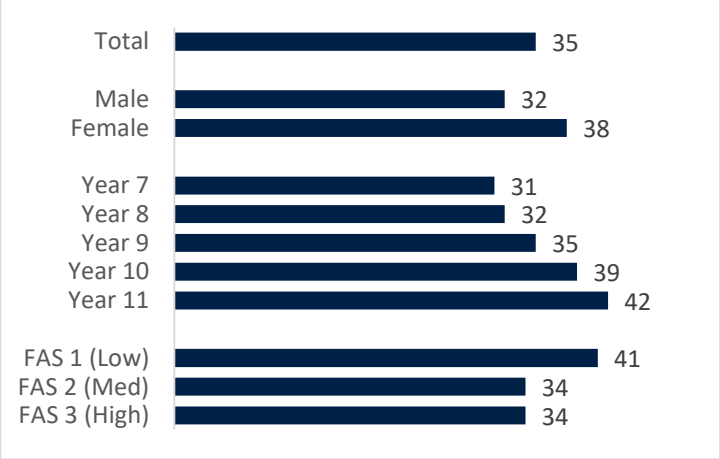
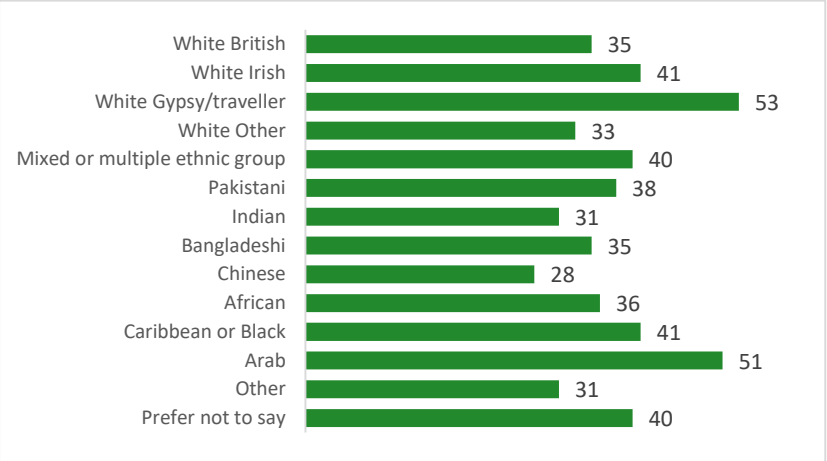


Figure 3.32. Percentage of those with a long-term illness or disability who reported that it affects their attendance and participation at school by ethnic group



Base sizes < 100 for White Irish, White Gypsy/traveller, Pakistani, Indian, Bangladeshi, Chinese, African, Caribbean or black, and Arab

Figure 3.33. Percentage of those with a long-term illness or disability who reported that it affects their attendance and participation at school by gender and year group

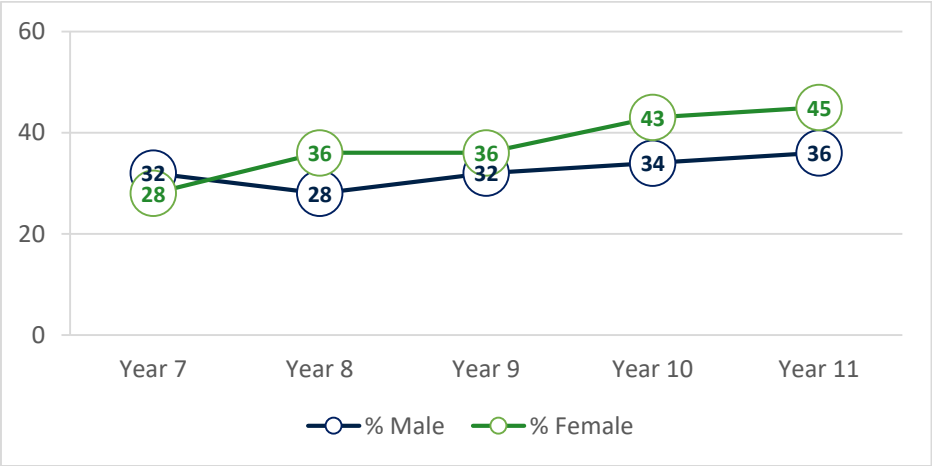
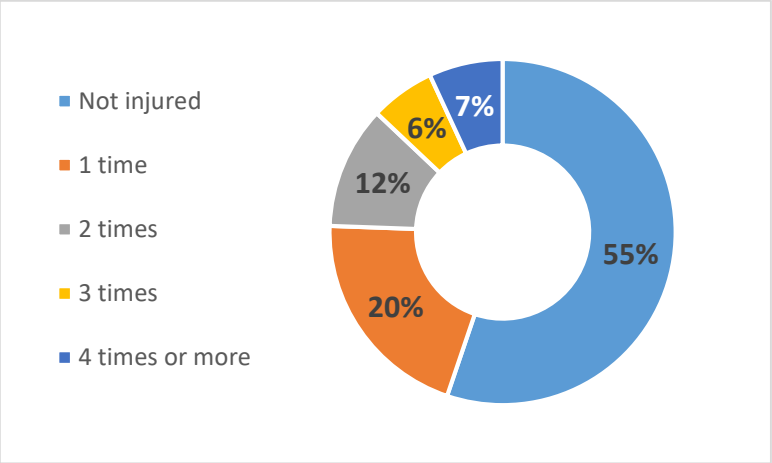


Table 3.8. Percentage of those with a long-term illness or disability who reported that it affects their attendance and participation at school by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	36	31	39
Aneurin Bevan	36	32	39
Betsi Cadwaladr	35	34	37
Cardiff & Vale	35	32	35
Cwm Taf	34	30	37
Hywel Dda	34	30	38
Powys*	37	35	***37***

* Base size for females in Powys < 100

Figure 3.34. Number of times injured in the last 12 months and had to be treated by a doctor or nurse



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (25,027)

Figure 3.35. Percentage who have been injured and needed treatment by gender, year group and family affluence

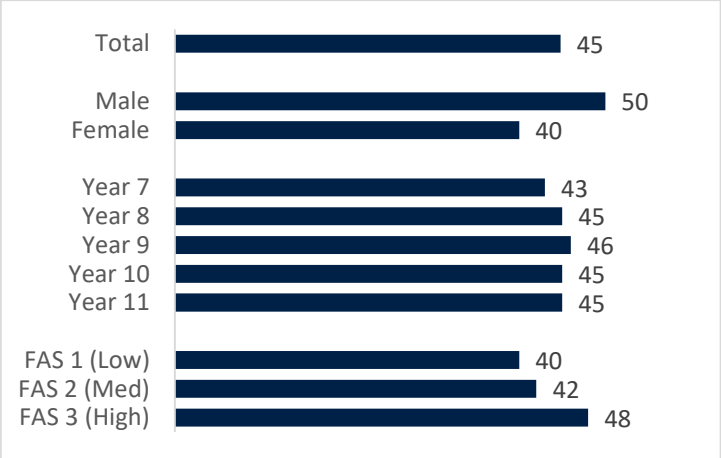


Figure 3.36. Percentage who have been injured and needed treatment by ethnic group

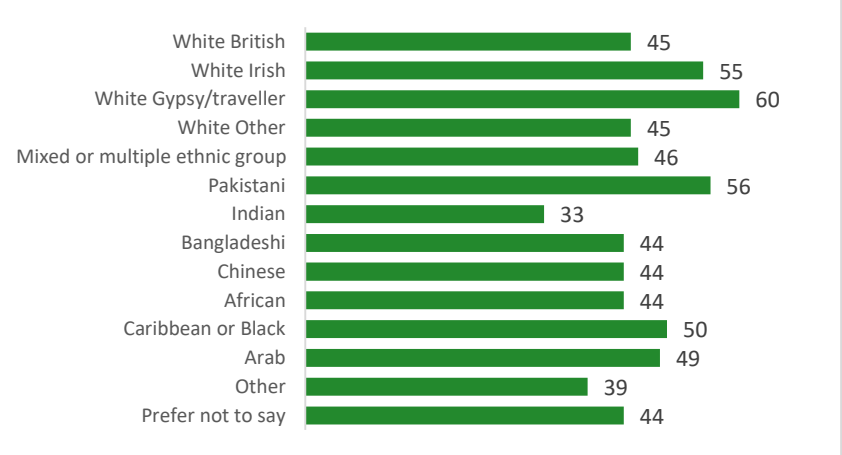


Figure 3.37. Percentage who have been injured and needed treatment by gender and year group

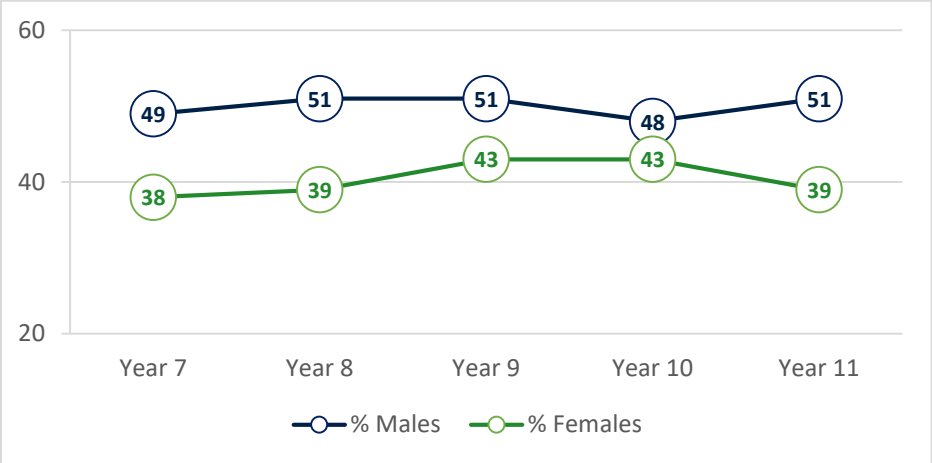
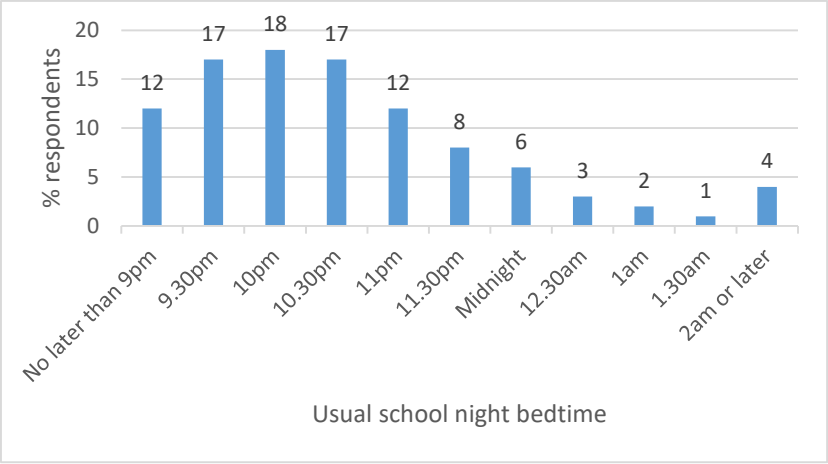


Table 3.9. Percentage who have been injured and needed treatment by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	45	50	39
Aneurin Bevan	46	53	41
Betsi Cadwaladr	42	46	38
Cardiff & Vale	45	53	38
Cwm Taf	44	46	41
Hywel Dda	46	49	42
Powys	49	53	44

Figure 3.38. Usual bedtime on a school night



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (85,615)

Figure 3.39. Percentage who go to bed after 11pm on a school night by gender, year group and family affluence

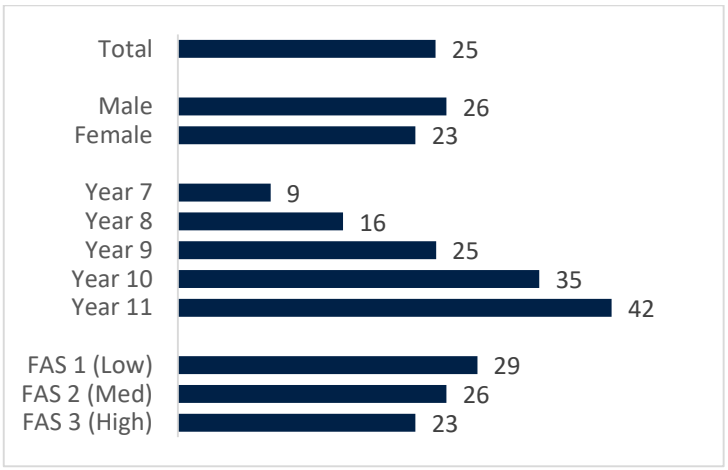


Figure 3.40. Percentage who go to bed after 11pm on a school night by ethnicity

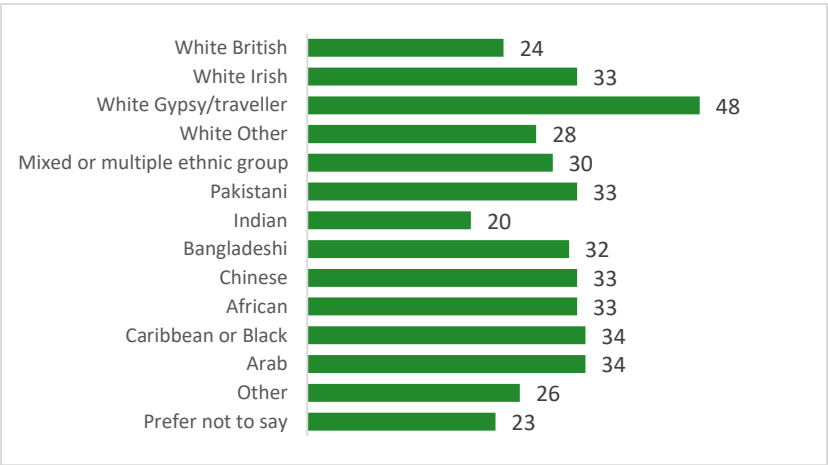


Figure 3.41. Percentage who go to bed after 11pm on a school night by gender and year group

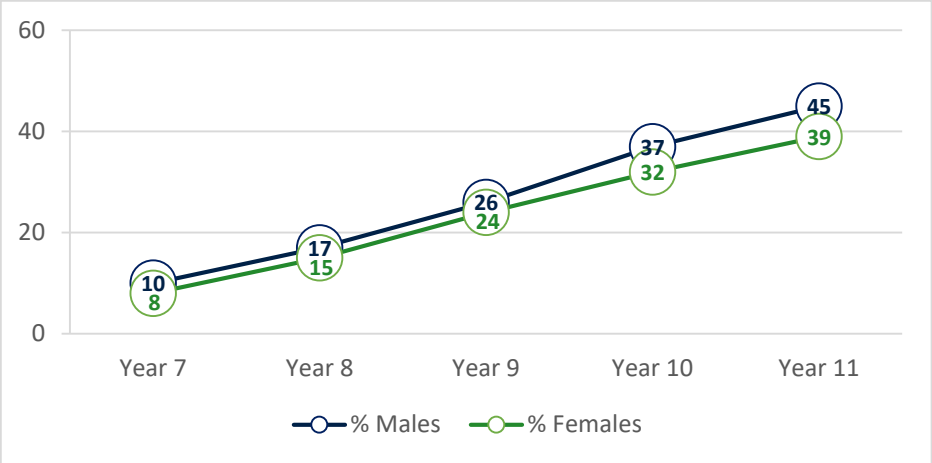
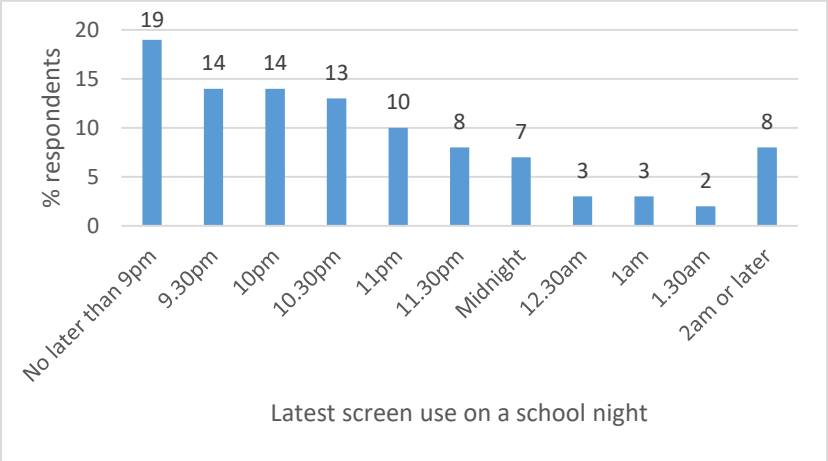


Table 3.10. Percentage who go to bed after 11pm on a school night by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	26	27	25
Aneurin Bevan	25	27	23
Betsi Cadwaladr	27	28	24
Cardiff & Vale	22	23	20
Cwm Taf	26	27	23
Hywel Dda	23	24	22
Powys	20	21	19

Figure 3.42. The latest time adolescents usually look at an electronic screen before going to sleep on a school night



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (84,717)

Figure 3.43. Percentage who last look at an electronic screen after 11pm on a school night by gender, year group and family affluence

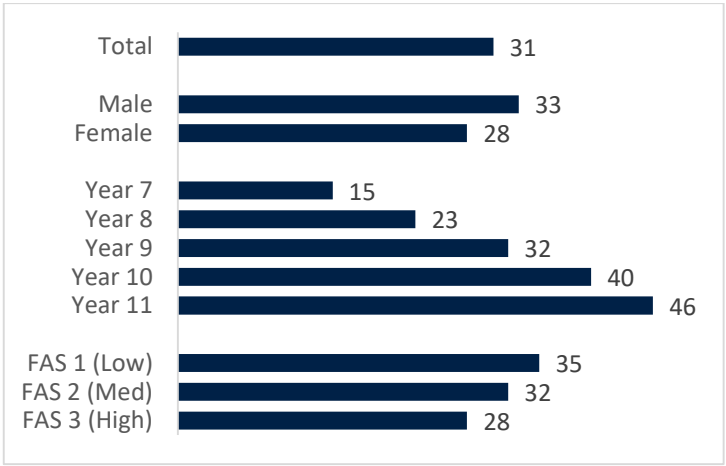


Figure 3.44. Percentage who last look at an electronic screen after 11pm on a school night by ethnic group

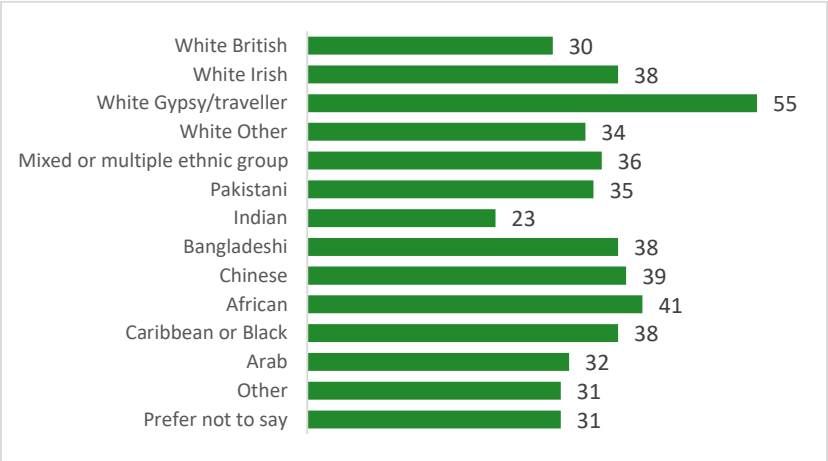


Figure 3.45. Percentage who last look at an electronic screen after 11pm on a school night by gender and year group

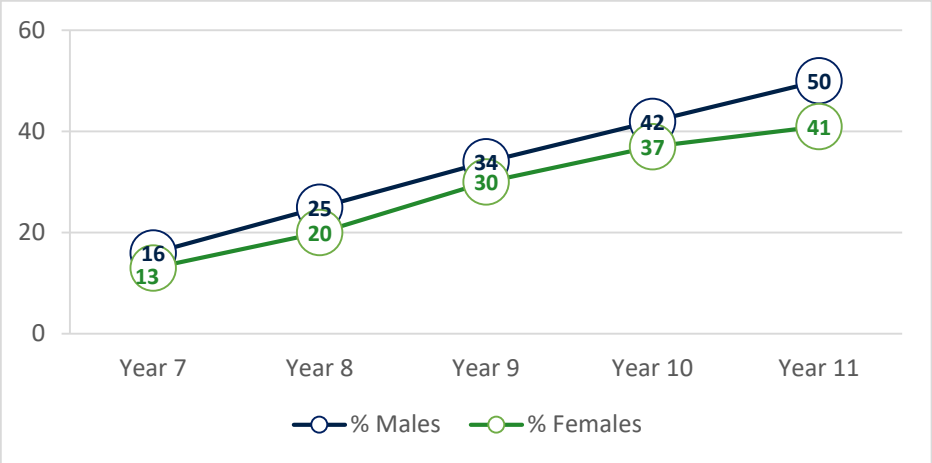
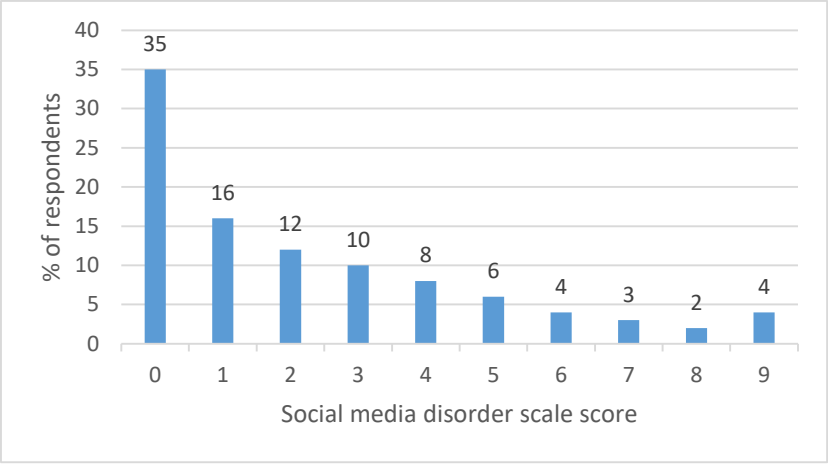


Table 3.11. Percentage who last look at an electronic screen after 11pm on a school night by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	32	34	30
Aneurin Bevan	31	33	28
Betsi Cadwaladr	33	35	29
Cardiff & Vale	27	29	24
Cwm Taf	31	33	29
Hywel Dda	30	31	27
Powys	24	25	23

Figure 3.46. Social Media Disorder scale scores



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (19,237)

Figure 3.47. Percentage classified as a problematic user of social media by gender, year group and family affluence

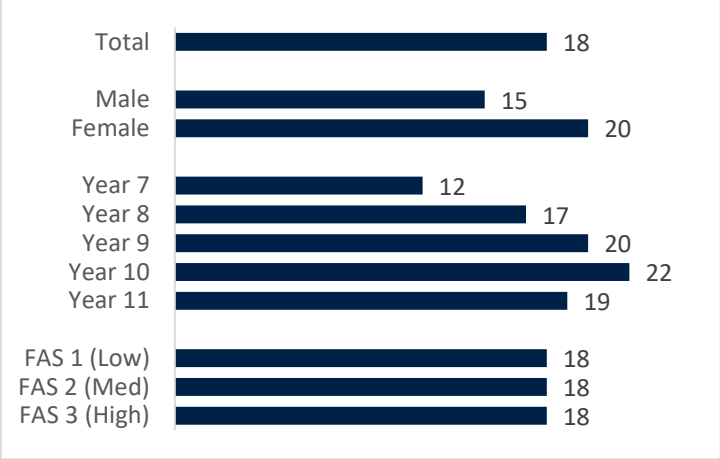


Figure 3.48. Percentage classified as a problematic user of social media by ethnic group

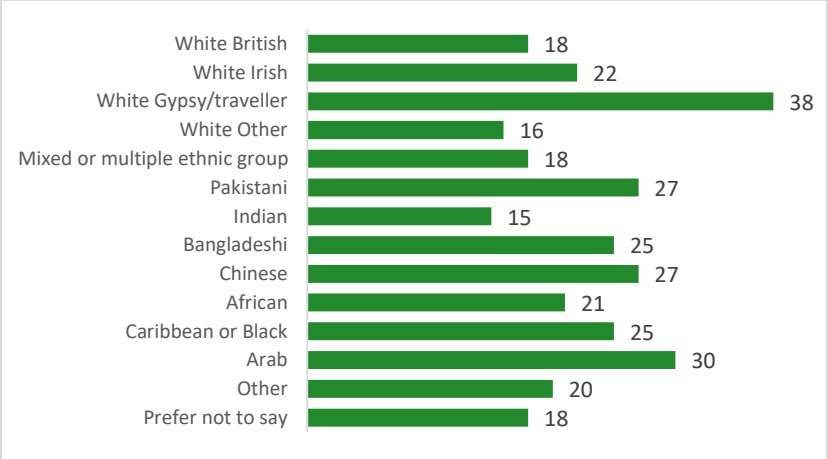


Figure 3.49. Percentage classified as a problematic user of social media by gender and year group

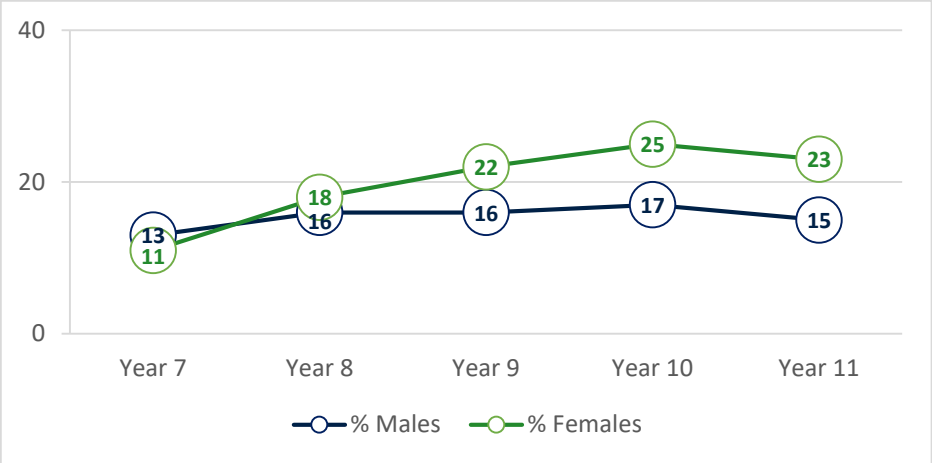
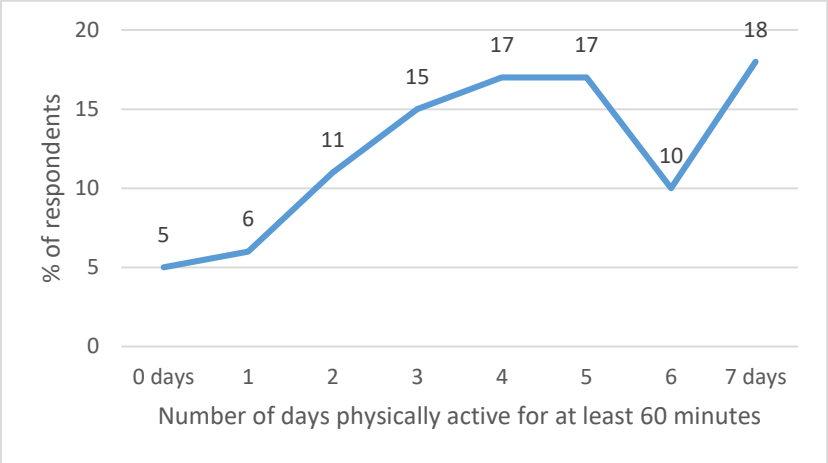


Table 3.12. Percentage classified as a problematic user of social media by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	18	15	21
Aneurin Bevan	19	17	21
Betsi Cadwaladr	19	16	21
Cardiff & Vale	16	13	17
Cwm Taf	20	19	22
Hywel Dda	16	13	19
Powys	15	15	15

Figure 3.50. Number of days physically active for at least 60 minutes in past 7 days



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (97,625)

Figure 3.51. Percentage who are physically active for at least 60 minutes per day by gender, year group and family affluence

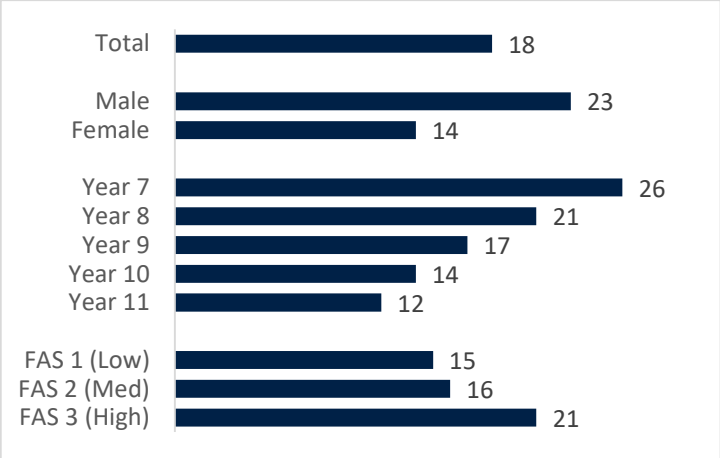


Figure 3.52. Percentage who are physically active for at least 60 minutes per day by ethnic group

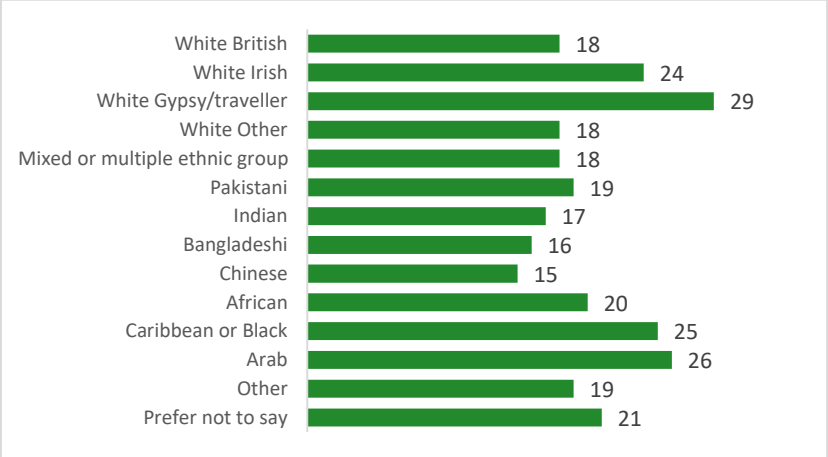


Figure 3.53. Percentage who are physically active for at least 60 minutes per day by gender and year group

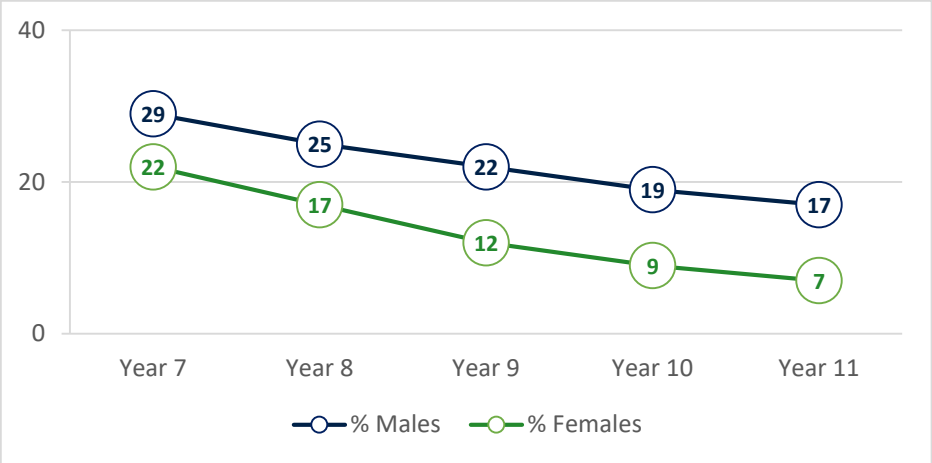
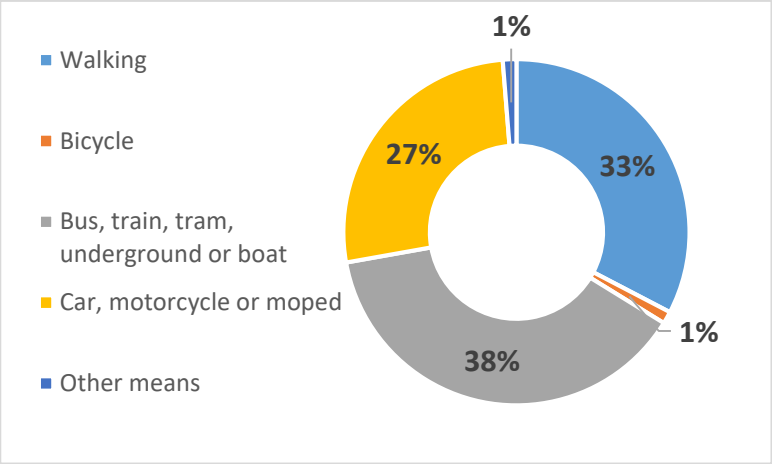


Table 3.13. Percentage who are physically active for at least 60 minutes per day by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	18	22	14
Aneurin Bevan	17	21	13
Betsi Cadwaladr	19	22	15
Cardiff & Vale	19	24	15
Cwm Taf	18	22	13
Hywel Dda	20	25	14
Powys	18	25	12

Figure 3.54. Mode of travel to school



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (102,886)

Figure 3.55. Percentage who travel to school by walking or cycling by gender, year group and family affluence

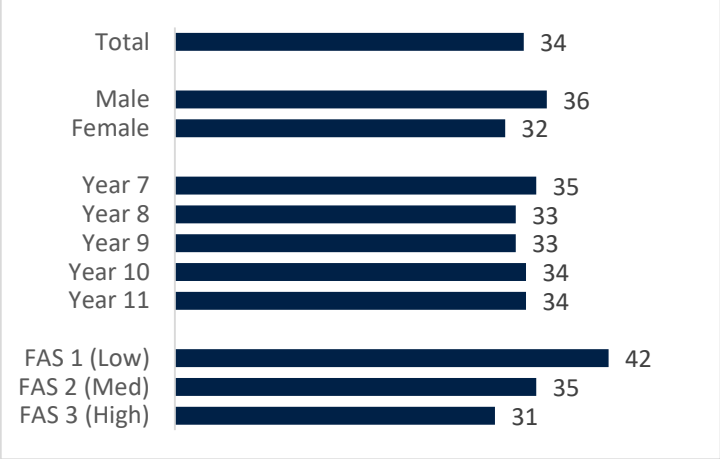


Figure 3.56. Percentage who travel to school by walking or cycling by ethnic group

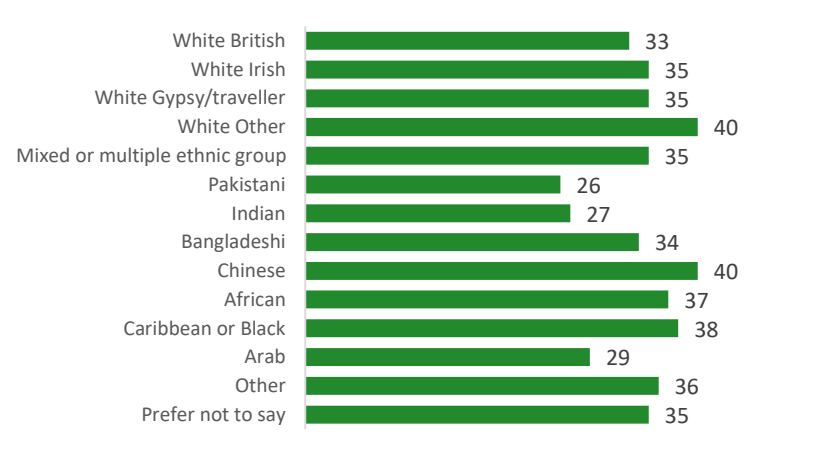


Figure 3.57. Percentage who travel to school by walking or cycling by gender and year group

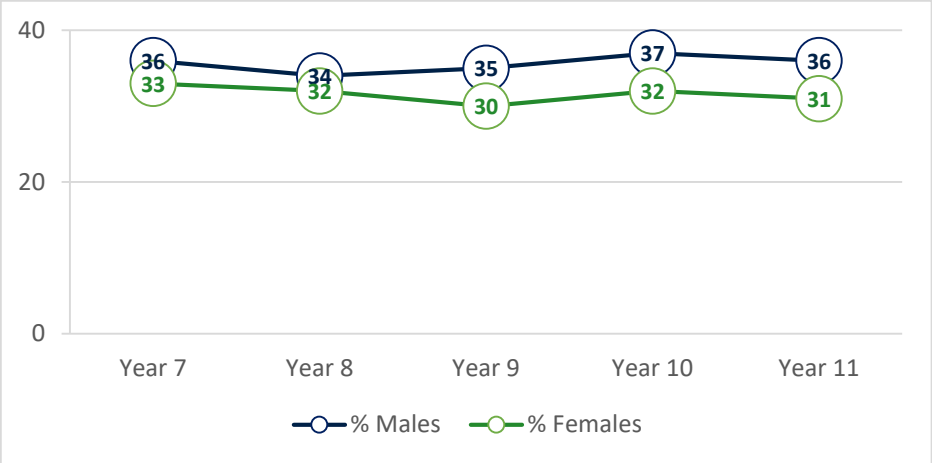
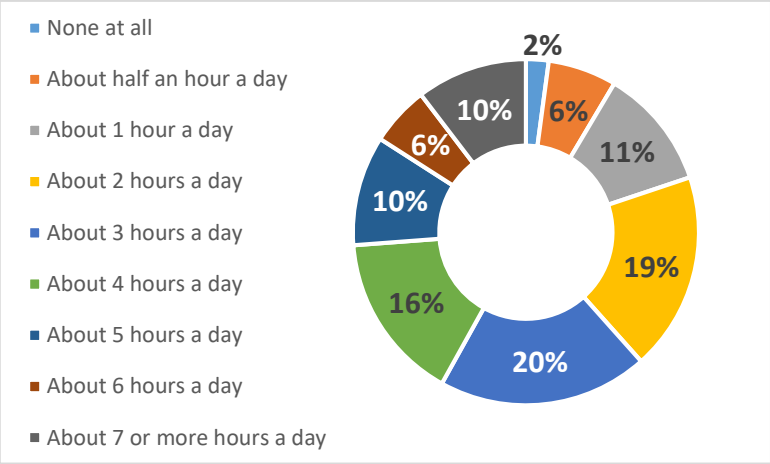


Table 3.14. Percentage who travel to school by walking or cycling by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	36	39	33
Aneurin Bevan	38	39	36
Betsi Cadwaladr	34	36	33
Cardiff & Vale	42	44	39
Cwm Taf	26	27	25
Hywel Dda	23	24	22
Powys	25	27	23

Figure 3.58. Time spent sitting in free time on weekdays



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (99,938)

Figure 3.59. Percentage sitting for 7 or more hours a day in their free time on weekdays by gender, year group and family affluence

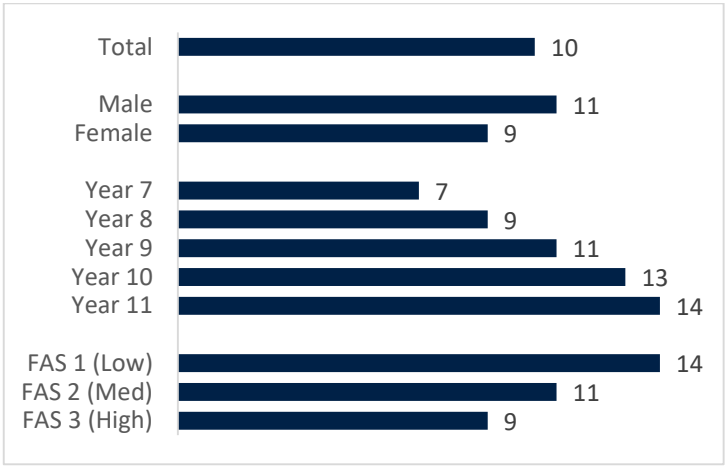


Figure 3.60. Percentage sitting for 7 or more hours a day in their free time on weekdays by ethnic group

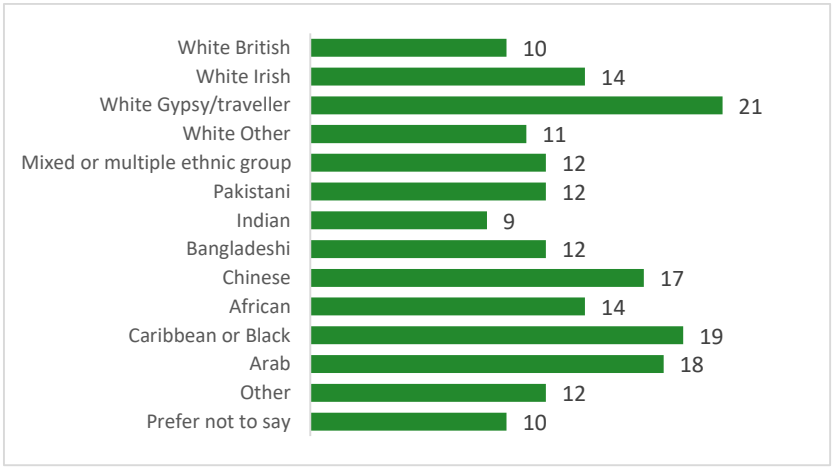


Figure 3.61. Percentage sitting for 7 or more hours a day in their free time on weekdays by gender and year group

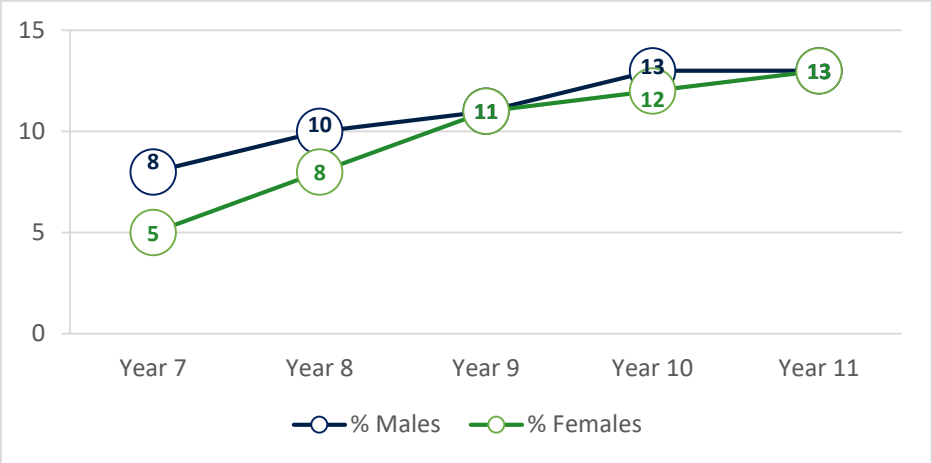
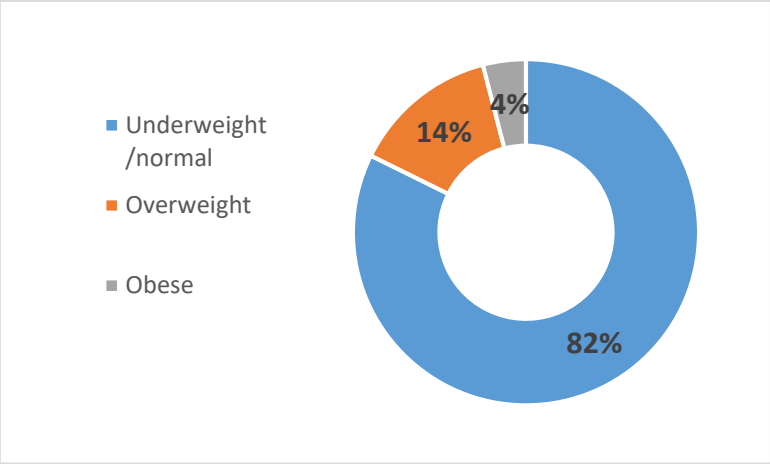


Table 3.15. Percentage sitting for 7 or more hours a day in their free time on weekdays by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	11	11	10
Aneurin Bevan	11	11	10
Betsi Cadwaladr	10	11	9
Cardiff & Vale	10	10	9
Cwm Taf	12	13	11
Hywel Dda	10	10	9
Powys	8	8	7

Figure 3.62. BMI categories



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (7,139). Please note that BMI data are calculated from self reported height/weight figures and from a smaller sample size owing to high levels of non-response so should be treated with some caution.

Figure 3.63. Percentage who are overweight or obese by gender, year group and family affluence

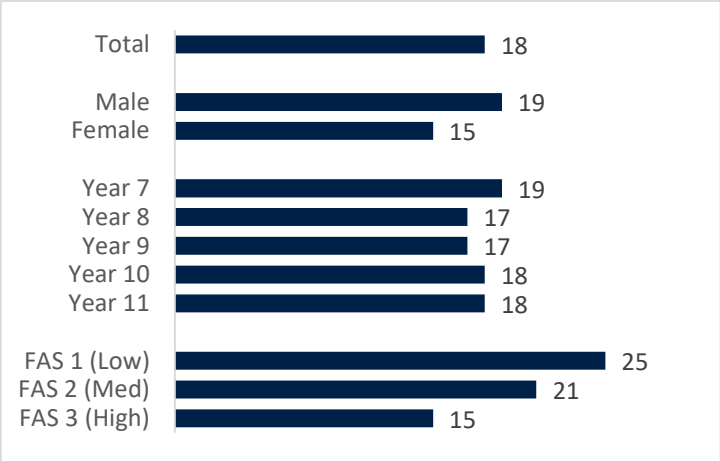
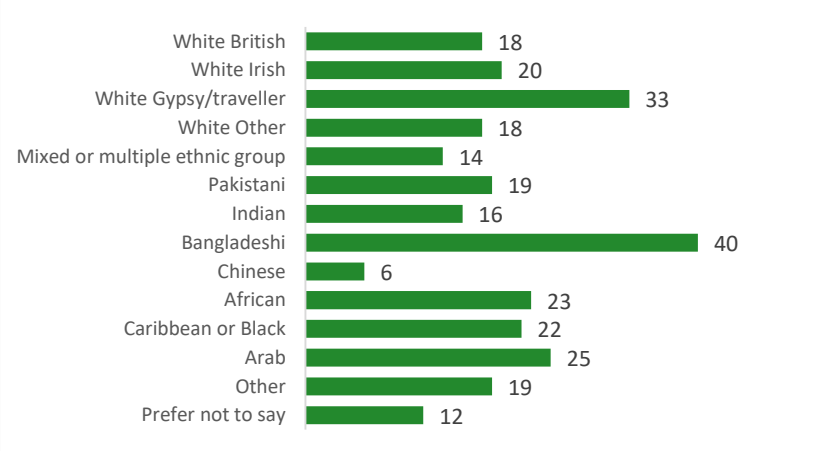


Figure 3.64. Percentage who are overweight or obese by ethnic group



* Base sizes for non-White British ethnicities = <100 to 260

Figure 3.65. Percentage who are overweight or obese by gender and year group

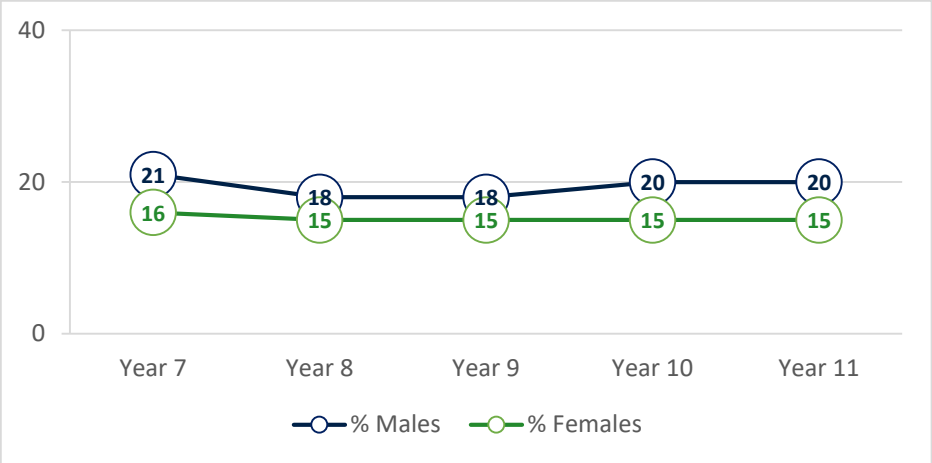
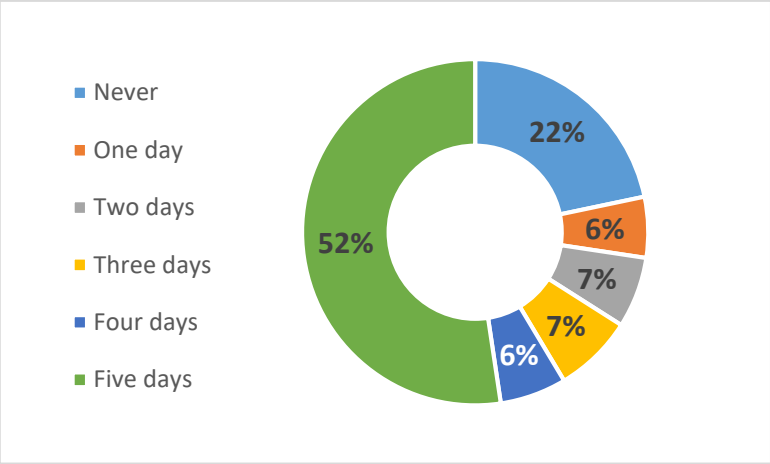


Table 3.16. Percentage who are overweight or obese by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	18	20	16
Aneurin Bevan	18	19	17
Betsi Cadwaladr	16	18	13
Cardiff & Vale	19	20	16
Cwm Taf	20	22	17
Hywel Dda	18	21	13
Powys	17	18	17

Figure 3.66. Breakfast consumption on weekdays



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (101,201)

Figure 3.67. Percentage who eat breakfast every weekday by gender, year group and family affluence

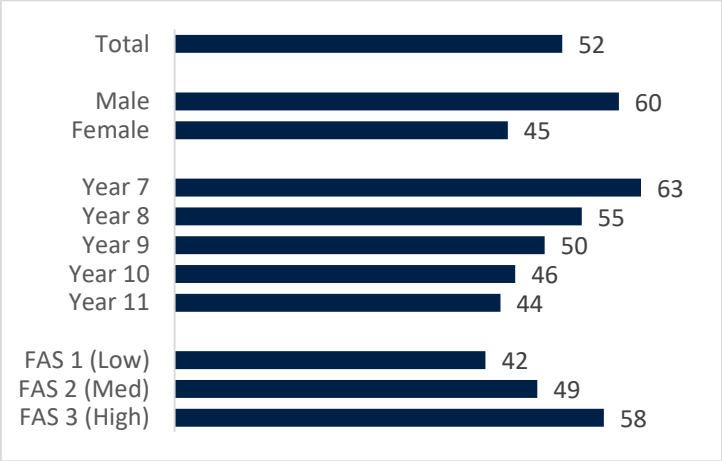


Figure 3.68. Percentage who eat breakfast every weekday by ethnic group

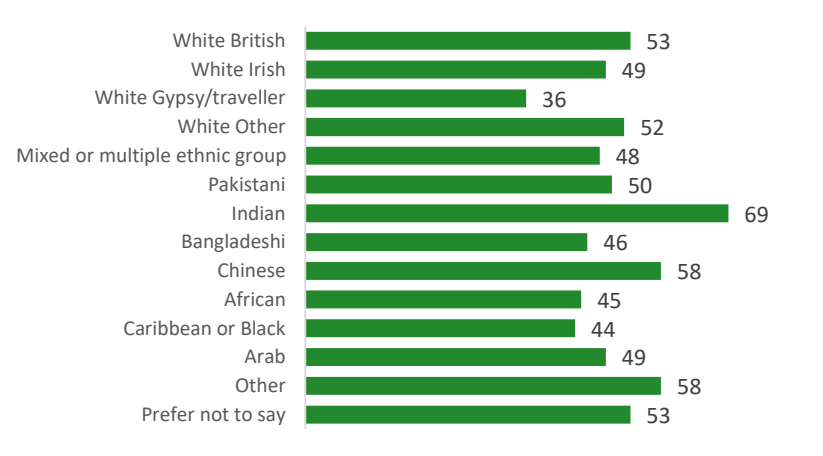


Figure 3.69. Percentage who eat breakfast every weekday by gender and year group

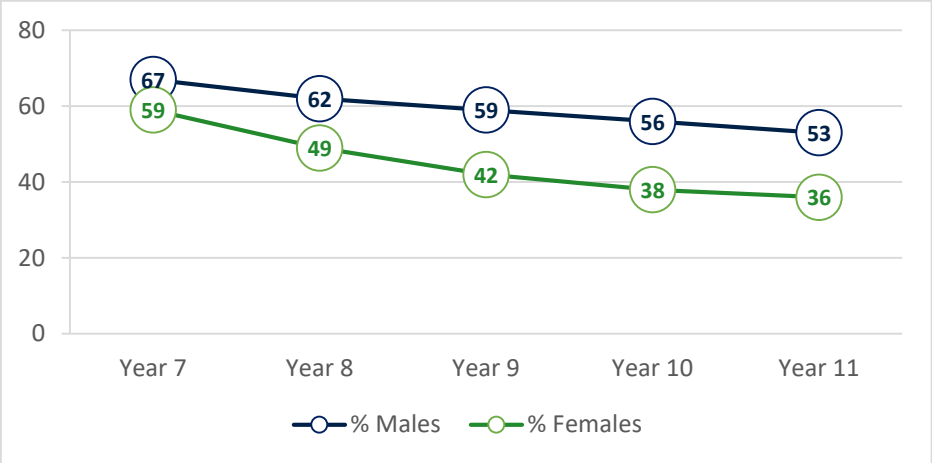
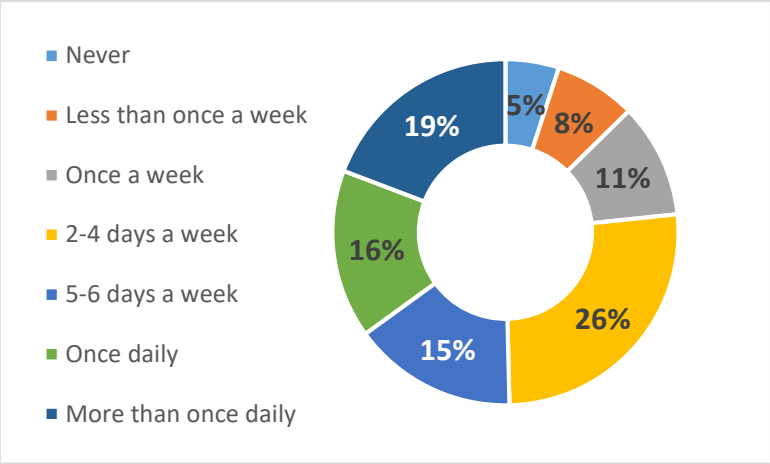


Table 3.17. Percentage who eat breakfast every weekday by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	51	59	44
Aneurin Bevan	51	58	44
Betsi Cadwaladr	53	59	46
Cardiff & Vale	54	61	48
Cwm Taf	49	57	42
Hywel Dda	55	62	47
Powys	58	66	51

Figure 3.70. Frequency of fruit consumption



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (102,091)

Figure 3.71. Percentage eating fruit at least daily by gender, year group and family affluence

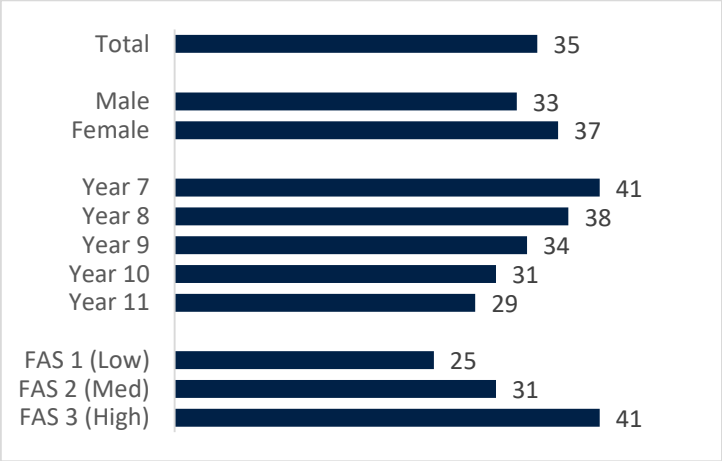


Figure 3.72. Percentage eating fruit at least daily by ethnic group

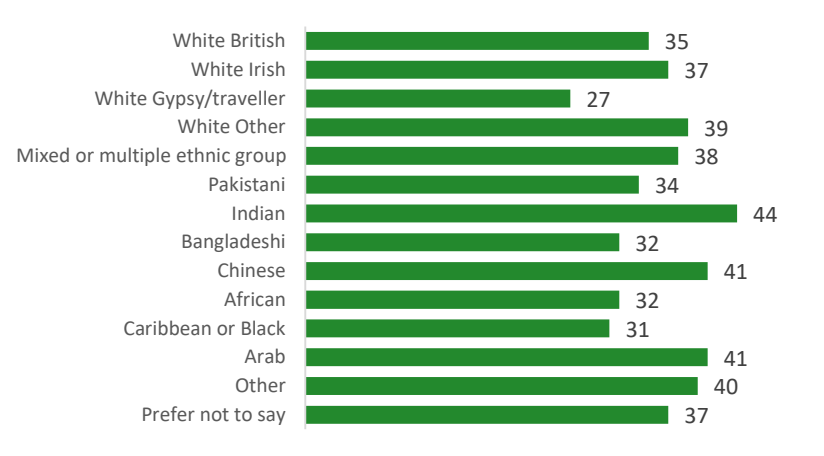


Figure 3.73. Percentage eating fruit at least daily by gender and year group

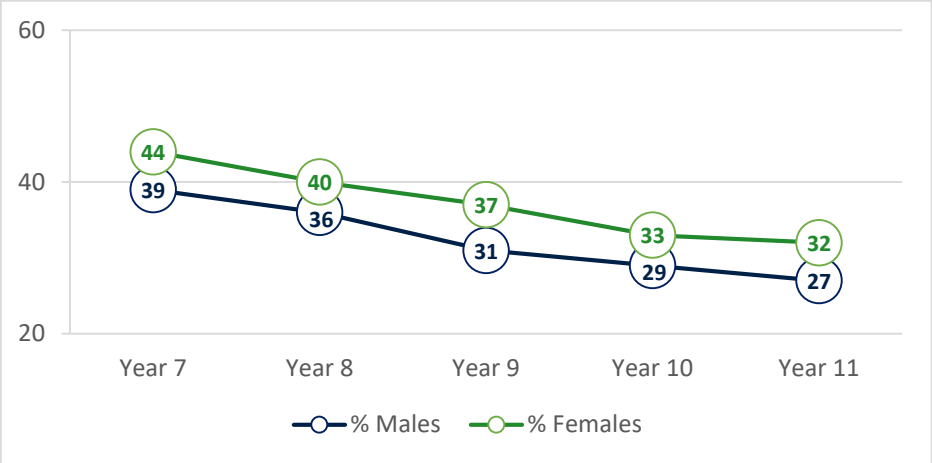
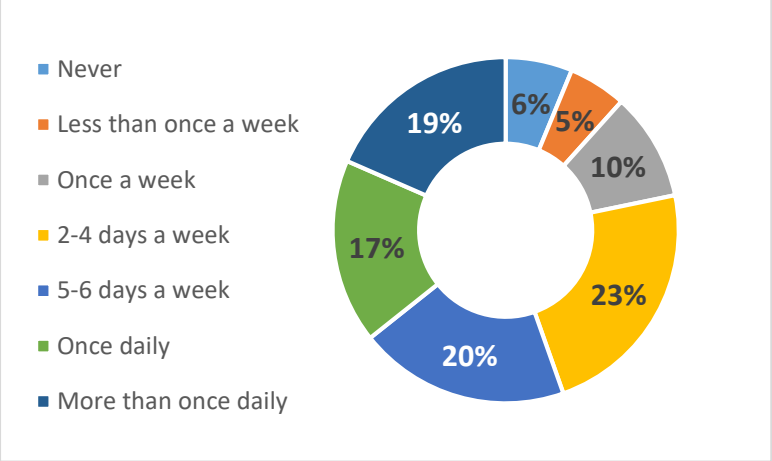


Table 3.18. Percentage eating fruit at least daily by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	34	32	36
Aneurin Bevan	33	31	36
Betsi Cadwaladr	34	32	37
Cardiff & Vale	40	38	43
Cwm Taf	31	29	34
Hywel Dda	36	34	39
Powys	37	35	40

Figure 3.74. Frequency of vegetable consumption



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (102,132)

Figure 3.75. Percentage eating vegetables at least daily by gender, year group and family affluence

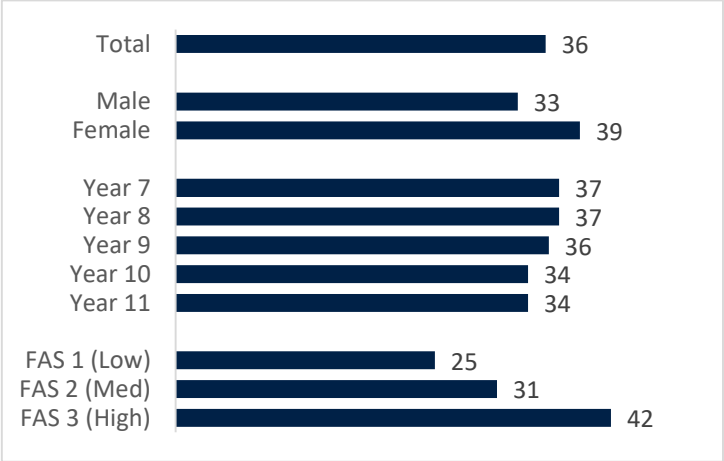


Figure 3.76. Percentage eating vegetables at least daily by ethnic group

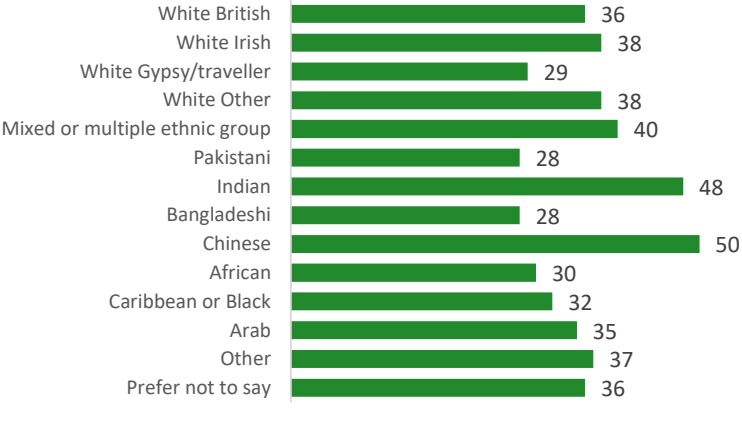


Figure 3.77. Percentage eating vegetables at least daily by gender and year group

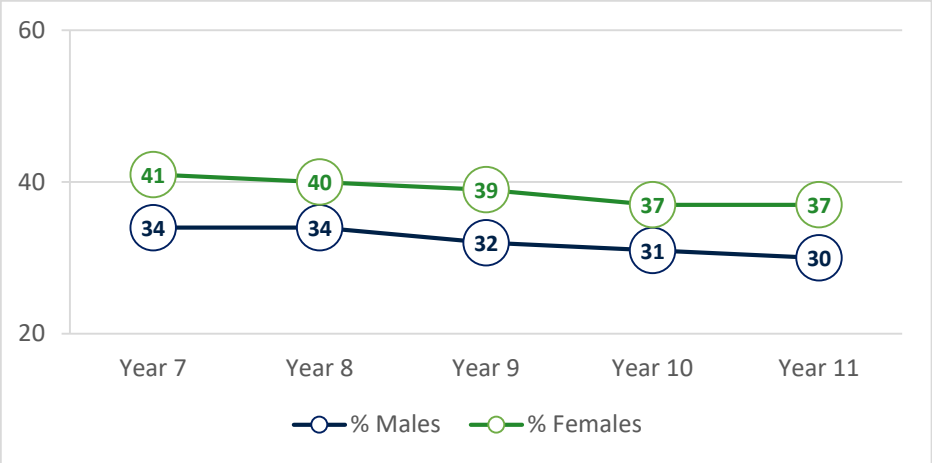
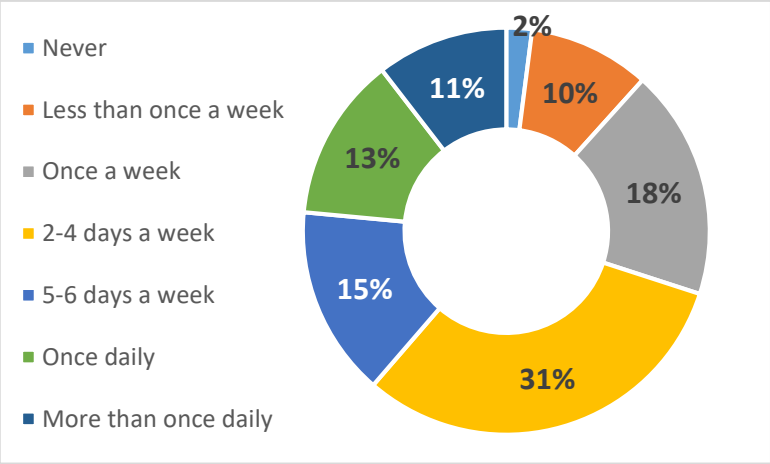


Table 3.19. Percentage eating vegetables at least daily by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	33	30	36
Aneurin Bevan	33	30	37
Betsi Cadwaladr	37	33	40
Cardiff & Vale	40	36	43
Cwm Taf	29	27	31
Hywel Dda	39	36	42
Powys	43	39	47

Figure 3.78. Frequency of sweet consumption



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (101,721)

Figure 3.79. Percentage eating sweets at least daily by gender, year group and family affluence

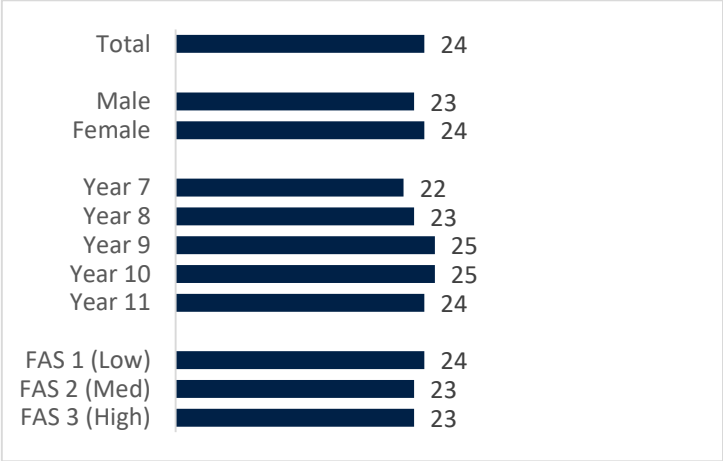


Figure 3.80. Percentage eating sweets at least daily by ethnic group

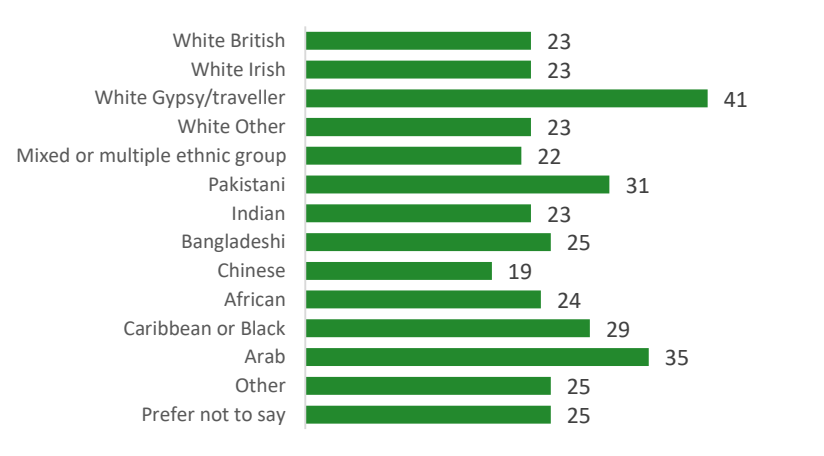


Figure 3.81. Percentage eating sweets at least daily by gender and year group

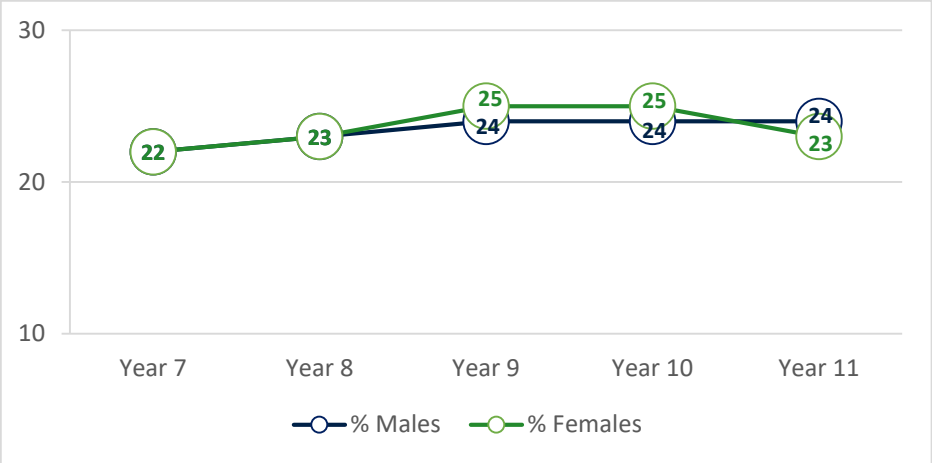
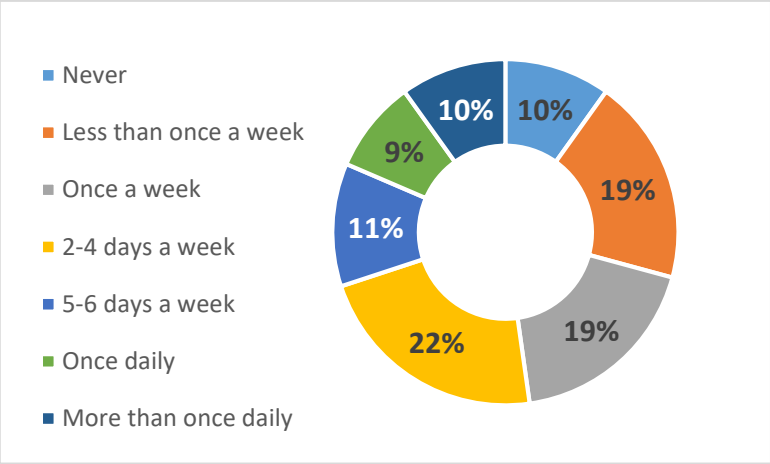


Table 3.20. Percentage eating sweets at least daily by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	23	22	23
Aneurin Bevan	25	25	26
Betsi Cadwaladr	24	24	24
Cardiff & Vale	24	23	24
Cwm Taf	26	25	26
Hywel Dda	20	20	20
Powys	19	19	19

Figure 3.82. Frequency of soft drinks consumption



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (102,082)

Figure 3.83. Percentage drinking soft drinks at least daily by gender, year group and family affluence

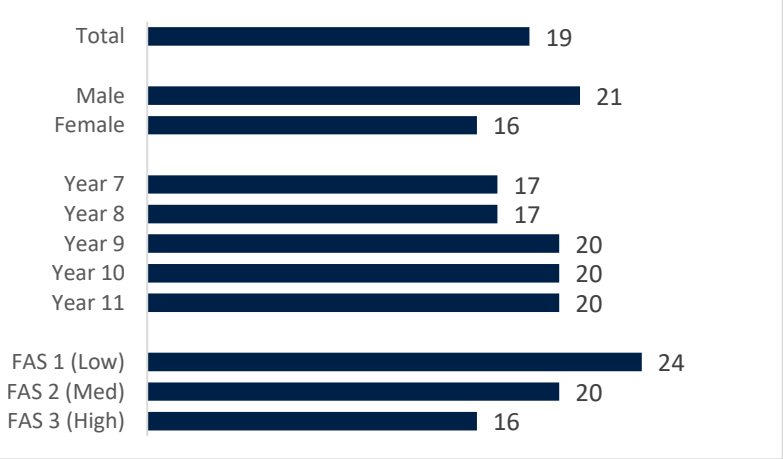


Figure 3.84. Percentage drinking soft drinks at least daily by ethnic group

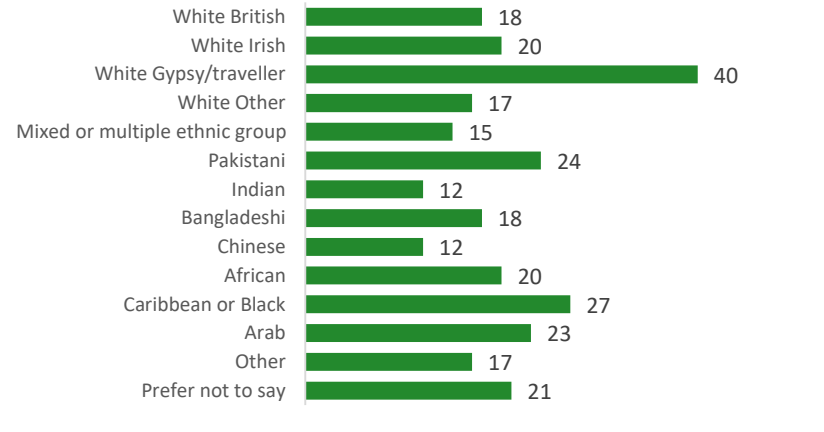


Figure 3.85. Percentage drinking soft drinks at least daily by gender and year group

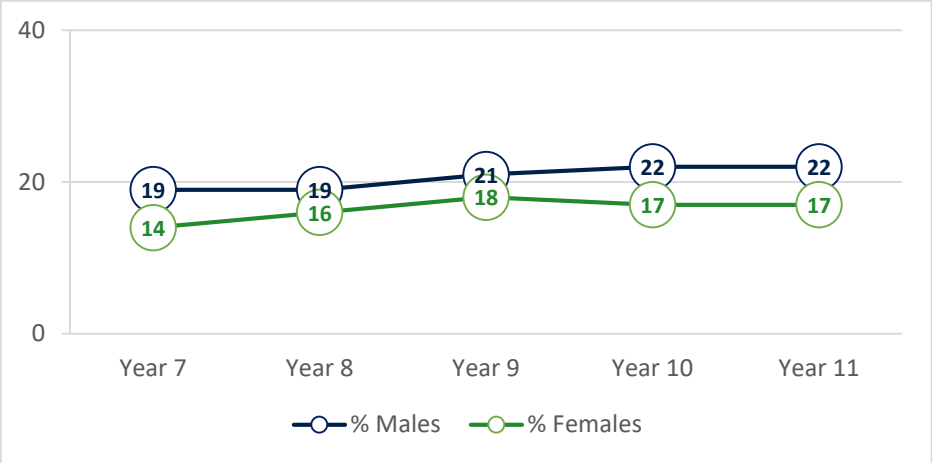
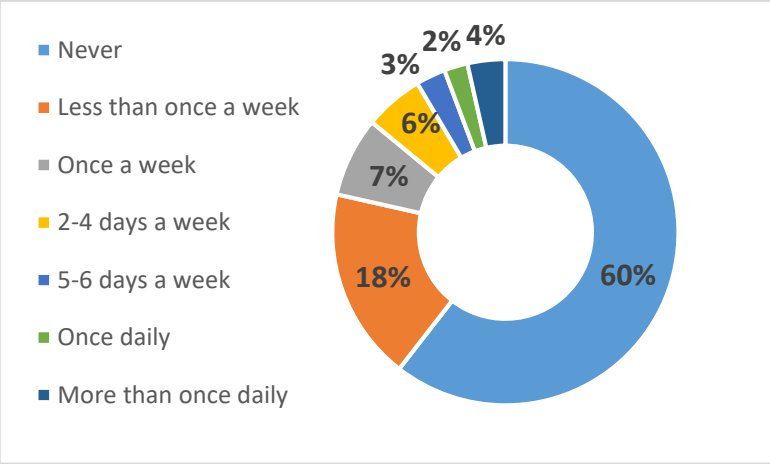


Table 3.21. Percentage drinking soft drinks at least daily by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	19	21	16
Aneurin Bevan	22	24	19
Betsi Cadwaladr	18	20	16
Cardiff & Vale	16	18	14
Cwm Taf	24	26	22
Hywel Dda	15	17	13
Powys	13	15	10

Figure 3.86. Frequency of energy drink consumption



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (102,108)

Figure 3.87. Percentage drinking energy drinks at least daily by gender, year group and family affluence

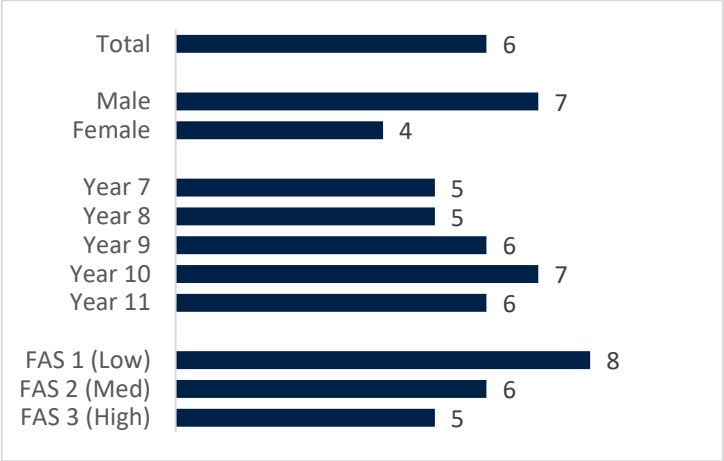


Figure 3.88. Percentage drinking energy drinks at least daily by ethnic group

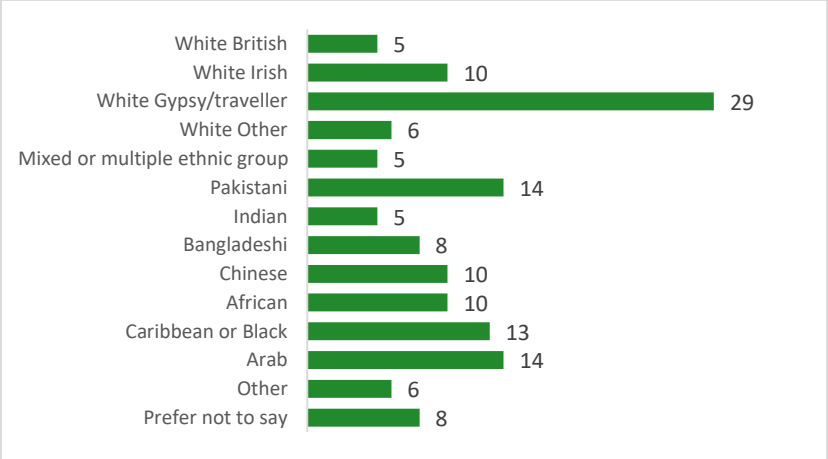


Figure 3.89. Percentage drinking energy drinks at least daily by gender and year group

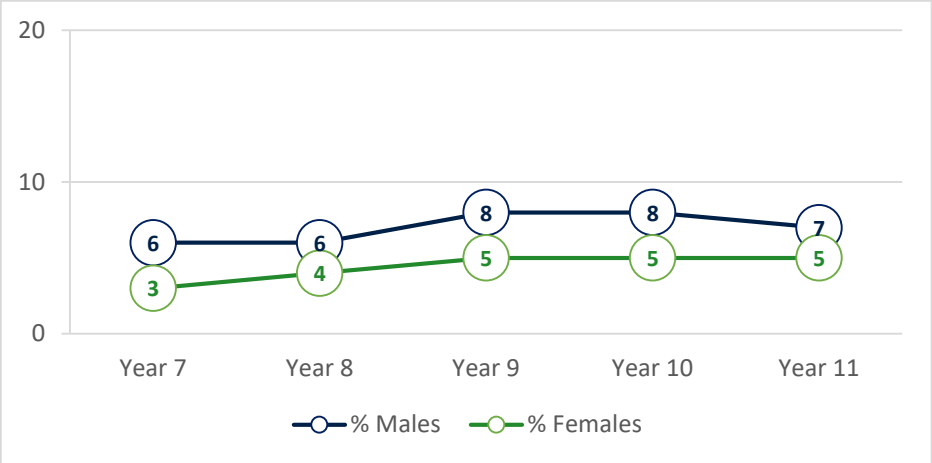
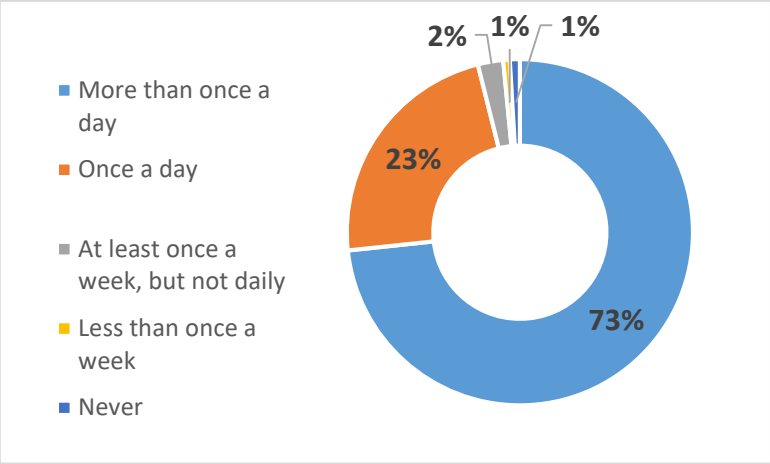


Table 3.22. Percentage drinking energy drinks at least daily by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	5	7	4
Aneurin Bevan	6	8	5
Betsi Cadwaladr	6	7	5
Cardiff & Vale	5	6	4
Cwm Taf	7	8	5
Hywel Dda	5	5	3
Powys	4	5	3

Figure 3.90. Frequency of tooth brushing



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (28,494)

Figure 3.91. Percentage who brush their teeth at least daily by gender, year group and family affluence

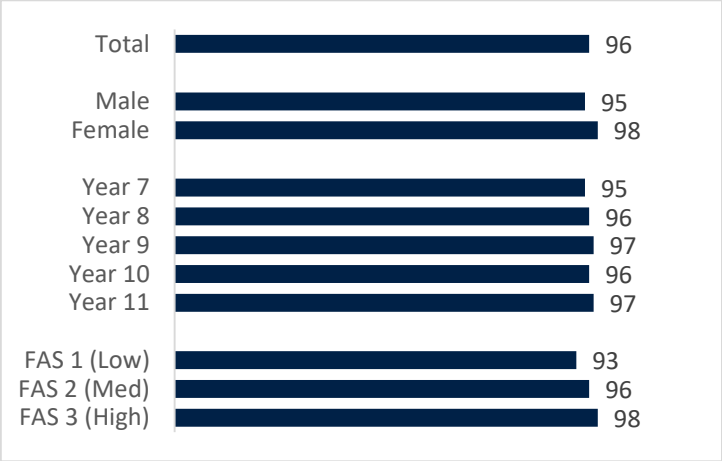


Figure 3.92. Percentage who brush their teeth at least daily by ethnic group

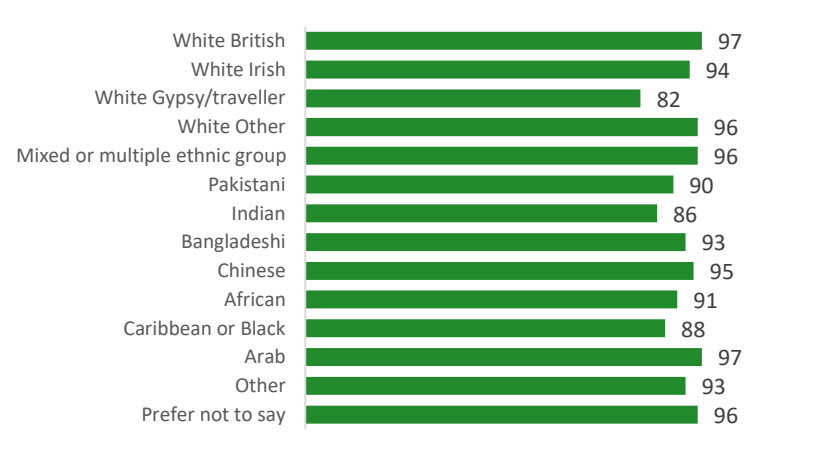


Figure 3.93. Percentage who brush their teeth at least daily by gender and year group

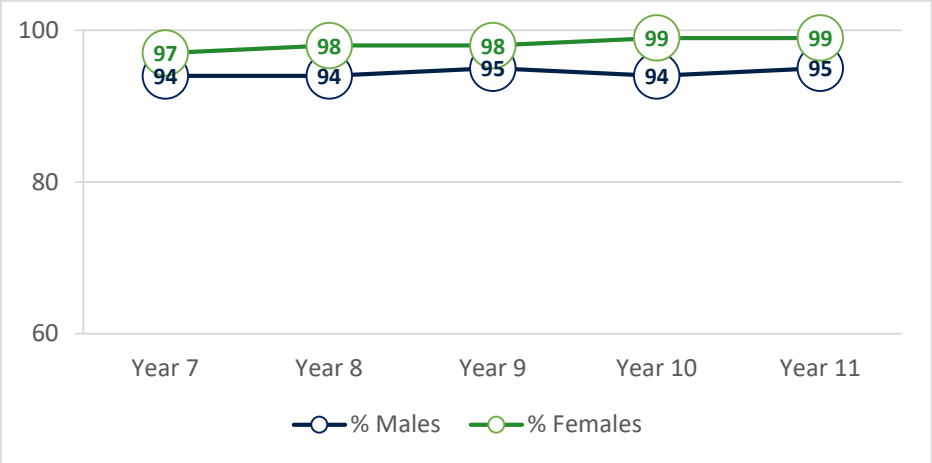
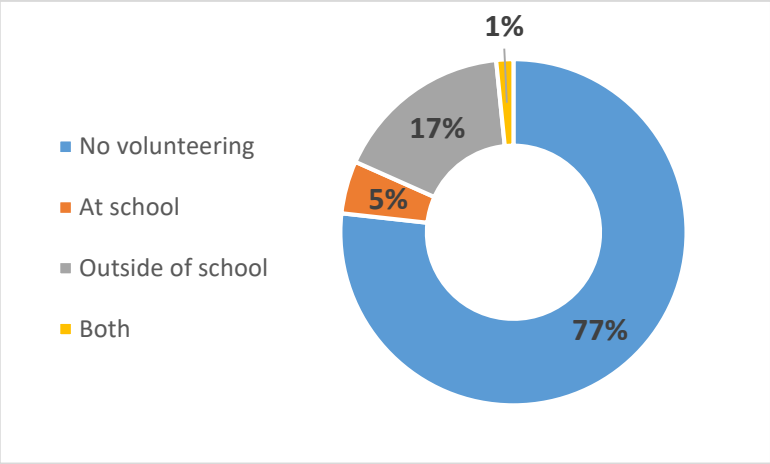


Table 3.23. Percentage who brush their teeth at least daily by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	96	95	98
Aneurin Bevan	96	94	99
Betsi Cadwaladr	96	94	98
Cardiff & Vale	97	95	98
Cwm Taf	96	94	98
Hywel Dda	95	94	98
Powys	96	94	98

Figure 3.94. Volunteering



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (35,499)

Figure 3.95. Percentage who volunteer by gender, year group and family affluence

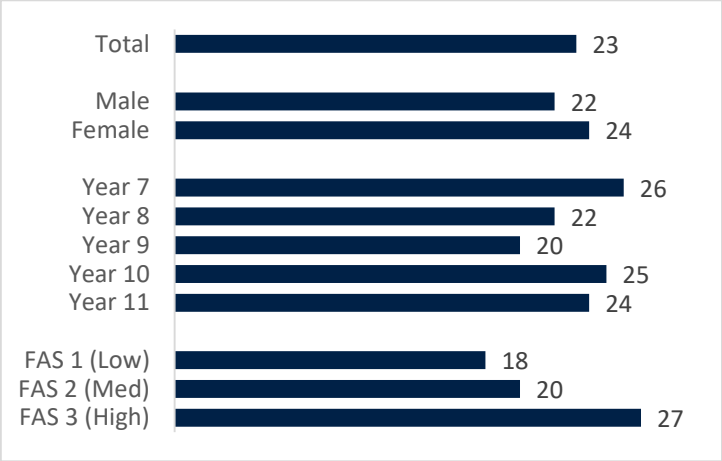


Figure 3.96. Percentage who volunteer by ethnic group

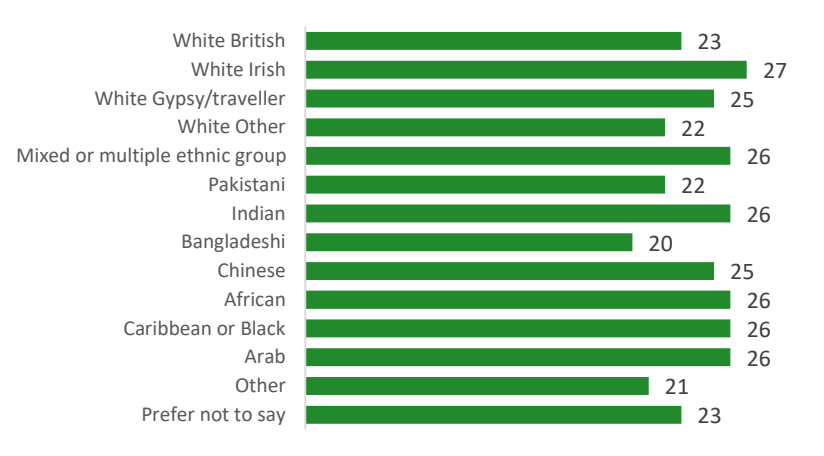


Figure 3.97. Percentage who volunteer by gender and year group

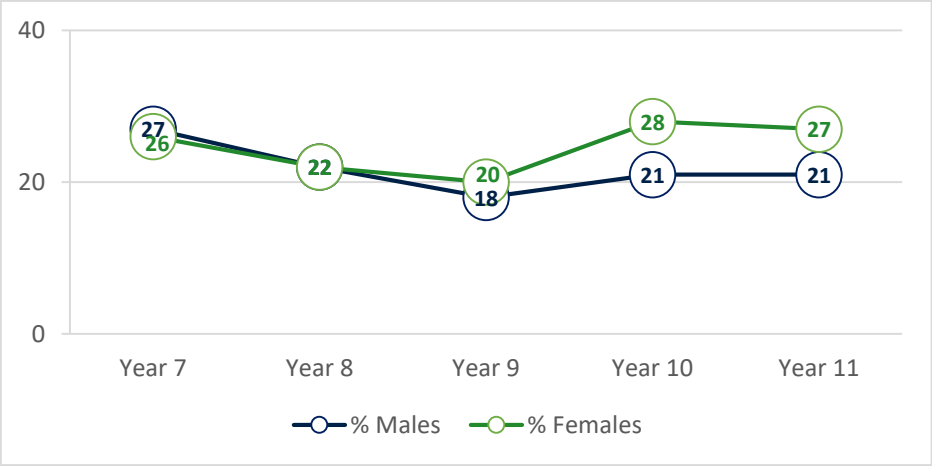


Table 3.24. Percentage who volunteer by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	22	20	24
Aneurin Bevan	22	19	24
Betsi Cadwaladr	24	24	25
Cardiff & Vale	24	24	24
Cwm Taf	20	19	22
Hywel Dda	25	24	26
Powys	26	28	24

4 School life

Introduction

The concept of school connectedness relates to students' belief that staff at their school care about them as individuals and about their learning. It includes four main elements: positive relationships with adults at the school; feeling happy at school and a sense of belonging there; feeling school is important; and perceiving a supportive learning environment[29]. Low school connectedness is associated with a number of health and wellbeing outcomes, including substance misuse, physical activity, self-harm, suicidal ideation and attempts, and dating and relationship violence[29-32].

Analysis of the 2013/14 HBSC survey in Wales found that perceived involvement in school decision-making was associated with students' subjective wellbeing[33]. Quality of student–teacher relationships, however, had wider ranging impact and was a consistent correlate of health and wellbeing outcomes, including substance misuse, fruit and vegetable intake, self-rated health and subjective wellbeing. The most positive student-teacher relationships were reported by students in the least affluent schools, whilst the worst were reported by students from less affluent households who were attending the most advantaged schools (those with low levels of free school meal entitlement).

Bullying can be defined as 'behaviour by an individual or group, repeated over time, which intentionally hurts others either physically or emotionally'[34]. It causes psychological distress and mental health problems, including anxiety and depression and low self-esteem[35 36] and impacts on academic attainment[37 38]. The impacts of bullying, however, can continue beyond school and longitudinal research has identified higher rates of psychological distress and mental health problems in adults who reported being bullied as children, as well as worse physical health, employment and earnings, and social supports[35 38].

Those who witness bullying in school, but are not involved as either perpetrator or victim, can also be affected. Higher rates of anxiety and depression have been reported in bystanders, regardless of whether they intervene, but those who do intervene may benefit in terms of their own wellbeing and attainment[36].

Rigidly dividing bullying behaviour into perpetrator and victim, however, is unlikely to reflect the complex social realities of school life, where the roles of perpetrator and victim may be more nuanced and fluid[39].

Adolescent mental health is deteriorating overall and there is evidence that inequalities are widening[40]. As noted in chapter 3, children and young people's mental health is a priority in Wales and schools are an important source of mental health support for adolescents[41]. Such support can range from assistance from a trusted member of staff to referral to Child and Adolescent Mental Health Services (CAMHS). Welsh Government provide guidance to schools on using a whole school approach to promoting emotional health and wellbeing in the school setting[42]. Local Authorities also have a statutory obligation to provide an independent, on-site counselling service in all secondary schools. In 2016/17, over 11,500 adolescents accessed these services, 63% of whom were female. Family issues was the most common presenting issue (36%), followed by anxiety (23%)[43].

Findings

Students in all year groups were asked a range of questions regarding their feelings about their school and their experiences in it, including their relationships with school staff, the degree to which they felt able to participate in school life and bullying. The findings suggest a notable decline in the degree to which adolescents feel engaged with and supported at school as they get older.

Feelings about school

Liking school

Most adolescents were positive about their school, with 18% reporting that they 'like it a lot' and 44% that they 'like it a bit'. Around 1 in 7, however, reported that they 'don't like it at all' (Figure 4.1). The degree to which adolescents reported liking school 'a lot' did not differ greatly by gender overall or family affluence, but there was a stark decline in liking school 'a lot' with increasing year group, particularly between students in years 7 and 8 (Figure 4.2). Females were more likely than males to say they liked school 'a lot' in years 7 and 8, but this difference disappeared among older year groups (Figure 4.4).

Adolescents from Indian and Arab backgrounds were most likely to say they liked school 'a lot', whilst those from White Gypsy/Traveller backgrounds were least likely to say so (Figure 4.3).

There was some variation in liking school a lot by LHB (Table 4.1). Adolescents living in Betsi Cadwaladr were least likely to say they liked school 'a lot' (16%) and those in Cardiff and Vale the most likely (22%). The difference between males and females also varied from no difference at all in Cwm Taf to a difference of 5% in Powys, where females were more likely than males to say they liked school 'a lot'.

School pressure

Over 80% of adolescents reported that they felt some degree of pressure from their school work with nearly one quarter (24%) reporting 'a lot' of pressure (Figure 4.5), but this was strongly related to age. Figure 4.6 shows that the proportion of adolescents reporting 'some' or 'a lot' of pressure more than doubled from year 7 to year 11. There was a gender difference in this increase, however, with a greater increase in females leading to a substantial gender gap by years 10 and 11 (Figure 4.8).

There was no notable difference in school pressure by family affluence (Figure 4.6) and a much smaller degree of variation by ethnic background than was seen for liking school (Figure 4.7).

Feeling 'some' or 'a lot' of school pressure was most frequently reported among adolescents living in Cardiff and Vale LHB (51%), but variation across the LHBs was small. In all LHBs females were more likely to report feeling pressure from their schoolwork than males, although the difference ranged from 4% in Powys to 10% in Aneurin Bevan (Table 4.2).

Relationships with school staff

Feel accepted by teachers

Nearly three-quarters of adolescents (71%) strongly agreed or agreed with the statement '*I feel my teachers accept me as I am*'. Seven percent disagreed and a further 4% strongly disagreed (Figure 4.9). Males were slightly more likely than females to agree with the statement and those from the least affluent households slightly less likely to agree (Figure 4.10). There was a more notable difference by age with the proportion agreeing that their teachers accept them as they are declining across years 7 to 10 in both genders (Figures 4.10 and 4.12).

Variation in adolescents' perception that their teachers accept them as they are was evident across different ethnic groups. Those from Indian and Bangladeshi backgrounds were most likely to agree that their teachers accept them and those from White Gypsy/Traveller and Caribbean or Black backgrounds least likely to agree (Figure 4.11).

There was a small degree of variation in the proportion of adolescents agreeing that their teachers accept them as they are by LHB (Table 4.3). In all LHBs the proportion of males in agreement was higher than females, with the exception of Powys.

Feel teachers care

Findings for whether adolescents believe their teachers care about them as a person were less positive than for whether they feel accepted by their teachers. Fewer (16%) strongly agreed with the statement '*I feel that my teachers care about me as a person*' and more disagreed (12%) or strongly disagreed (8%) than with the statement regarding feeling accepted by teachers (Figure 4.13).

Again, males were slightly more likely than females to agree with the statement, although the difference was small, and there was no clear pattern with family affluence (Figure 4.14). The decline with age in the proportion who agreed that their teachers care about them was greater than for feeling accepted by their teachers, but it again plateaued across older year groups for both genders (Figure 4.16).

The proportion of adolescents who agreed that their teachers care about them ranged widely from 35% among those of White Gypsy/Traveller backgrounds to 67% of those from Indian backgrounds (Figure 4.15).

At the LHB level the proportion of adolescents who agreed with the statement ranged from 50% in Betsi Cadwaladr to 56% in Abertawe Bro Morgannwg and Cwm Taf. There were small differences by gender in the proportion who agreed, although these were not in a consistent direction (Table 4.4).

A member of staff to confide in

Students were also asked to respond to the statement '*There is at least one teacher or other member of staff at this school who I can talk to about things that worry me*'. There was a largely positive response to this with nearly one-third (31%) strongly agreeing with this statement and a further 37% agreeing with it. Seven percent said they strongly disagreed (Figure 4.17).

As with the statements on feeling accepted by teachers and that teachers care, there were small differences by gender and family affluence, although for this statement, females were slightly more likely to agree than males (Figure 4.18). The proportion of adolescents who agreed that there was a member of staff they could confide in declined from 80% in year 7 to 65% in year 9 and from then on plateaued for both genders (Figures 4.18 and 4.20).

Over half of adolescents from all ethnic backgrounds agreed there was a member of staff to confide in. Adolescents from Chinese backgrounds were least likely to agree and those from White British backgrounds the most likely (Figure 4.19).

There was very little difference in the proportion of adolescents who agreed with the statement across the LHBs, but the gender difference in the proportion ranged from 1% (Cardiff and Vale) to 7% (Cwm Taf) (Table 4.5).

Participation in school life

A say in planning and organising school events

Half of adolescents agreed or strongly agreed with the statement '*At our school, students have a say in planning and organising school activities and school events*', but nearly one-quarter (24%) disagreed or strongly disagreed (Figure 4.21). There was very little difference in the proportion in agreement with the statement by family affluence, but it halved as year group increased from 69% in year 7 to 35% in year 11. Females were less likely to agree with the statement than males and this was true for all year groups except year 7 (Figures 4.22 and 4.24).

There was a relatively small degree of variation by ethnic background from 44% (mixed or multiple ethnic group) to 55% (other) in agreement with the statement (Figure 4.23) and likewise across the LHBs (48% in Aneurin Bevan to 53% in Abertawe Bro Morgannwg) (Table 4.6).

Opportunities to decide and plan school projects

Findings for this question were very similar to that above. Students were asked to respond to the statement '*At our school, students have a lot of chances to help decide and plan school projects*'. Forty-eight percent strongly agreed or agreed with the statement and one-quarter disagreed or strongly disagreed (Figure 4.25).

Differences in response on the basis of gender and family affluence were small, but again there was a stark decline in the proportion of adolescents who agreed with the statement as year group increased from 70% in year 7 to 33% in year 11 (Figure 4.26). From years 8 to 11, females were less likely to agree with the statement than males by approximately 5% (Figure 4.28).

As with having a say in planning and organising school events, there was some variation in the proportion agreeing with the statement by ethnic group and LHB, which ranged from 42% (mixed or multiple ethnic group) to 55% (Indian) and from 45% (Aneurin Bevan) to 51% (Abertawe Bro Morgannwg) respectively (Figure 4.27 and Table 4.7).

Student ideas treated seriously

Students were asked to respond to the statement '*At our school, students' ideas are treated seriously*' and nearly half (47%) strongly agreed or agreed. Twenty-nine percent neither agreed nor disagreed, 16% disagreed and 8% strongly disagreed (Figure 4.29).

Agreement with the statement varied little by family affluence and males were only slightly more likely to agree than females (49% and 46% respectively). There was a steep gradient in the proportion agreeing with the statement by year group, however, with it more than halving from year 7 (71%) to year 11 (32%) (Figure 4.30). This decline was slightly greater in females than in males, so that by year 10 less than one-third of females agreed that students' ideas are treated seriously (Figure 4.32).

Adolescents from White Gypsy/Traveller, Mixed or multiple, or Caribbean or Black backgrounds were least likely to say they agreed with the statement (Figure 4.31).

There were similar levels of agreement with the statement across the LHBs, although when disaggregated by gender, the proportion in agreement ranged from 43% (females in Hywel Dda) to 52% (males in Powys) (Table 4.8).

Own ideas treated seriously

Students were also asked if they thought their *own* ideas were taken seriously at their school and they were less positive about this than about ideas from the wider student body. The proportion in agreement with the statement '*At our school my ideas are taken seriously*' was 38%, lower than the equivalent figure of 47% for ideas from the wider student body, and nearly one-third (29%) either disagreed or strongly disagreed with the statement (Figure 4.33).

There was a small difference between the proportion of males and females agreeing with the statement, with males again slightly higher, and also a small gradient by family affluence, with those from the most affluent families most likely to agree that their ideas are taken seriously. Fifty-eight percent of students in year 7 agreed that their ideas are taken seriously, but this decreased to just 25% of students in year 11 (Figure 4.34). Again there was a slightly steeper downward gradient for females as year group increased from year 7 to year 9 (Figure 4.36).

Adolescents from White Gypsy/Traveller, Mixed or multiple, or Caribbean or Black backgrounds were again the groups least likely to say they thought their ideas were taken seriously (Figure 4.35).

There were only small differences in the proportion in agreement with the statement across the LHBs, where it was highest in Powys (40%) (Table 4.9).

Bullying[d]

Bullying others

A large majority of adolescents (83%) reported that they had not bullied another person at school in the past couple of months. Twelve percent reported that they had done so only once or twice and 5% more frequently. Only 2% reported bullying others several times a week (Figure 4.37).

Overall, 17% of adolescents reported that they had bullied another person at school in the past couple of months, but this was not evenly reported across the genders, with 20% of males and 13% of females reporting having bullied. Reporting having bullied increased from year 7 to year 9 and then plateaued at 18%, although this plateau was only evident in females when year group was disaggregated by gender. Reported bullying by males continued to increase (Figures 4.38 and 4.40). Adolescents from the least affluent households were also slightly more likely to report having bullied (Figure 4.38).

There was quite wide variation in rates of reporting having bullied by ethnic group, with adolescents from Indian and White British background least likely to report that they had bullied another person and those from White Gypsy/Traveller and Arab backgrounds most likely to do so (Figure 4.39).

Findings at the LHB level closely mirrored the national level findings for overall levels of reported bullying and the gender difference (Table 4.10).

[d] Findings on cyber-bullying are presented in chapter 5

Being bullied

Thirty-six percent of adolescents reported some experience of having been bullied at school in the past couple of months. Most of these reported having been bullied once or twice (21%) and 10% reported having been bullied weekly or more (Figure 4.41).

Females were more likely than males to report that they had been bullied (39% compared to 33%), although this difference was greater in years 8 and 9 than other year groups (Figures 4.42 and 4.44). This underlies the peak in overall rates of reporting having been bullied in years 8 and 9, which then decline to their lowest level of 32% in year 11 (Figure 4.42). Adolescents from the least affluent families were more likely to report having been bullied than those from the most affluent families (42% compared to 33%) (Figure 4.42).

Adolescents from White Irish backgrounds were most likely to report that they had been bullied in the past couple of months and those from Caribbean or Black backgrounds the least likely (Figure 4.43).

There was little difference in reported rates of having been bullied across the LHBs, although there was some variation in the size of the gender gap, which ranged from 3% in Cardiff and Vale to 8% in Aneurin Bevan (Table 4.11).

Mental health support at school

Support for students who feel unhappy, worried or unable to cope

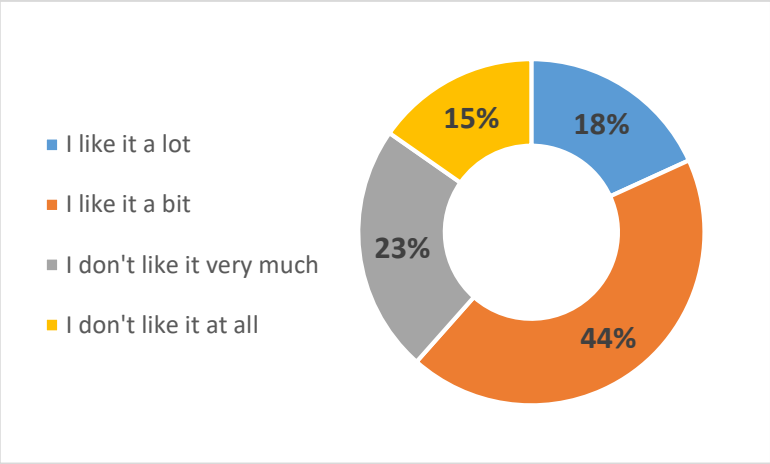
Nearly three-quarters of adolescents strongly agreed or agreed with the statement that '*There is support at my school for students who feel unhappy, worried or unable to cope*'. Only 3% of adolescents strongly disagreed with the statement and a further 6% disagreed with it (Figure 4.45).

Adolescents from the least affluent families were slightly less likely to agree that their school offered support, but there was no difference in the proportion of males and females who agreed with the statement (Figures 4.46 and 4.48). There was, however, a decrease in the proportion agreeing with the statement across year groups 7 to 10, before it plateaued in year 11 (Figure 4.46).

The proportion of adolescents in agreement with the statement was highest in those of Indian and White British backgrounds and lowest in those of White Gypsy/Traveller backgrounds (Figure 4.47).

Adolescents in Aneurin Bevan LHB were least likely to agree that their school offered support to students (70%), whilst those in Powys were most likely (76%). There were no or negligible differences in the proportion of males and females in agreement with the statement, with the exception of Cwm Taf where 77% of females agreed compared to 72% of males (Table 4.12).

Figure 4.1. Feelings about school



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (27,280)

Figure 4.2. Percentage who like school a lot by gender, year group and family affluence

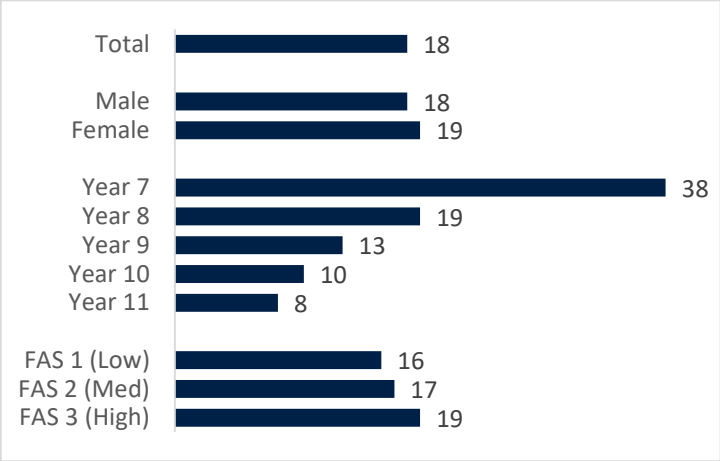


Figure 4.3. Percentage who like school a lot by ethnic group

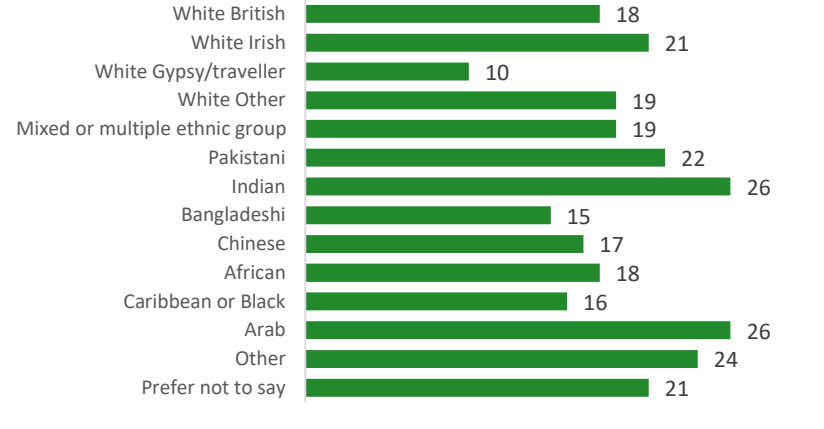


Figure 4.4. Percentage who like school a lot by gender and year group

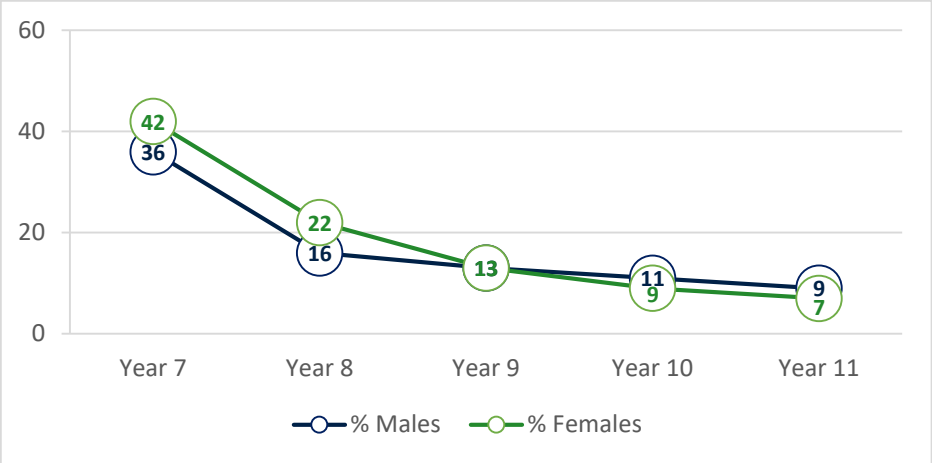
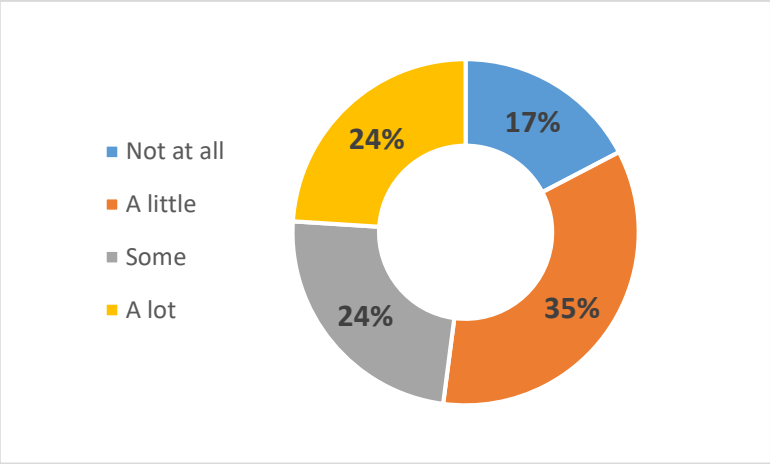


Table 4.1. Percentage who like school a lot by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	20	19	21
Aneurin Bevan	17	16	17
Betsi Cadwaladr	16	15	16
Cardiff & Vale	22	20	24
Cwm Taf	19	19	19
Hywel Dda	19	19	20
Powys	18	15	20

Figure 4.5. Pressure felt from schoolwork



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (97,660)

Figure 4.6. Percentage who feel 'a lot' or 'some' pressure by gender, year group and family affluence

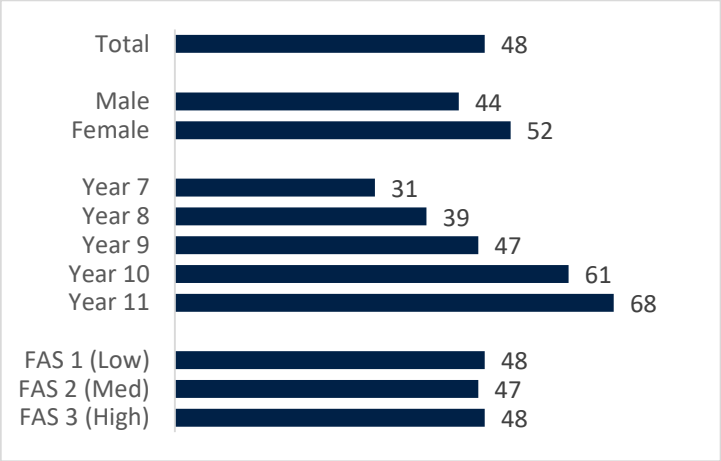


Figure 4.7. Percentage who feel 'a lot' or 'some' pressure by ethnic group

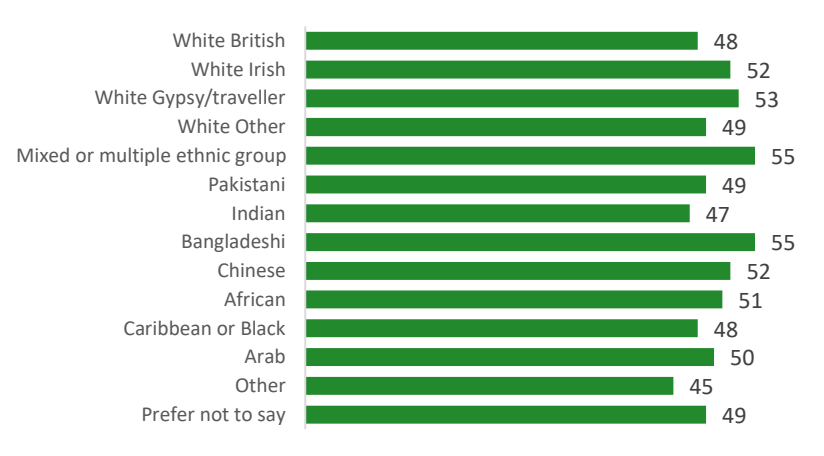


Figure 4.8. Percentage who feel 'a lot' or 'some' pressure by gender and year group

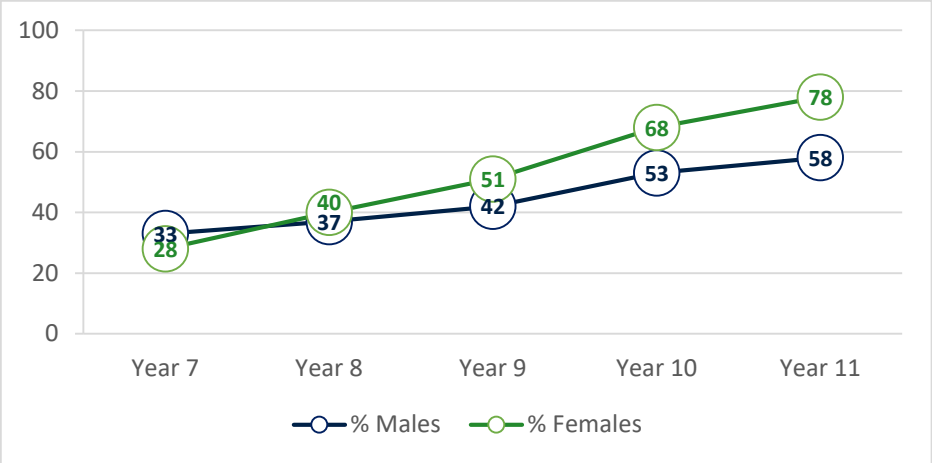
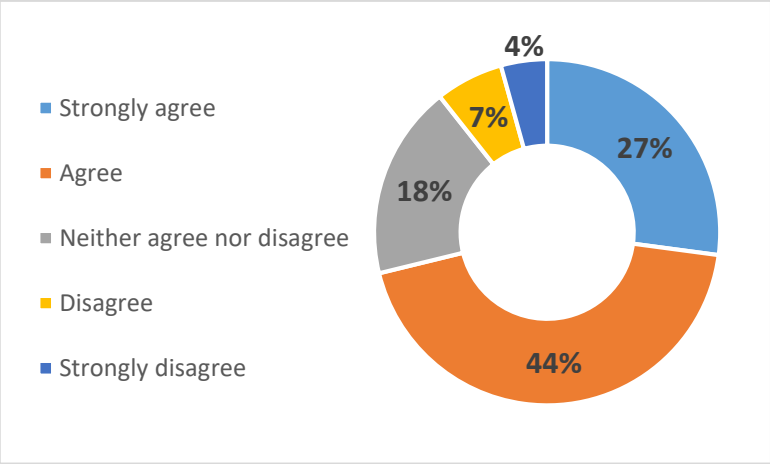


Table 4.2. Percentage who feel 'a lot' or 'some' pressure by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	49	45	52
Aneurin Bevan	48	43	53
Betsi Cadwaladr	47	42	51
Cardiff & Vale	51	47	55
Cwm Taf	46	44	49
Hywel Dda	46	42	50
Powys	46	44	48

Figure 4.9. Feel accepted by teachers



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (26,587)

Figure 4.10. Percentage who feel their teachers accept them as they are by gender, year group and family affluence

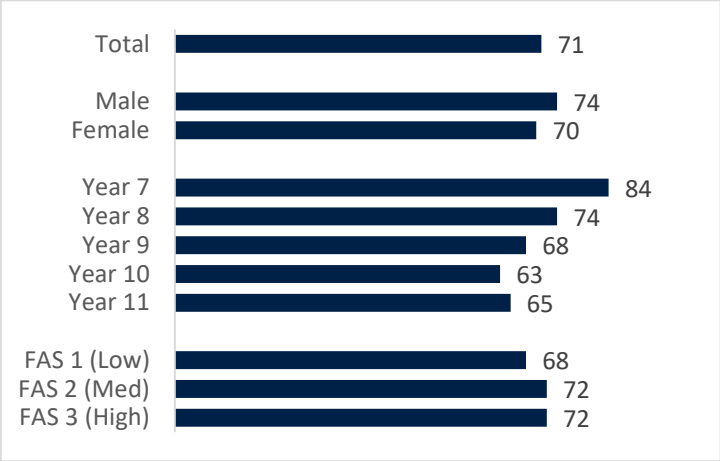


Figure 4.11. Percentage who feel their teachers accept them as they are by ethnic group

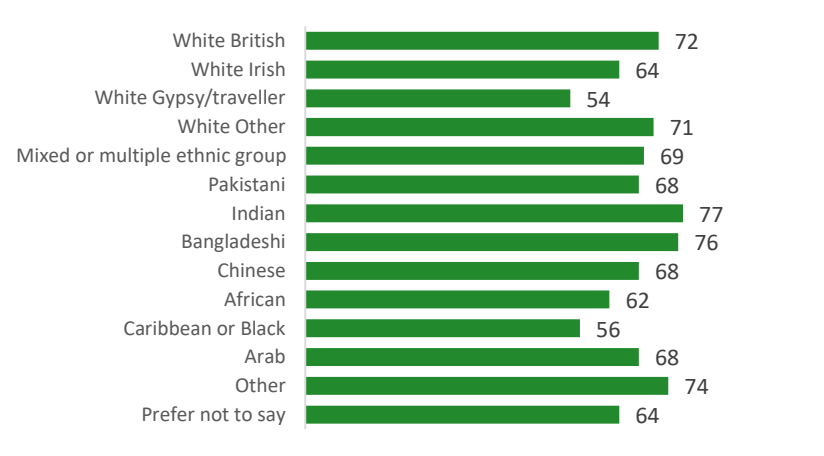


Figure 4.12. Percentage who feel their teachers accept them as they are by gender and year group

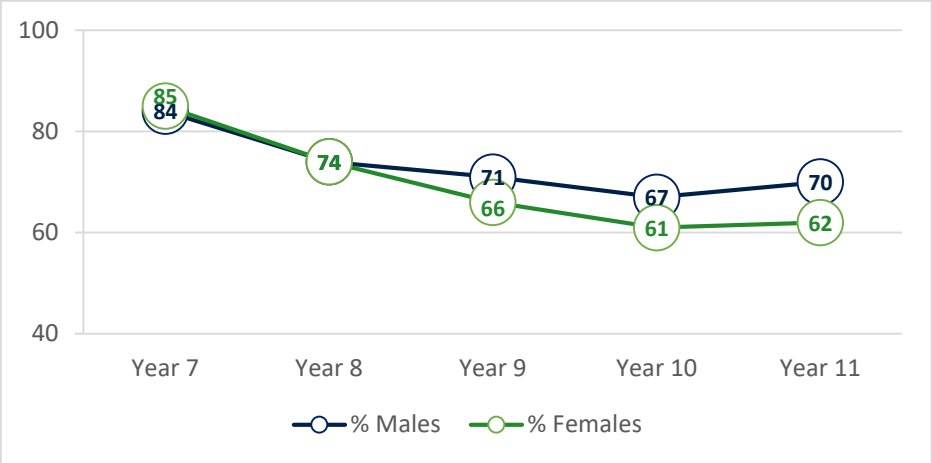
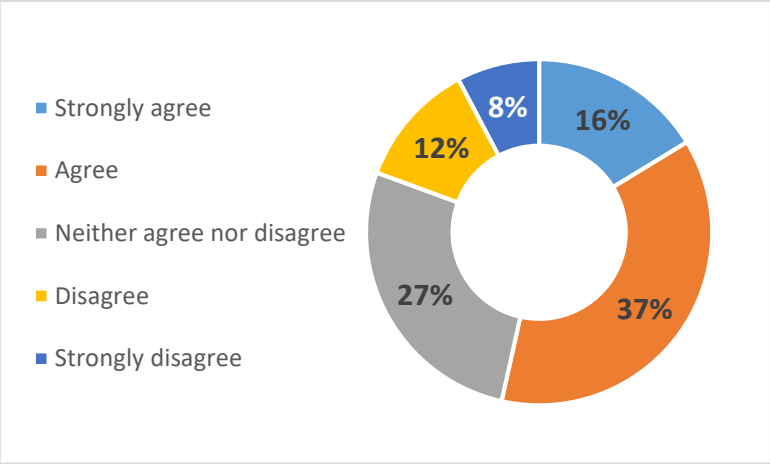


Table 4.3. Percentage who feel their teachers accept them as they are by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	74	75	73
Aneurin Bevan	71	75	68
Betsi Cadwaladr	69	70	68
Cardiff & Vale	74	76	72
Cwm Taf	74	76	73
Hywel Dda	69	72	67
Powys	71	71	72

Figure 4.13. Feel that teachers care about them as a person



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (95,486)

Figure 4.14. Percentage who feel their teachers care about them by gender, year group and family affluence

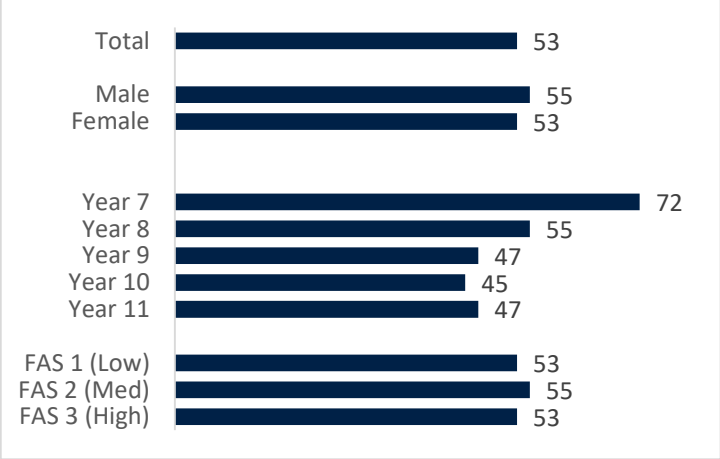


Figure 4.15. Percentage who feel their teachers care about them by ethnic group

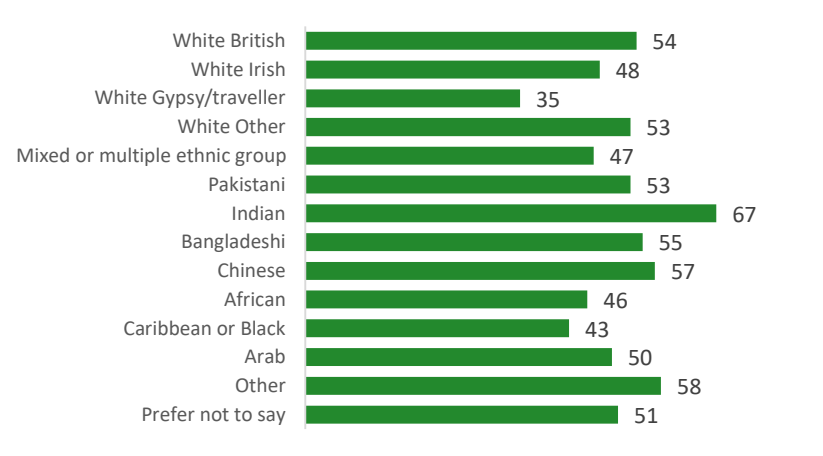


Figure 4.16. Percentage who feel their teachers care about them by gender and year group

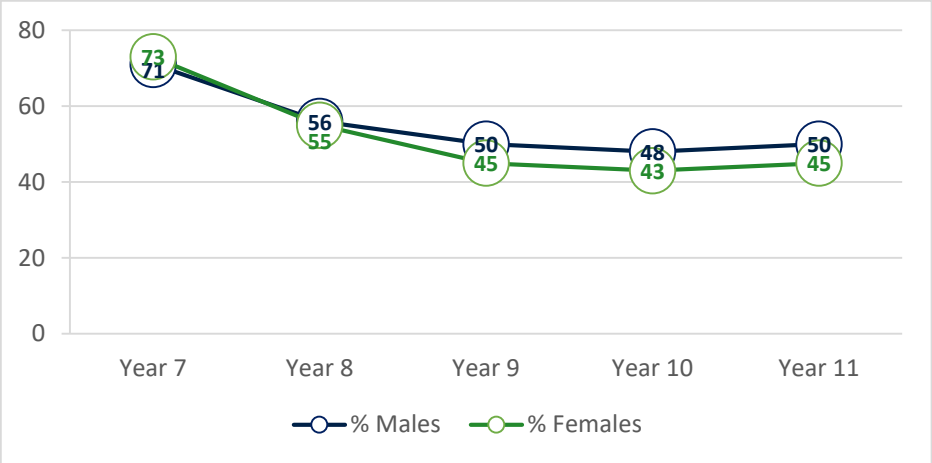
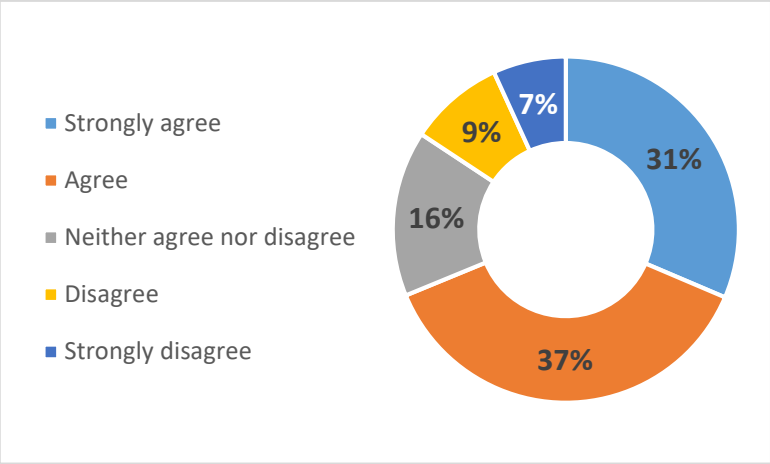


Table 4.4. Percentage who feel their teachers care about them by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	56	57	55
Aneurin Bevan	54	56	53
Betsi Cadwaladr	50	53	49
Cardiff & Vale	55	57	54
Cwm Taf	56	55	57
Hywel Dda	52	54	51
Powys	55	55	56

Figure 4.17. Member of staff to confide in



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (95,184)

Figure 4.18. Percentage who agree there is a member of staff they can confide in by gender, year group and family affluence

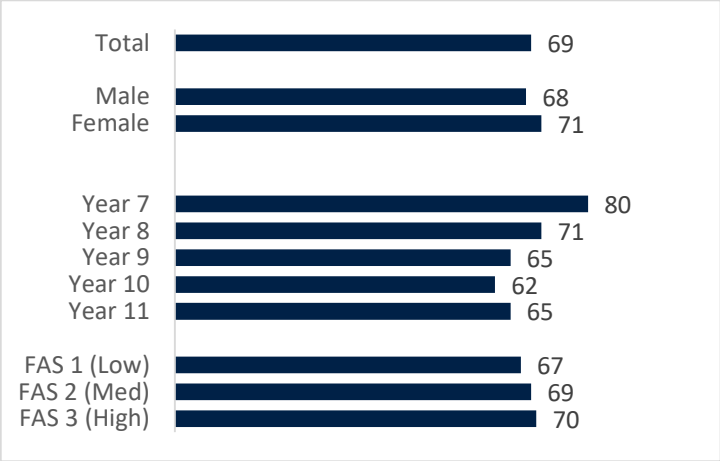


Figure 4.19. Percentage who agree there is a member of staff they can confide in by ethnic group

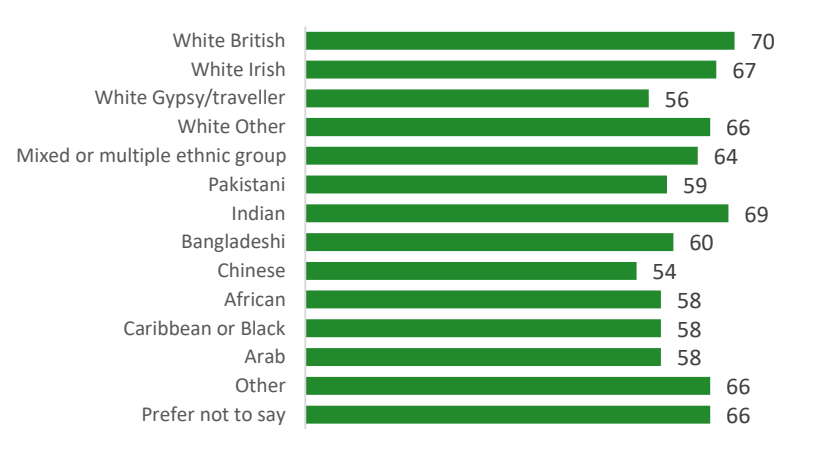


Figure 4.20. Percentage who agree there is a member of staff they can confide in by gender and year group

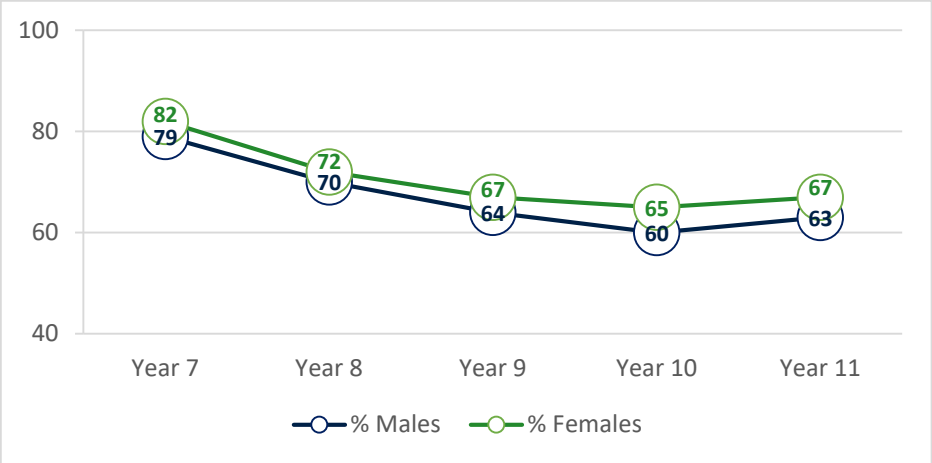
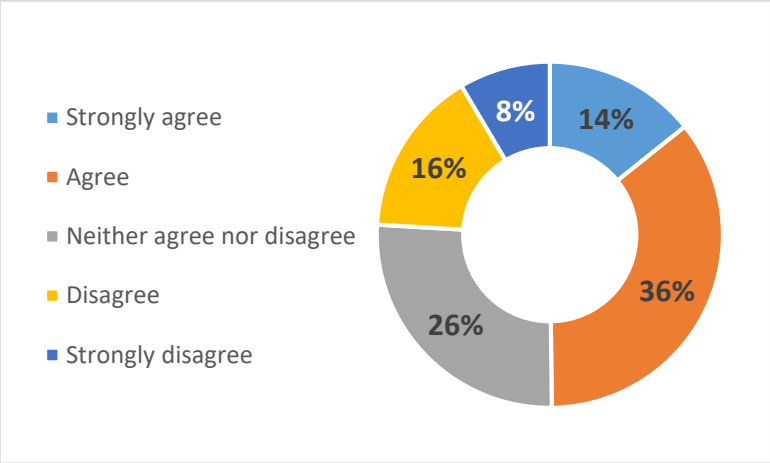


Table 4.5. Percentage who agree there is a member of staff they can confide in by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	69	67	72
Aneurin Bevan	69	68	71
Betsi Cadwaladr	69	68	70
Cardiff & Vale	67	66	67
Cwm Taf	70	67	74
Hywel Dda	69	69	71
Powys	70	67	73

Figure 4.21. Students have a say in planning and organising school activities and events



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (92,474)

Figure 4.22. Percentage who agree that students in their school have a say in planning and organising school activities and events by gender, year group and family affluence

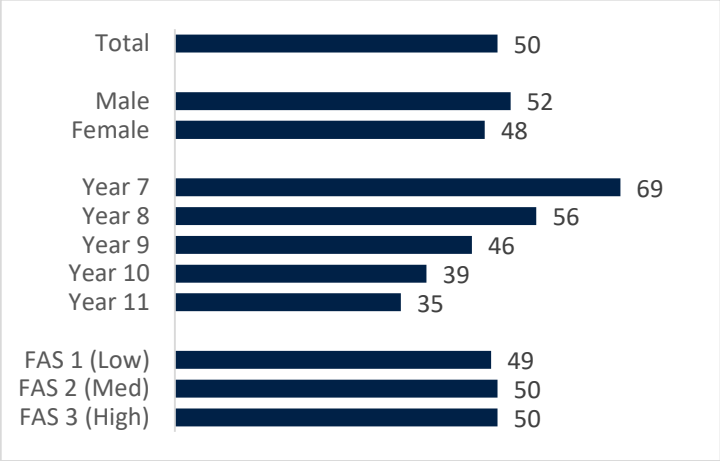


Figure 4.23. Percentage who agree that students in their school have a say in planning and organising school activities and events by ethnic group

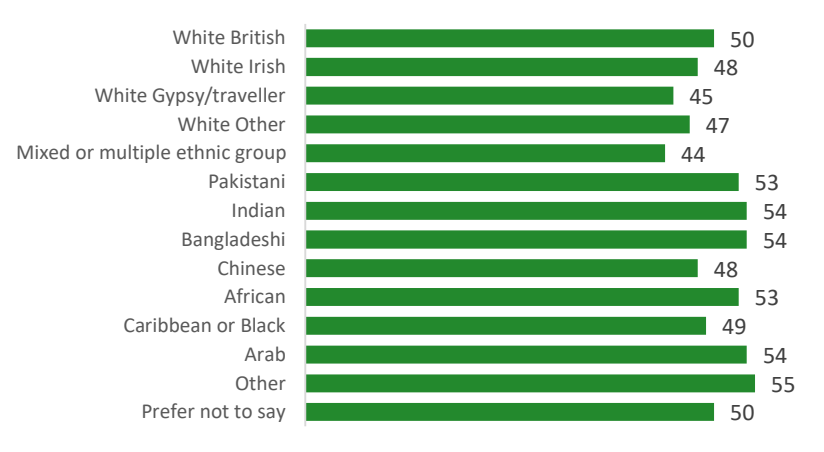


Figure 4.24. Percentage who agree that students in their school have a say in planning and organising school activities and events by gender and year group

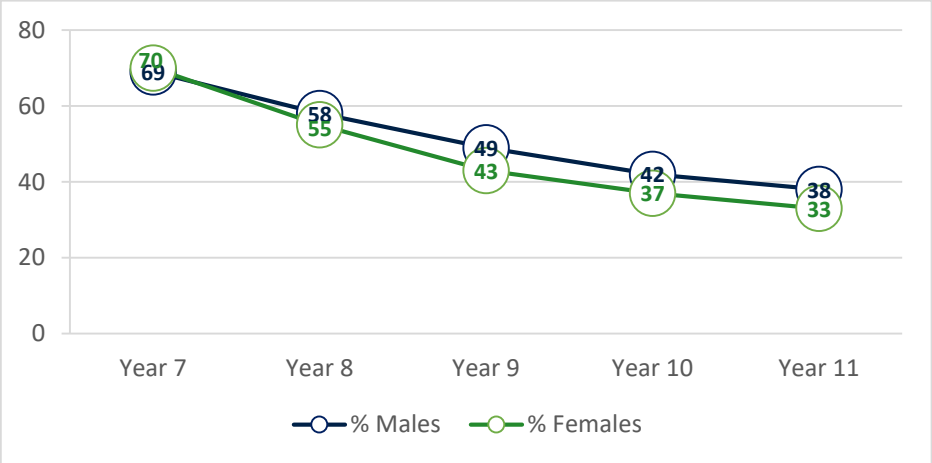
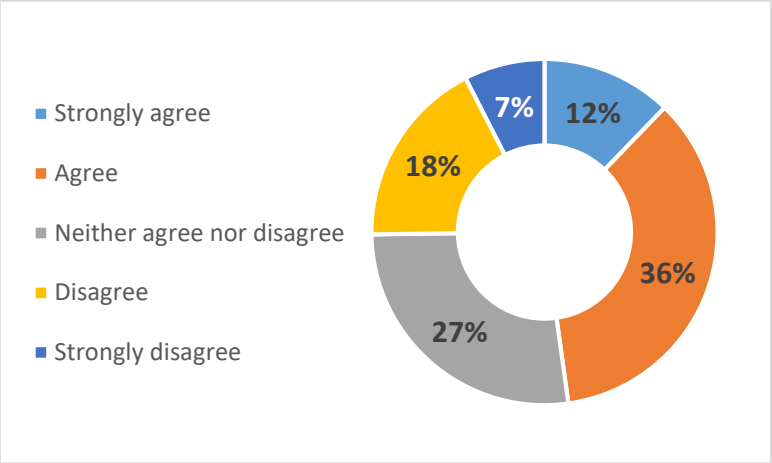


Table 4.6. Percentage who agree that students in their school have a say in planning and organising school activities and events by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	53	54	52
Aneurin Bevan	48	50	45
Betsi Cadwaladr	49	51	48
Cardiff & Vale	50	52	48
Cwm Taf	51	50	51
Hywel Dda	50	52	48
Powys	51	54	49

Figure 4.25. Students have a lot of chances to help decide and plan school projects



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (93,336)

Figure 4.26. Percentage who agree that students in their school have a lot of chances to help decide and plan school projects by gender, year group and family affluence

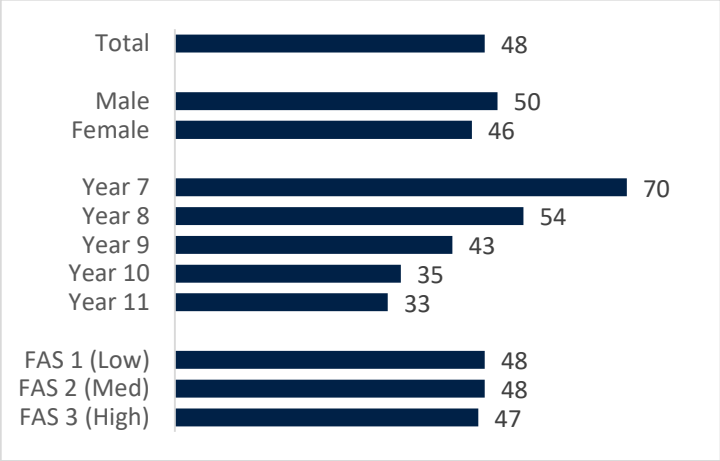


Figure 4.27. Percentage who agree that students in their school have a lot of chances to help decide and plan school projects by ethnic group

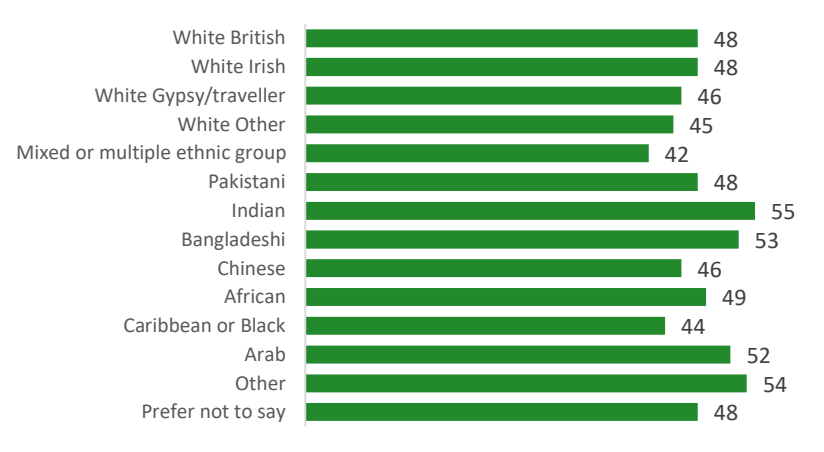


Figure 4.28. Percentage who agree that students in their school have a lot of chances to help decide and plan school projects by gender and year group

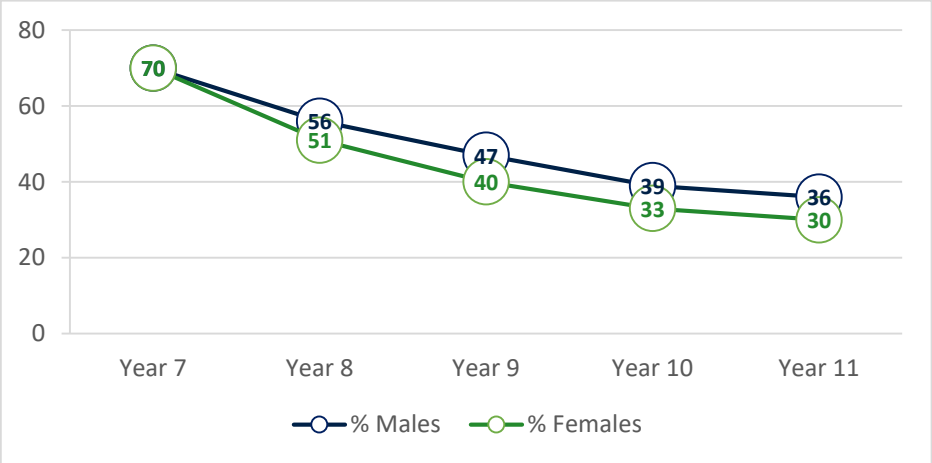
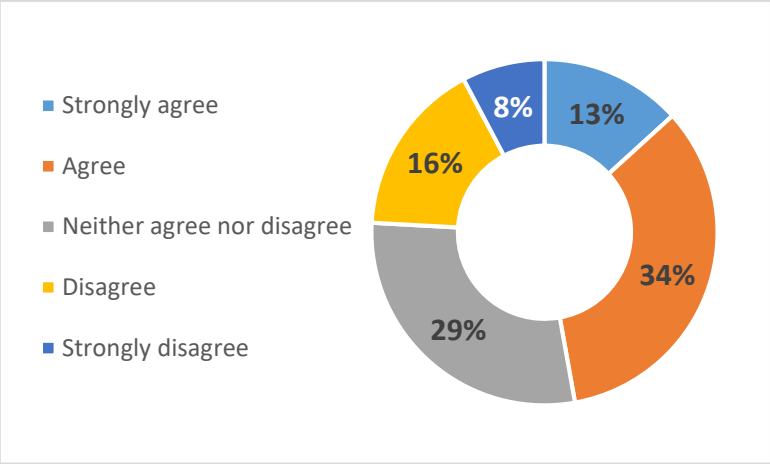


Table 4.7. Percentage who agree that students in their school have a lot of chances to help decide and plan school projects by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	51	53	49
Aneurin Bevan	45	49	42
Betsi Cadwaladr	46	49	44
Cardiff & Vale	49	52	47
Cwm Taf	50	51	49
Hywel Dda	47	50	45
Powys	46	50	43

Figure 4.29. Students' ideas are treated seriously at school



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (93,518)

Figure 4.30. Percentage who agree that students' ideas are treated seriously in their school by gender, year group and family affluence

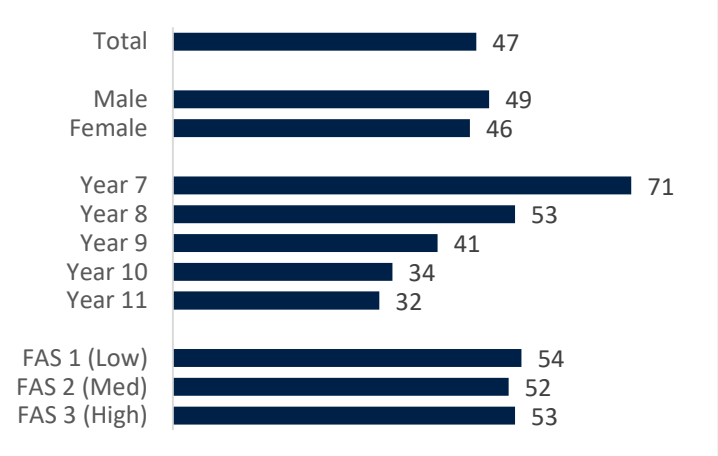


Figure 4.31. Percentage who agree that students' ideas are treated seriously in their school by ethnic group

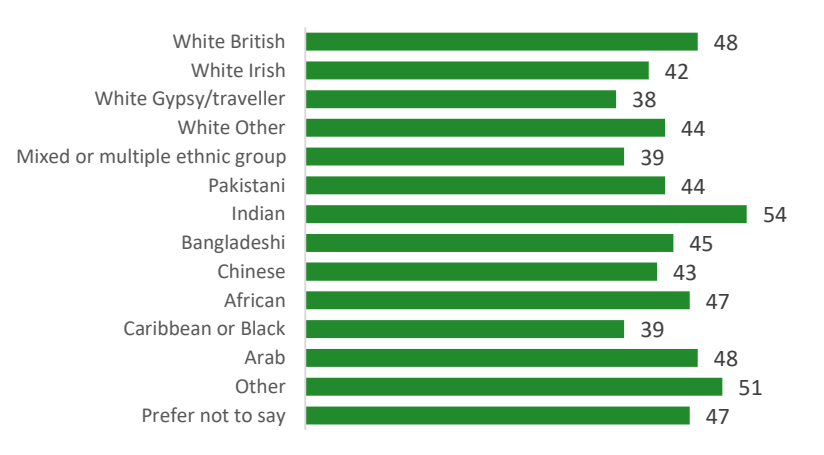


Figure 4.32. Percentage who agree that students' ideas are treated seriously in their school by gender and year group

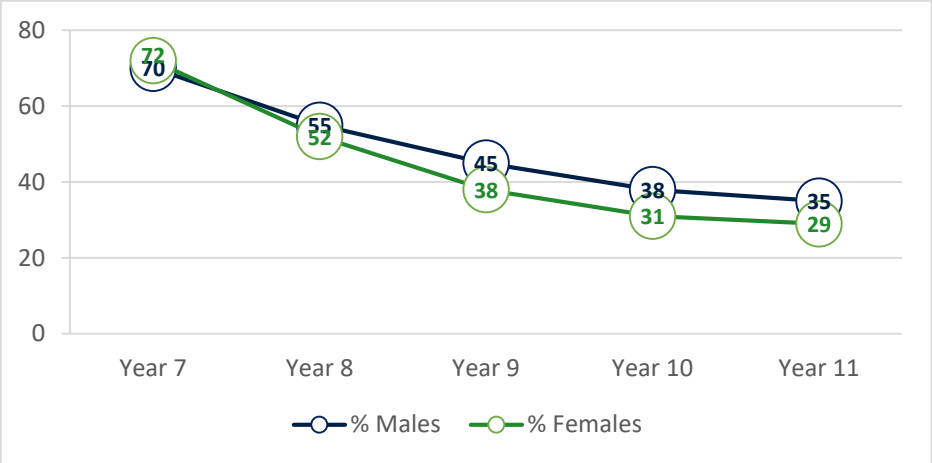
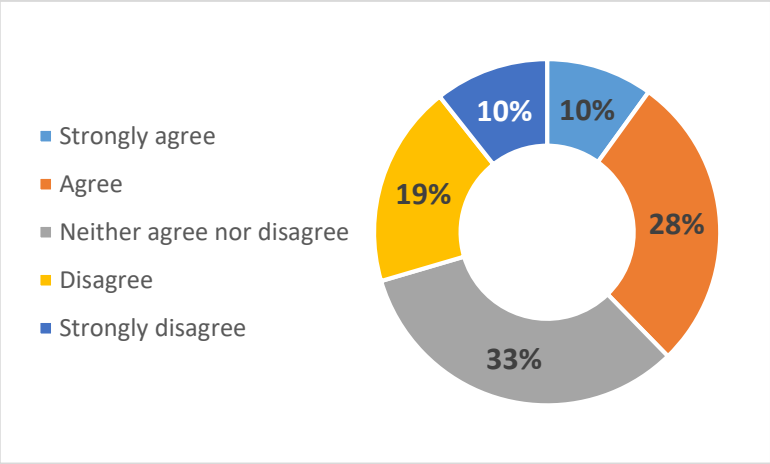


Table 4.8. Percentage who agree that students' ideas are treated seriously in their school by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	49	51	48
Aneurin Bevan	46	49	44
Betsi Cadwaladr	46	48	44
Cardiff & Vale	48	50	46
Cwm Taf	49	51	48
Hywel Dda	46	49	43
Powys	50	52	48

Figure 4.33. Own ideas are taken seriously at school



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (92,909)

Figure 4.34. Percentage who agree that their own ideas are taken seriously at their school by gender, year group and family affluence

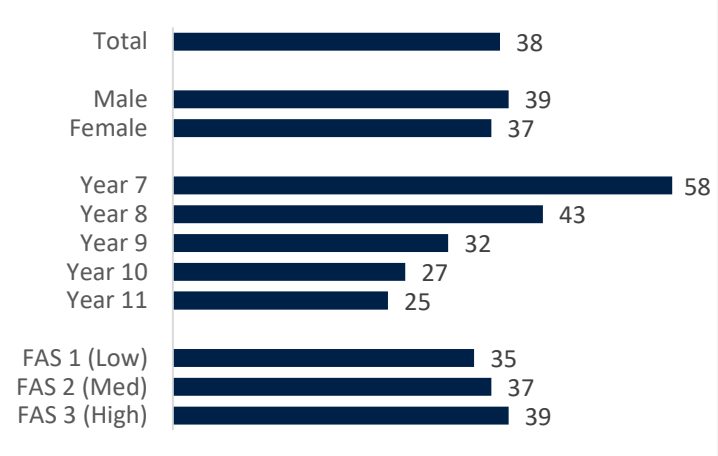


Figure 4.35. Percentage who agree that their own ideas are taken seriously at their school by ethnic group

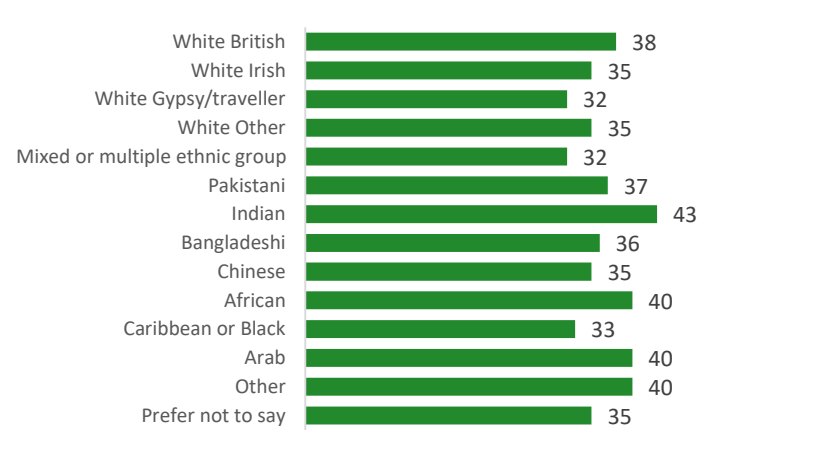


Figure 4.36. Percentage who agree that their own ideas are taken seriously at their school by gender and year group

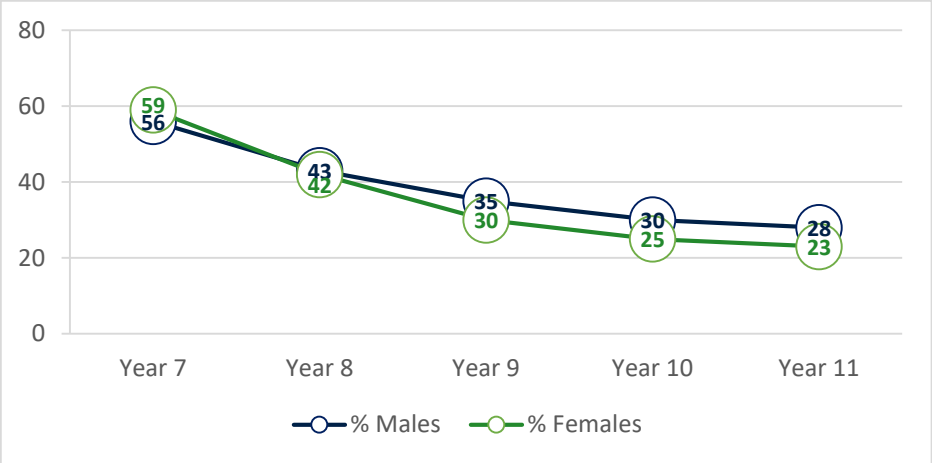
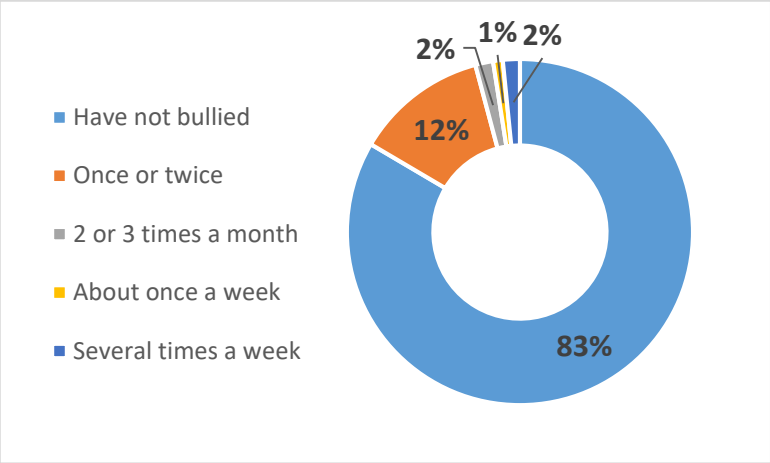


Table 4.9. Percentage who agree that their own ideas are taken seriously at their school by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	39	41	39
Aneurin Bevan	37	39	35
Betsi Cadwaladr	37	38	35
Cardiff & Vale	39	41	38
Cwm Taf	39	40	39
Hywel Dda	36	38	34
Powys	40	41	40

Figure 4.37. Bullied another person at school in the past couple of months



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (87,873)

Figure 4.38. Percentage who have bullied another person at school in the past couple of months by gender, year group and family affluence

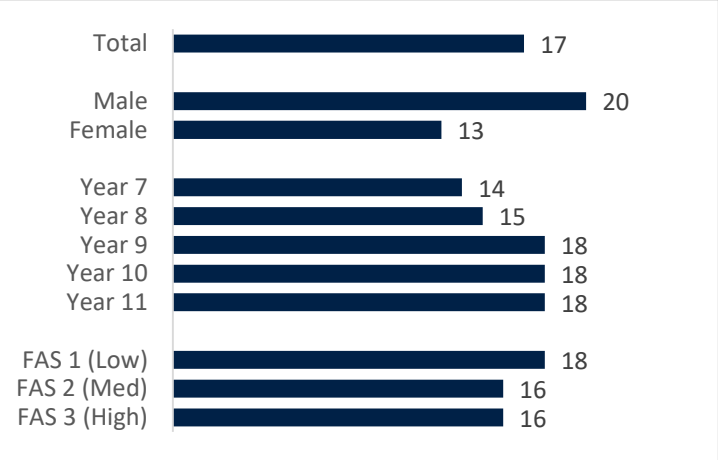


Figure 4.39. Percentage who have bullied another person at school in the past couple of months by ethnic group

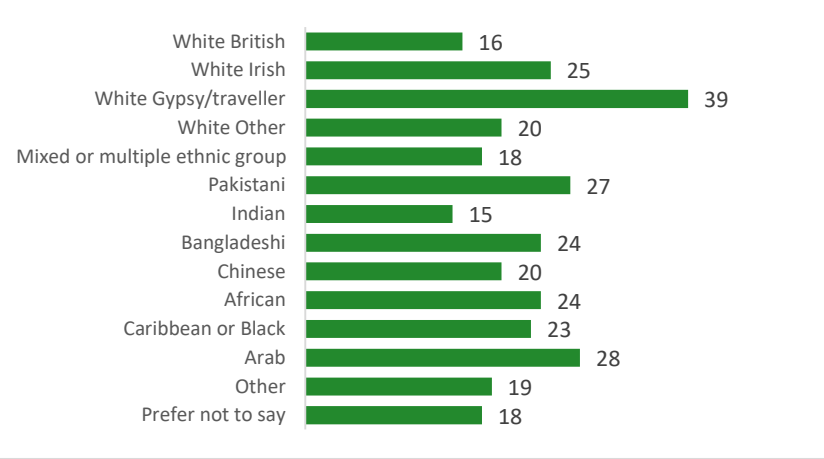


Figure 4.40. Percentage who have bullied another person at school in the past couple of months by gender and year group

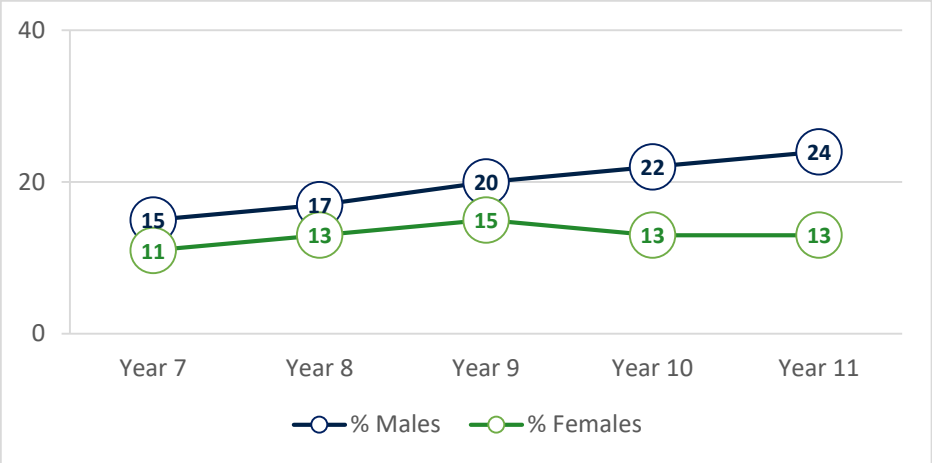
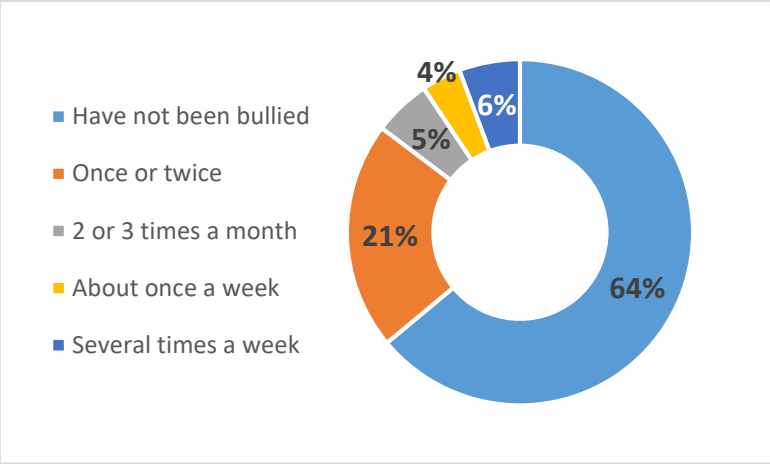


Table 4.10. Percentage who have bullied another person at school in the past couple of months by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	16	19	13
Aneurin Bevan	17	21	14
Betsi Cadwaladr	17	20	14
Cardiff & Vale	16	20	13
Cwm Taf	16	18	13
Hywel Dda	15	19	12
Powys	17	21	13

Figure 4.41. Been bullied at school in the past couple of months



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (89,085)

Figure 4.42. Percentage who have been bullied at school in the past couple of months by gender, year group and family affluence

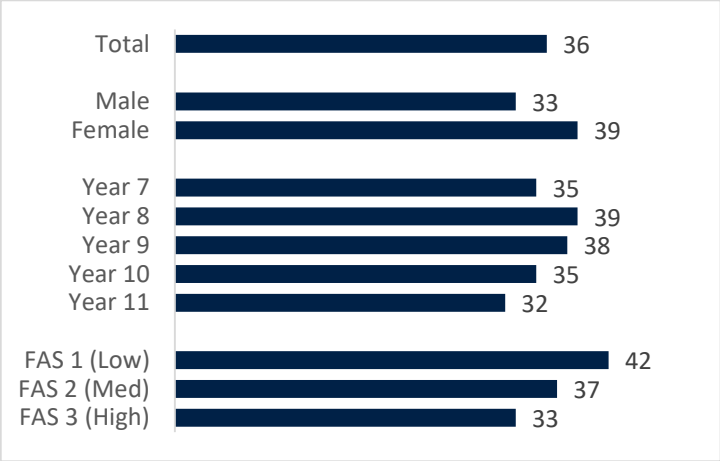


Figure 4.43. Percentage who have been bullied at school in the past couple of months by ethnic group

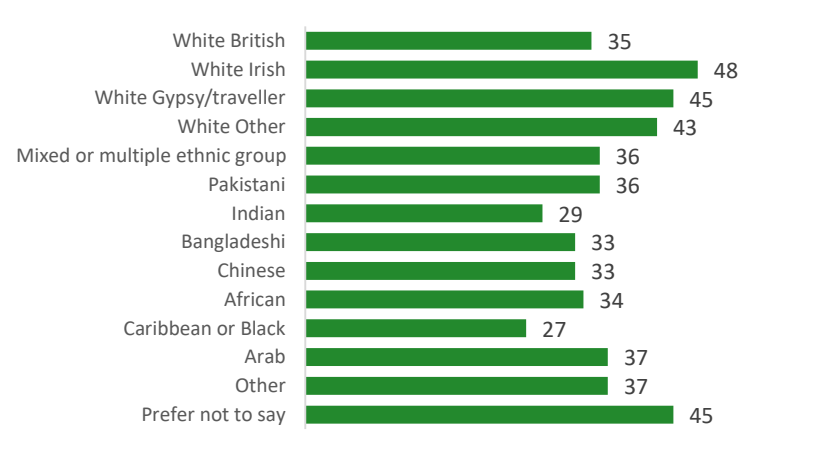


Figure 4.44. Percentage who have been bullied at school in the past couple of months by gender and year group

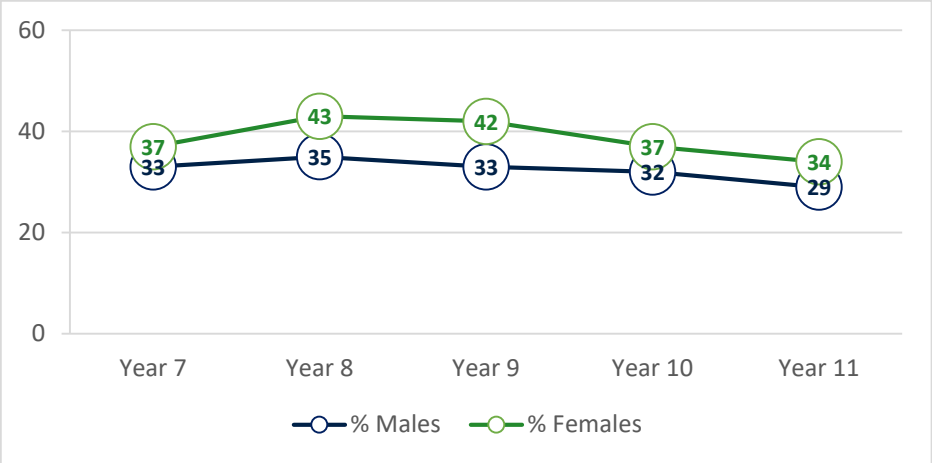
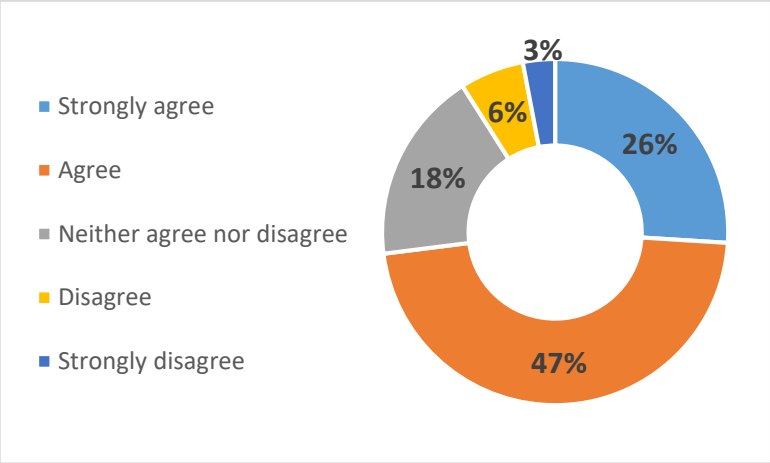


Table 4.11. Percentage who have been bullied at school in the past couple of months by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	37	33	40
Aneurin Bevan	37	33	41
Betsi Cadwaladr	37	33	40
Cardiff & Vale	34	32	35
Cwm Taf	37	33	40
Hywel Dda	35	32	38
Powys	35	33	37

Figure 4.45. Support at school for students who feel unhappy, worried or unable to cope



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (92,253)

Figure 4.46. Percentage who agree that there is support at their schools for students who feel unhappy, worried or unable to cope by gender, year group and family affluence

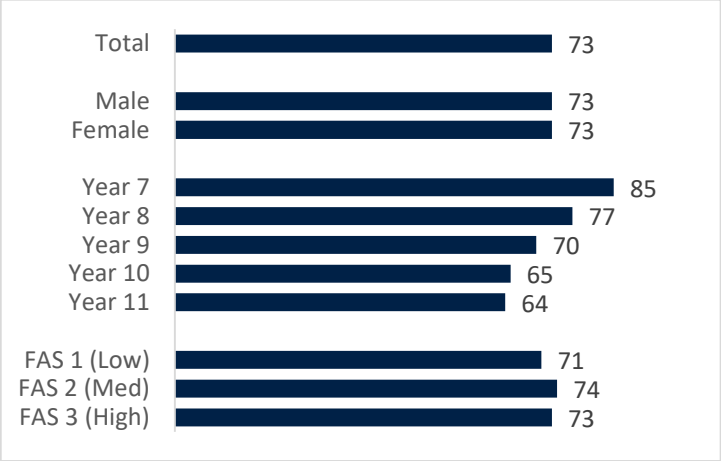


Figure 4.47. Percentage who agree that there is support at their schools for students who feel unhappy, worried or unable to cope by ethnic group

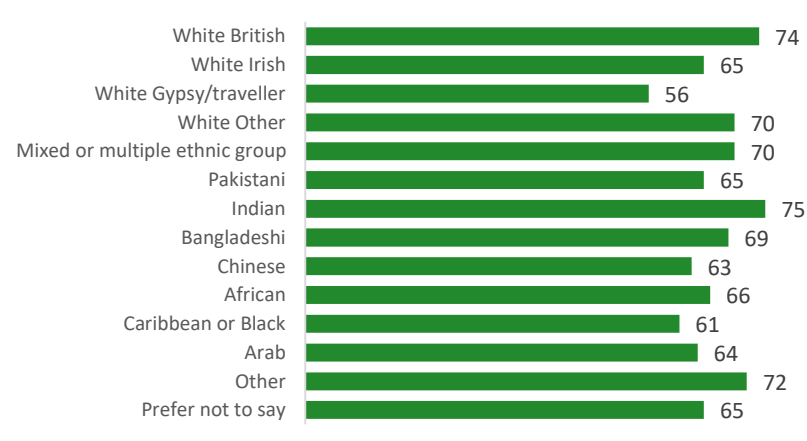


Figure 4.48. Percentage who agree that there is support at their schools for students who feel unhappy, worried or unable to cope by gender and year group

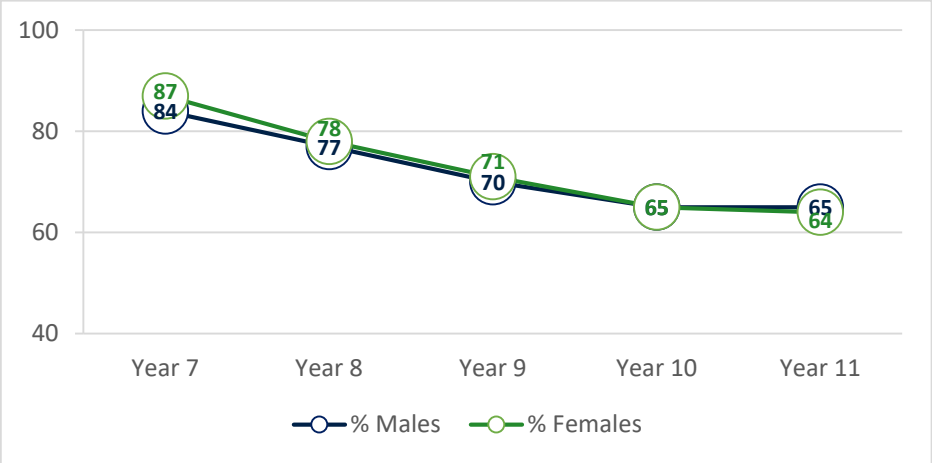


Table 4.12. Percentage who agree that there is support at their schools for students who feel unhappy, worried or unable to cope by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	74	73	74
Aneurin Bevan	70	71	70
Betsi Cadwaladr	71	72	72
Cardiff & Vale	74	74	75
Cwm Taf	74	72	77
Hywel Dda	74	74	74
Powys	76	75	77

5 Family life and friendships

Introduction

Adolescence is a period of increasing autonomy as adolescents seek greater independence from their parents or carers. This can bring about conflict and distance in parent-child relationships and whilst this is quite normal, parenting skills and capacity during this turbulent time predict adolescent health risk behaviours and outcomes, such as depression[1 44].

The social engagement adolescents experience beyond their family is a critical part of their social and emotional development. Peers have a significant effect on how adolescents process social information as they are acutely aware of, and sensitive to, how they are perceived by their peers. This means that peer influence on health and wellbeing peaks during adolescence[1].

Data from previous HBSC and Student Health and Wellbeing Surveys in Wales indicate that positive relationships between adolescents and their families are consistently associated with better health and wellbeing outcomes. However, more complex relationships between friendships and adolescent health are apparent. Whilst stronger peer relationships are associated with improved subjective well-being and mental health, they are also associated with greater substance use and, among adolescents with low levels of family support, worse mental health[7 45].

The technological context in which adolescents grow up is not only completely transformed from that which their parents and teachers will have experienced, but also one which is rapidly evolving. Whilst there are many positives to the changes in communication new technologies have brought, cyber-bullying has emerged as a new risk to adolescent wellbeing.

Cyberbullying is defined by Welsh Government as the use of information and communication technology (ICT), particularly mobile phones and the internet (including social networking sites, blogs, e-mail, video and instant messaging), to deliberately upset someone else[46]. Schools in Wales have been encouraged to take a whole school approach to preventing cyber-bullying and advice on how schools should approach prevention and management of cyber-bullying is currently the subject of a Welsh Government consultation. Cyber-bullying, however, has been found to be strongly associated with aggressive behaviour at school, suggesting that it may not only be a feature of wider patterns of bullying but also of aggression more broadly[47].

Research from the UK suggests detrimental short and long term wellbeing and education outcomes for young carers. These include experience of bullying, lower life satisfaction and lower educational aspiration and outcomes[48]. The Longitudinal Survey of Young People in England (LSYPE) found a significant difference in GCSE points score between carers and non-carers, equivalent to a 9 grade difference and a relationship between being a young carer at age 14 and being NEET (not in education, employment or training) at age 16 to 19[49]. The 'hidden' status of many young carers is a concern frequently raised by third sector organisations. Reasons for health, social and education services being unaware of young carers include parents' fear that children will be taken into care, young people's fear of stigmatisation and bullying and not enough effort from services to identify young carers[49]. Welsh Government published its strategy for carers, including young carers, in 2013 and therein it committed to ensure that young carers are fully integrated into all Welsh Government policies and strategies affecting carers and to use the Social Services and Well-being (Wales) Bill (now Act) to ensure that young carers can exercise their rights under the United Nations Convention on the Rights of the Child in respect of social and well-being services[50].

Findings

The survey included questions on perceptions of communication and support within the family, being a young carer, having friends that could be counted on, fighting and cyber-bullying. These questions were asked to students in all year groups. The findings on young carers represent the first estimate from a large scale survey on the prevalence of being a young carer in Wales that reflects Welsh Government's own definition.

Family communication and support

Ease of talking to father

Most adolescents (75%) reported that they found it easy or very easy to talk to their father, but 16% reported that they found it difficult and 9% found it very difficult (Figure 5.1). Males were more likely to report finding it easy or very easy to talk to their father than females, although this difference was less apparent at younger ages (Figures 5.2 and 5.4). The likelihood of finding it easy or very easy to talk to their father decreased with age and increased with family affluence (Figure 5.2).

The proportion of adolescents who found it easy or very easy to talk to their father did not vary widely across ethnic groups (Figure 5.3). Adolescents from Indian backgrounds were most likely to report they found it easy or very easy and those from Mixed or Multiple and Bangladeshi backgrounds the least likely.

There was little variation in reported ease of talking to their father across the LHBs and a gender difference similar to that seen at the national level was observed in all LHBs (Table 5.1).

Ease of talking to mother

Adolescents were more likely to report that they found it easy or very easy to talk to their mother than their father (Figures 5.1 and 5.5). Only 10% reported that they found it difficult to talk to their mother and 4% that it was very difficult (Figure 5.5). As with talking to their father there was a decrease in the proportion finding it easy or very easy to talk to their mother with age and an increase with family affluence (Figure 5.6). Again, males were more likely than females to report they found it easy or very easy to talk to their mother, but the difference was smaller and was negligible at younger ages (Figures 5.6 and 5.8).

Adolescents from Indian, Arab and White British backgrounds were most likely to report that they found it easy or very easy to talk to their mother, whilst those from White Gypsy/Traveller and Mixed or Multiple ethnic groups were least likely to do so (Figure 5.7).

Differences in reported ease of talking to their mother were small across the LHBs (Table 5.2).

Emotional help and support from family

Students were asked to rate the degree to which they get the emotional help and support they need from their family on a strongly disagree to strongly agree scale from 1 to 7. Twelve percent of adolescents gave the strongest disagree score (1) to this question and a further 12% were on the disagree side of a neutral response (scores of 2 or 3). The most frequently cited score, however, was 7, the strongest agree score (43%) (Figure 5.9).

Sixty-nine percent of adolescents agreed that they get the emotional help and support they need from their family (scores of 5, 6 or 7). This proportion varied little by gender, although was slightly

wider in the middle years of adolescence, but decreased with age and increased with increasing affluence (Figures 5.10 and 5.12).

The proportion of adolescents who agreed that they get the emotional help and support they need from their family ranged from 60% to 70% in the majority of ethnic groups, but was lower among those from White Gypsy/Traveller, Chinese and Pakistani backgrounds (Figure 5.11).

There was little variation in agreement that families provided emotional help and support across the LHBs, where it ranged from 67% in Aneurin Bevan and Cardiff and Vale to 71% in Cwm Taf and Hywel Dda (Table 5.3).

Young carers

Regular caring responsibilities

Sixteen percent of adolescents identified themselves as having a caring responsibility for someone in their family as a result of them being disabled, physically or mentally unwell or having a problem with alcohol or drugs. Of these young carers, one-quarter reported that they looked after more than one person, representing 4% of all adolescents (Figures 5.13 and 5.14).

The likelihood of adolescents identifying themselves as a young carer varied little by gender or age, but decreased with increasing family affluence from 21% among adolescents from the least affluent households to 14% among adolescents from the most affluent (Figures 5.14 and 5.16).

Identifying as a young carer ranged from 16% to 20% of adolescents in most ethnic groups, but was lower in adolescents from Indian backgrounds and higher in those from White Gypsy/Traveller and White Irish backgrounds (Figure 5.15).

There was little variation in the proportion of young people identifying as a young carer across the LHBs (Table 5.4).

Peer relationships

Being able to count on friends

Students were asked to rate the degree to which they can count on their friends when things go wrong on a strongly disagree to strongly agree scale from 1 to 7. Ten percent of adolescents gave the strongest disagree score (1) to this question and a further 13% were on the disagree side of a neutral response (scores of 2 or 3). Over one-third (36%), however, gave the most frequently cited score of 7, the strongest agree score (Figure 5.17).

Overall, 67% of adolescents agreed that they can count on their friends when things go wrong. There was a small decrease in the proportion agreeing as age increased, but very little difference by gender (Figures 5.18 and 5.20). Adolescents from the most affluent families were more likely to agree that they can count on their friends than those from the least affluent families (Figure 5.18).

In all ethnic groups over half of adolescents agreed they can count on their friends when things go wrong and this ranged from 53% of those from a White Gypsy/Traveller background to 68% of those from a White British Background (Figures 5.19).

The proportion of adolescents who agreed they can count on their friends varied little by LHB, although the size of the gender gap ranged from 0% in Cardiff and Vale to 4% in Betsi Cadwaladr and Powys (Table 5.5).

Fighting

Just over one-third (36%) of adolescents reported that they had been in a physical fight in the last 12 months, with 11% reporting they had been in three or more fights (Figures 5.21 and 5.22).

Males were much more likely to report having been in three or more fights in the last 12 months than girls (16% compared to 6% respectively). Trends by age and family affluence were less clear, although there was a decline in reported fighting by age in males, which was not observed in females (Figures 5.22 and 5.24).

Reporting having been in three or more fights in the last 12 months varied widely by ethnic group with those from White Gypsy/traveller backgrounds most likely to have done so (Figure 5.23), but was relatively constant across LHBs (Table 5.6).

Cyber-bullying - perpetration[e]

A large majority of adolescents (90%) reported that they had not taken part in cyber-bullying in the past couple of months and of the remainder, most reported they had only done so once or twice. Only 1% of adolescents reported they had cyber-bullied several times a week (Figure 5.25).

There was an increase in reported cyber-bullying across years 7 to 10, but very little difference in reported prevalence on the basis of family affluence (Figure 5.26). Overall, males were slightly more likely than females to report that they had cyber-bullied in the past couple of months and this was seen across all year groups except Year 8 and widened in Year 11 (Figures 5.26 and 5.28).

There was some variation in rates of reported cyber-bullying across the different ethnic groups, with the highest rates reported by adolescents from White Gypsy/Traveller, Pakistani and Caribbean or Black backgrounds (Figure 5.27).

There was little variation in reported cyber-bullying across the LHBs where overall rates ranged from 8% in Powys to 11% in Cwm Taf (Table 5.7).

Cyber-bullying - experience

A larger proportion of adolescents reported that they had been a victim rather than a perpetrator of cyber-bullying (Figures 5.25 and 5.29). Thirteen percent reported they had been cyber-bullied once or twice in the past couple of months and 3% once a week or more (Figure 5.29).

Overall, 19% of adolescents reported they had experienced cyber-bullying in the past couple of months. There was a larger gender gap in reported rates of being cyber-bullied compared to perpetrating cyber-bullying, with 23% of adolescent females reporting being cyber-bullied compared to 15% of males (Figures 5.26 and 5.30). This gender gap was at its widest among Year 9 students (Figure 5.32). Overall rates of reported cyber-bullying also peaked in Year 9 and were slightly higher among adolescents from the least affluent households (Figure 5.30).

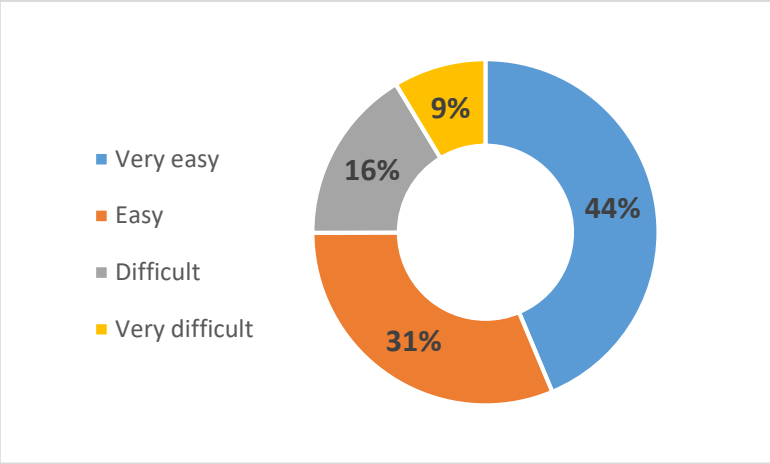
Adolescents from White Gypsy/Traveller and White Irish backgrounds were most likely to report having been cyber-bullied in the past couple of months and those from an Indian background the least likely (Figure 5.31).

Across the LHBs, the proportion of adolescents reporting that they had been cyber-bullied varied little and a gender gap of similar magnitude to the national data was seen in all areas (Table 5.8).

---

[e] Findings on bullying are presented in chapter 4

Figure 5.1. Ease of talking to father



Base: All respondents in years 7 to 11 who gave an answer, excluding those who do not have / do not see their father, surveyed between September and December 2017 (77,118)

Figure 5.2. Percentage who find it easy or very easy to talk to their father by gender, year group and family affluence

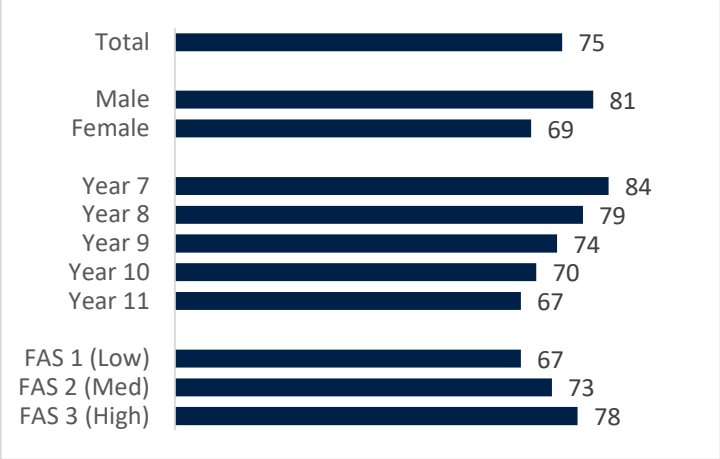


Figure 5.3. Percentage who find it easy or very easy to talk to their father by ethnic group

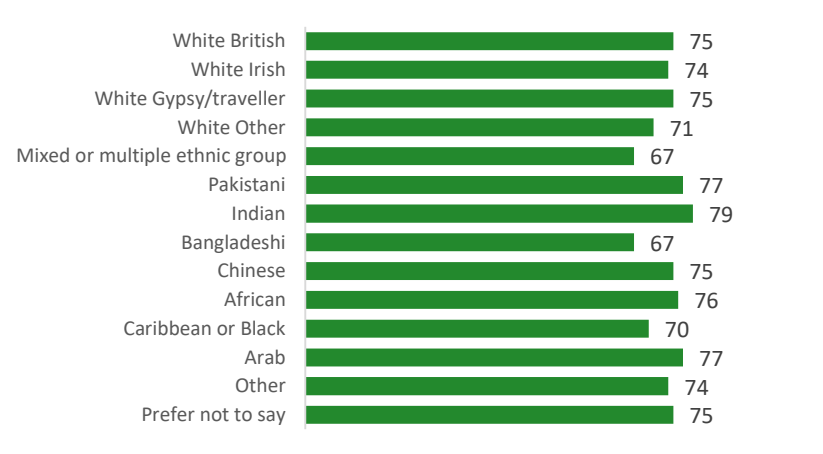


Figure 5.4. Percentage who find it easy or very easy to talk to their father by gender and year group

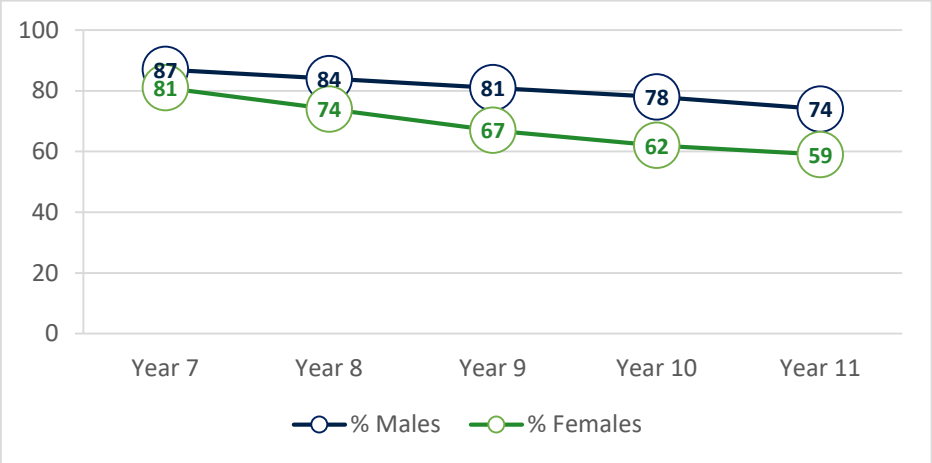
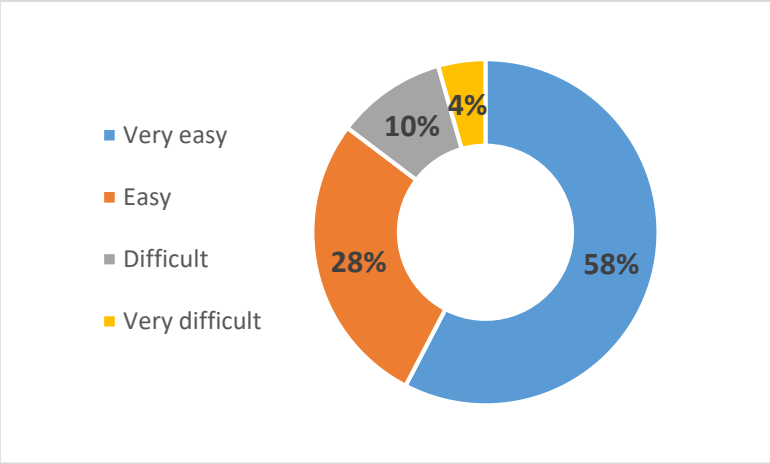


Table 5.1. Percentage who find it easy or very easy to talk to their father by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	74	81	69
Aneurin Bevan	74	81	68
Betsi Cadwaladr	75	82	69
Cardiff & Vale	74	80	69
Cwm Taf	77	83	72
Hywel Dda	75	82	69
Powys	76	83	69

Figure 5.5. Ease of talking to mother



Base: All respondents in years 7 to 11 who gave an answer, excluding those who do not have / do not see their mother, surveyed between September and December 2017 (83,481)

Figure 5.6. Percentage who find it easy or very easy to talk to their mother by gender, year group and family affluence

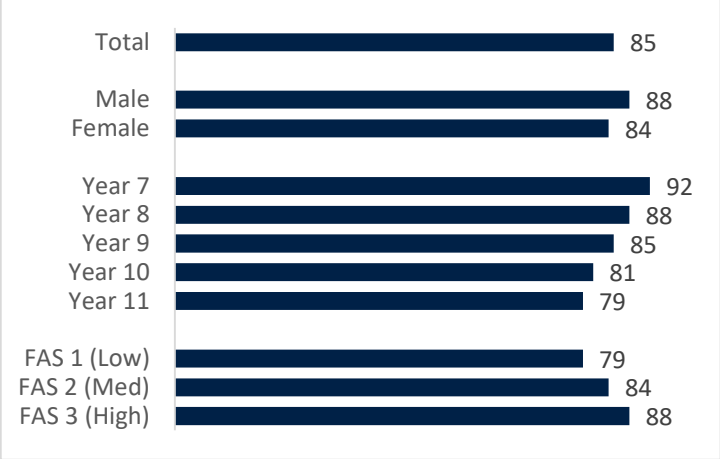


Figure 5.7. Percentage who find it easy or very easy to talk to their mother by ethnic group

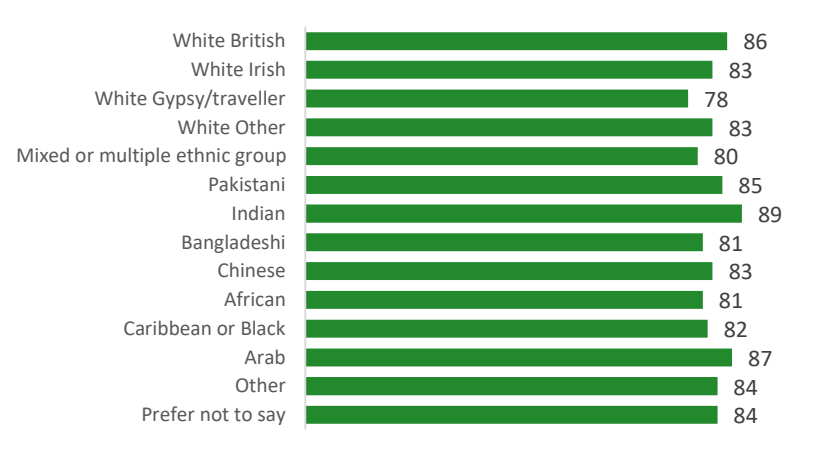


Figure 5.8. Percentage who find it easy or very easy to talk to their mother by gender and year group

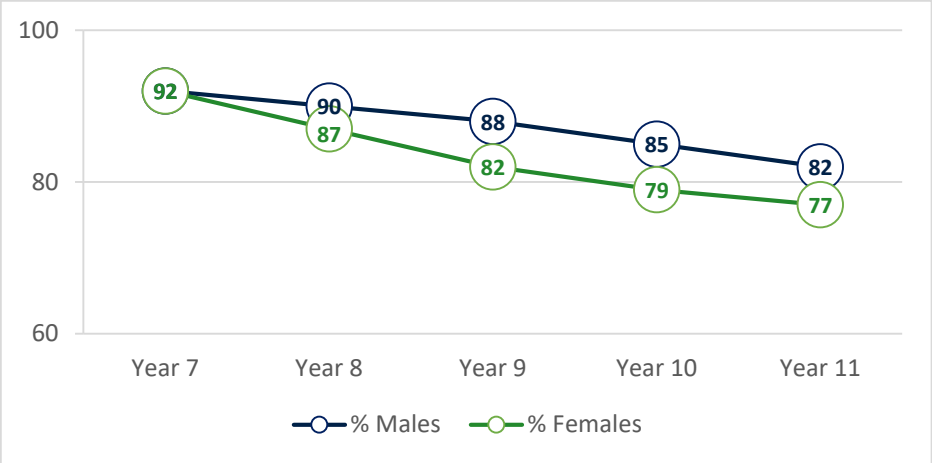
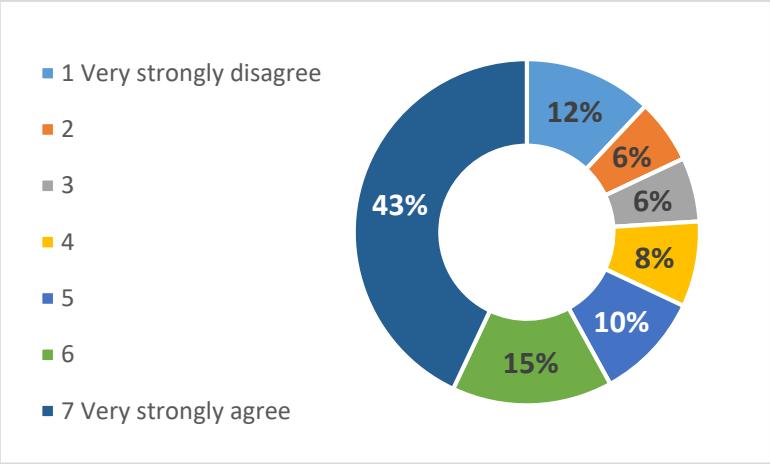


Table 5.2. Percentage who find it easy or very easy to talk to their mother by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	85	87	84
Aneurin Bevan	85	88	82
Betsi Cadwaladr	85	88	83
Cardiff & Vale	86	87	84
Cwm Taf	87	89	86
Hywel Dda	85	88	83
Powys	86	88	84

Figure 5.9. Help and emotional support from the family



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (83,465)

Figure 5.10. Percentage who agreed that they got the help and emotional support that they needed from their family by gender, year group and family affluence

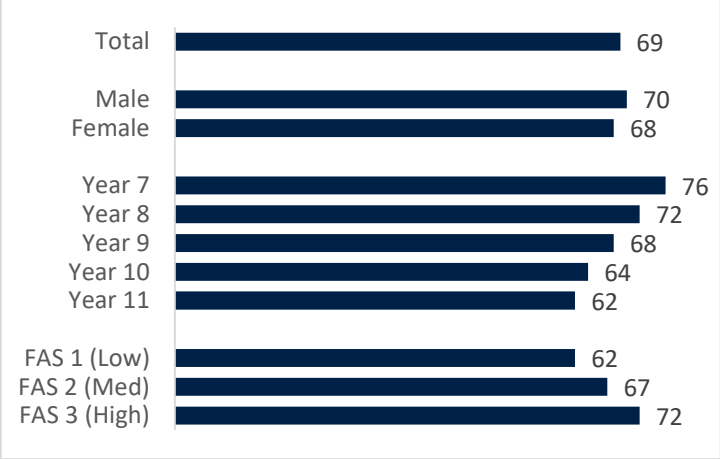


Figure 5.11. Percentage who agreed that they got the help and emotional support that they needed from their family by ethnic group

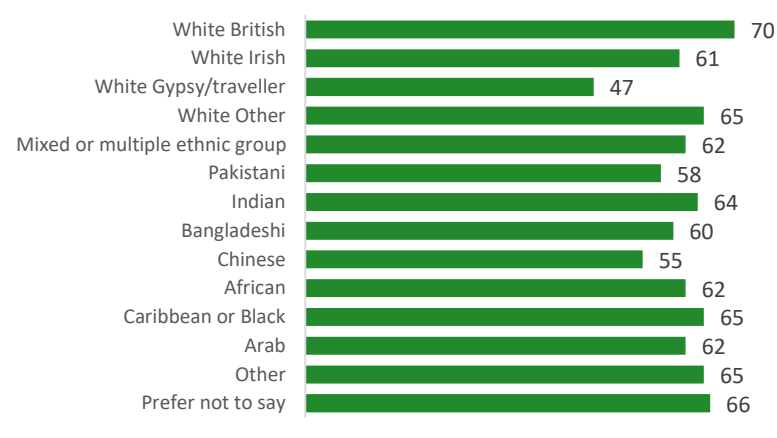


Figure 5.12. Percentage who agreed that they got the help and emotional support that they needed from their family by gender and year group

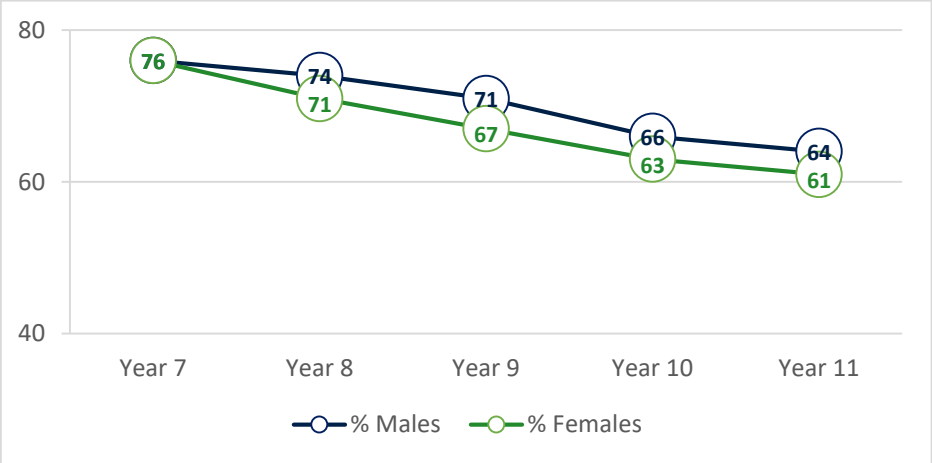
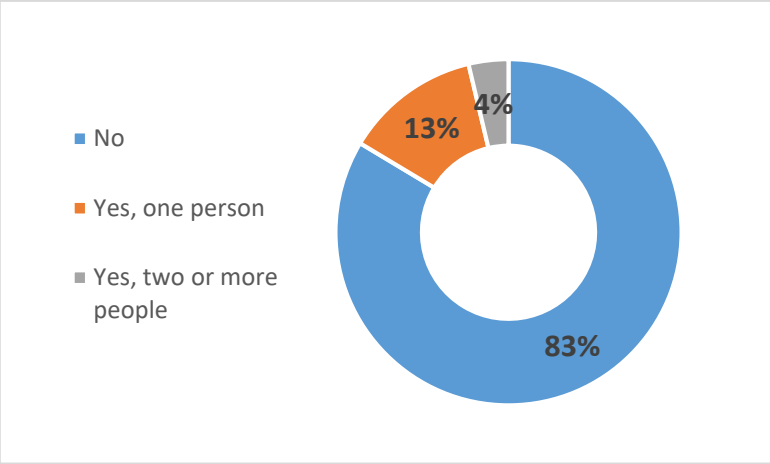


Table 5.3. Percentage who agreed that they got the help and emotional support that they needed from their family by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	69	71	68
Aneurin Bevan	67	69	66
Betsi Cadwaladr	68	70	67
Cardiff & Vale	67	68	66
Cwm Taf	71	72	70
Hywel Dda	71	72	70
Powys	68	71	67

Figure 5.13. Caring for a family member



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (83,153)

Figure 5.14. Percentage who care for a family member by gender, year group and family affluence

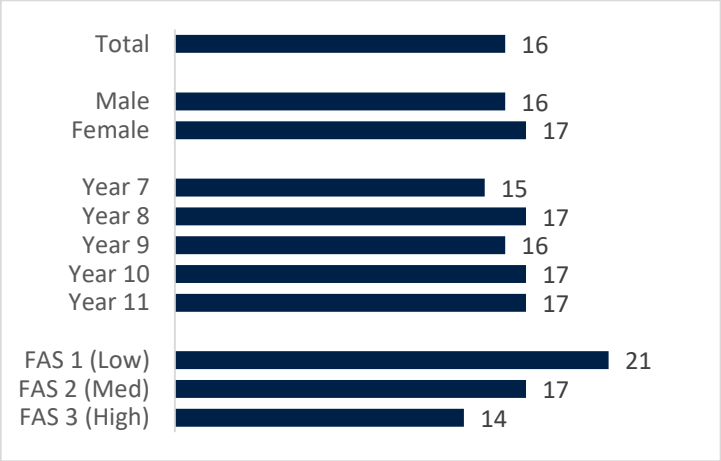


Figure 5.15. Percentage who care for a family member by ethnic group

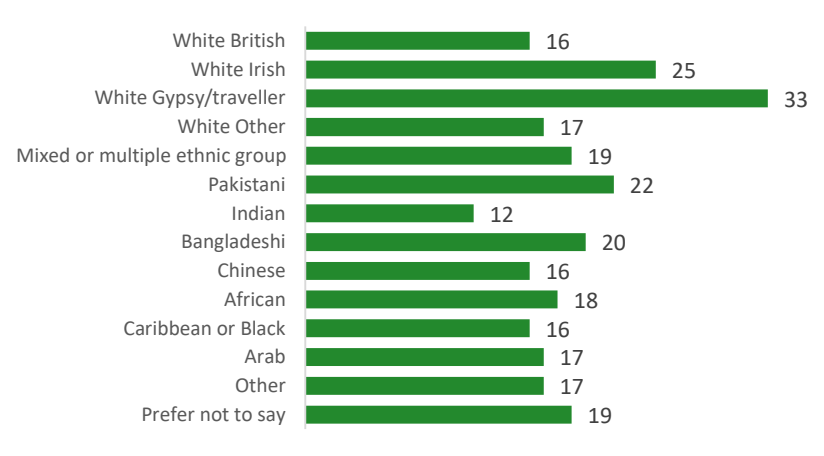


Figure 5.16. Percentage who care for a family member by gender and year group

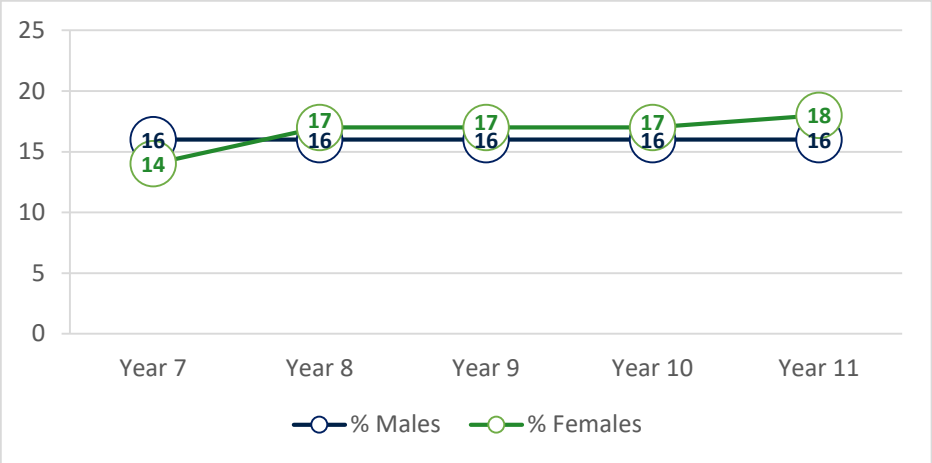
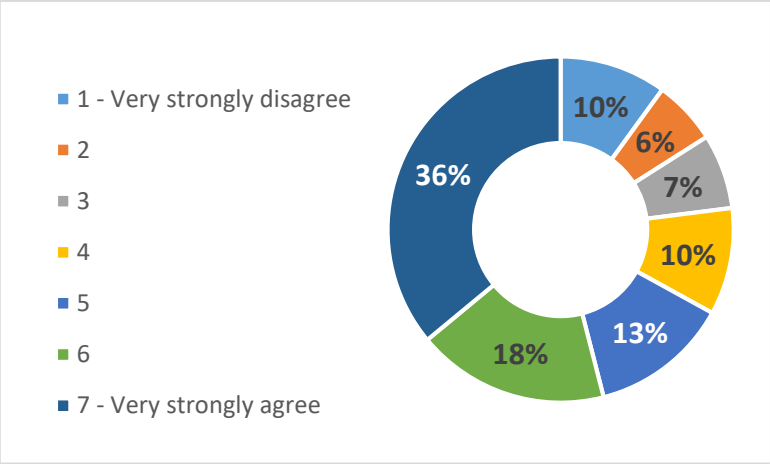


Table 5.4. Percentage who care for a family member by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	17	16	17
Aneurin Bevan	18	17	18
Betsi Cadwaladr	16	15	17
Cardiff & Vale	15	15	14
Cwm Taf	18	18	18
Hywel Dda	15	14	15
Powys	14	13	14

Figure 5.17. Can count on friends when things go wrong



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (90,285)

Figure 5.18. Percentage who can count on their friends by gender, year group and family affluence

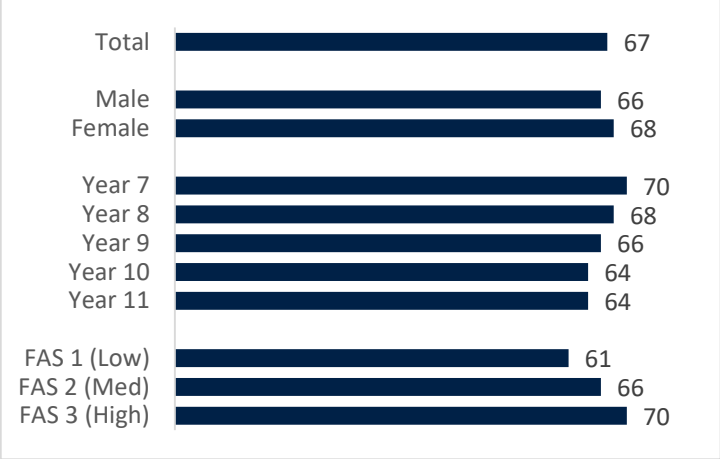


Figure 5.19. Percentage who can count on their friends by ethnic group

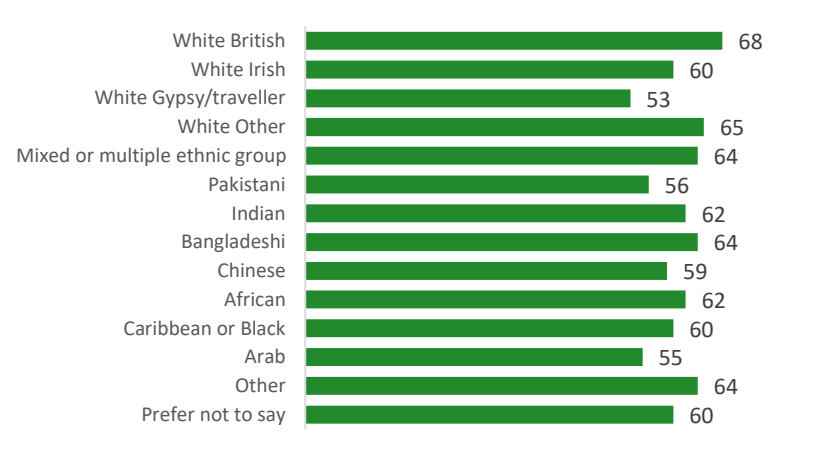


Figure 5.20. Percentage who can count on their friends by gender and year group

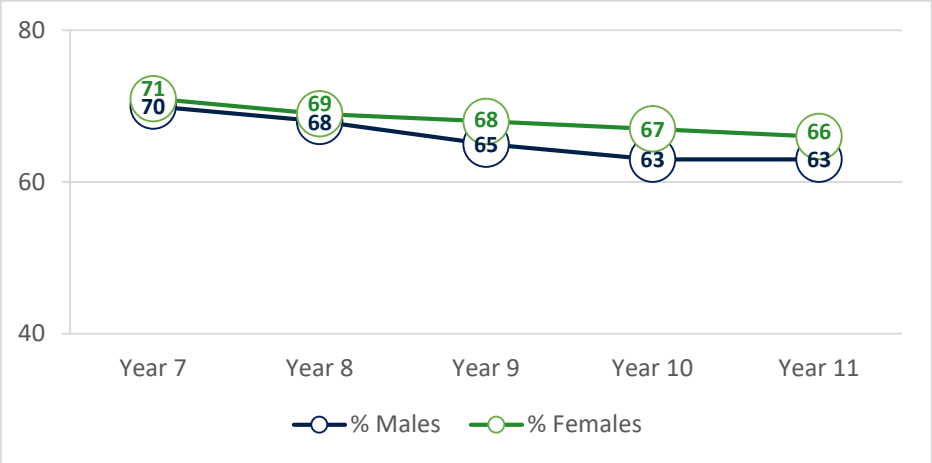
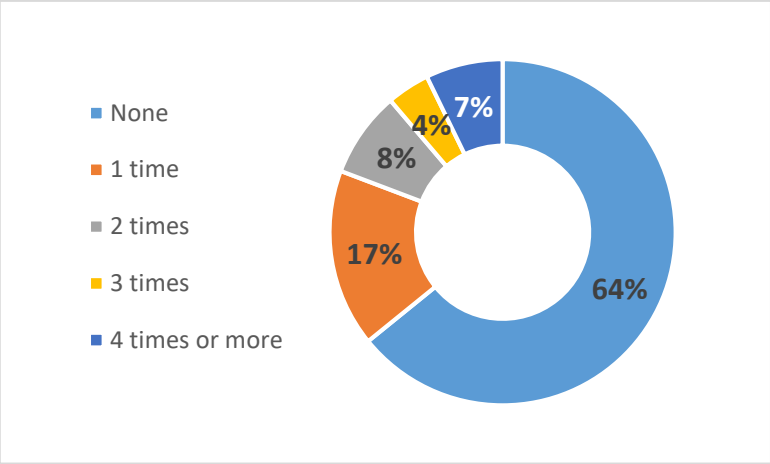


Table 5.5. Percentage who can count on their friends by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	67	66	69
Aneurin Bevan	66	65	66
Betsi Cadwaladr	67	65	69
Cardiff & Vale	66	66	66
Cwm Taf	67	66	69
Hywel Dda	69	68	71
Powys	67	65	69

Figure 5.21. Times in a physical fight in the last 12 months



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (25,310)

Figure 5.22. Percentage who have been in a fight three or more times in the last 12 months by gender, year group and family affluence

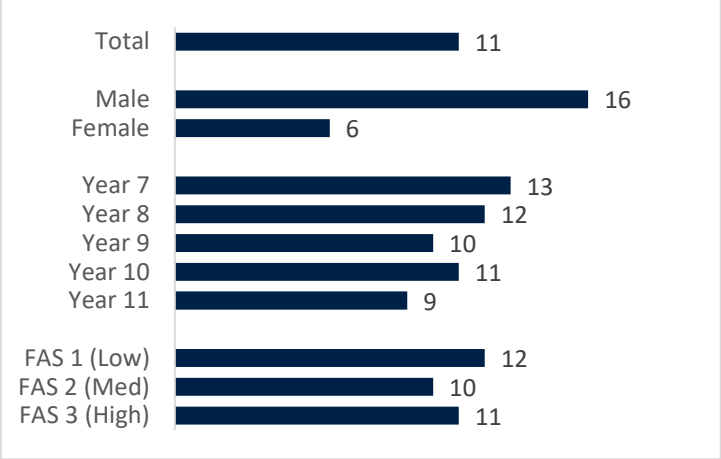


Figure 5.23. Percentage who have been in a fight three or more times in the last 12 months by ethnic group

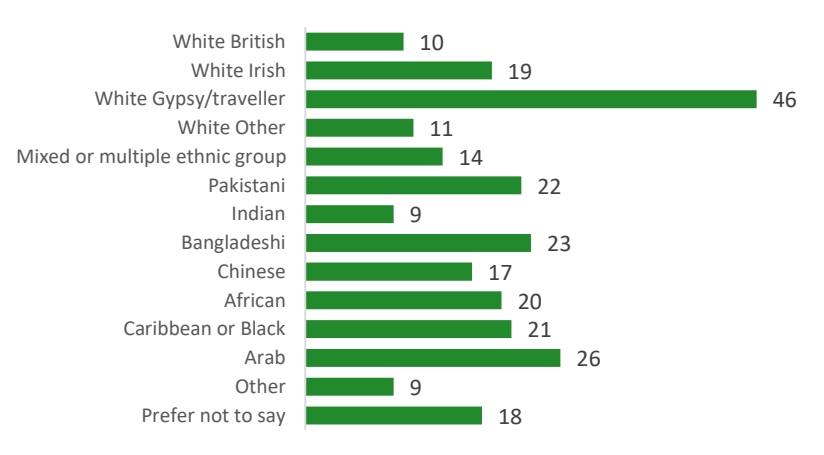


Figure 5.24. Percentage who have been in a fight three or more times in the last 12 months by gender and year group

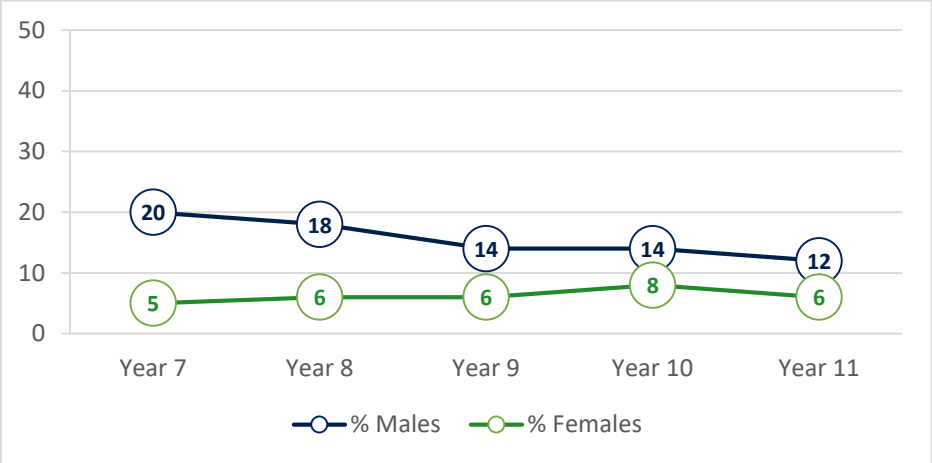
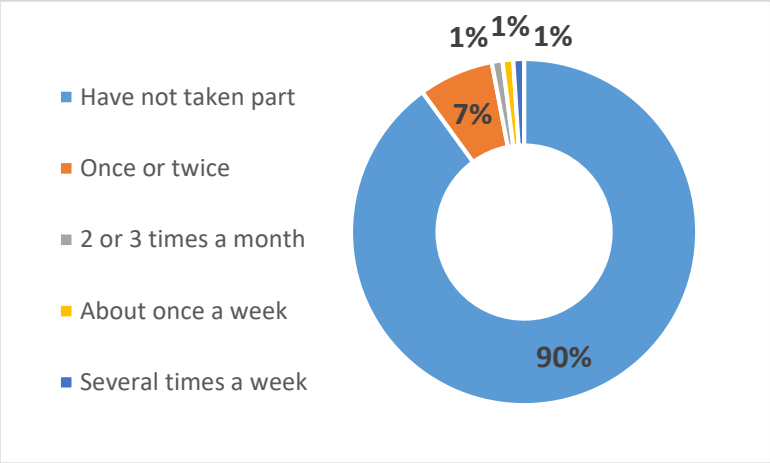


Table 5.6. Percentage who have been in a fight three or more times in the last 12 months by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	12	18	5
Aneurin Bevan	11	16	7
Betsi Cadwaladr	11	15	7
Cardiff & Vale	10	15	4
Cwm Taf	12	17	8
Hywel Dda	11	14	8
Powys	12	16	7

Figure 5.25. Times taken part in cyber-bullying in the past couple of months



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (24,844)

Figure 5.26. Percentage who have cyber-bullied others in the past couple of months by gender, year group and family affluence

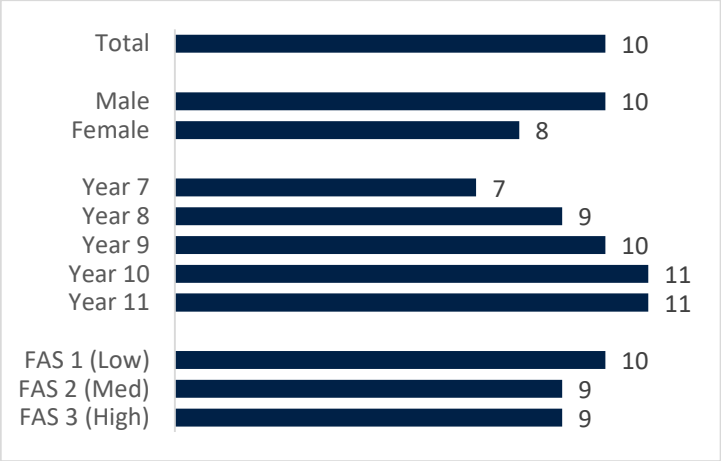


Figure 5.27. Percentage who have cyber-bullied others in the past couple of months by ethnic group

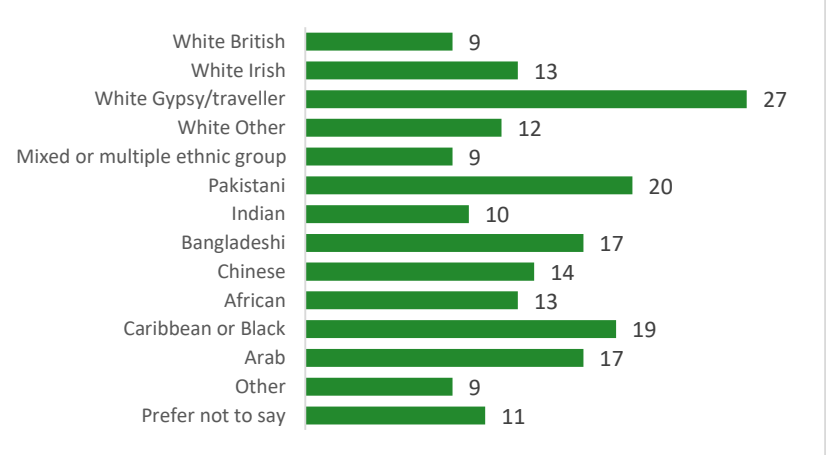


Figure 5.28. Percentage who have cyber-bullied others in the past couple of months by gender and year group

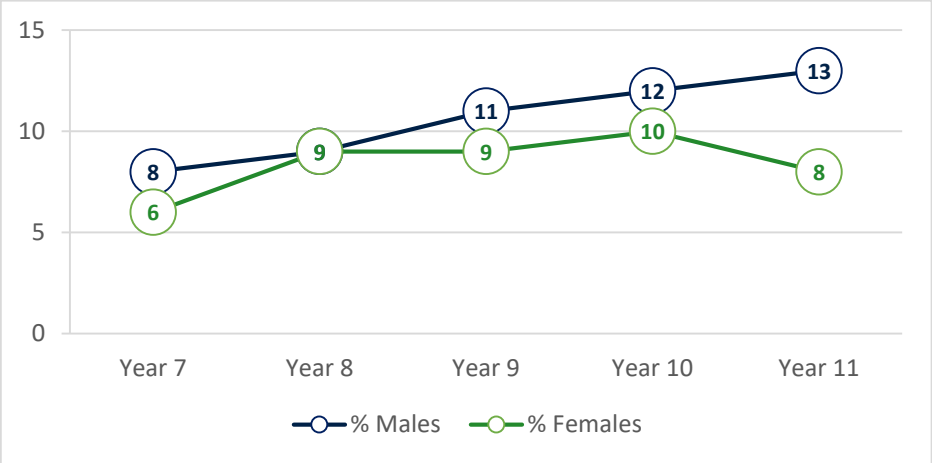
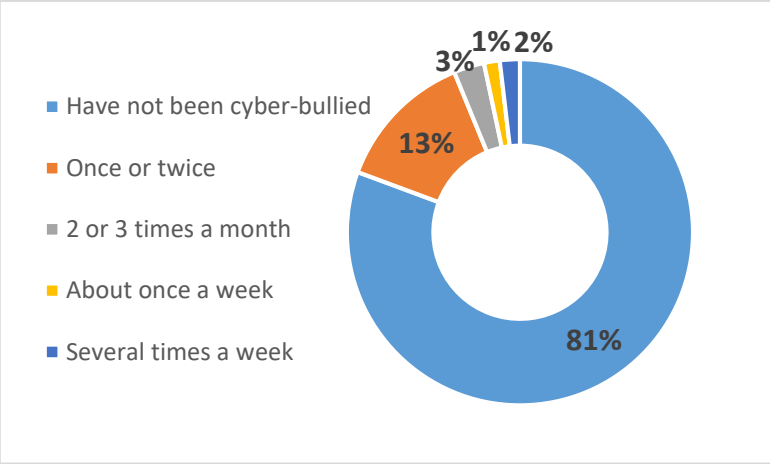


Table 5.7. Percentage who have cyber-bullied others in the past couple of months by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	10	10	8
Aneurin Bevan	10	11	9
Betsi Cadwaladr	9	10	8
Cardiff & Vale	9	10	7
Cwm Taf	11	10	10
Hywel Dda	10	10	9
Powys	8	9	7

Figure 5.29. Times been cyber-bullied in the past couple of months



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (88,301)

Figure 5.30. Percentage who have been cyber-bullied in the past couple of months by gender, year group and family affluence

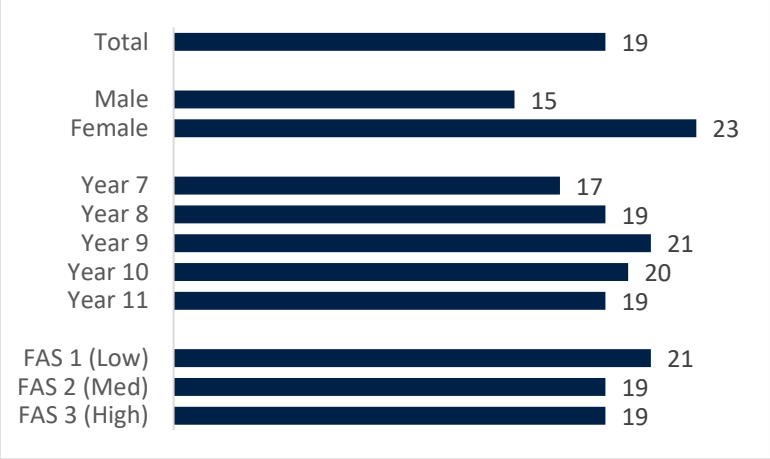


Figure 5.31. Percentage who have been cyber-bullied in the past couple of months by ethnic group

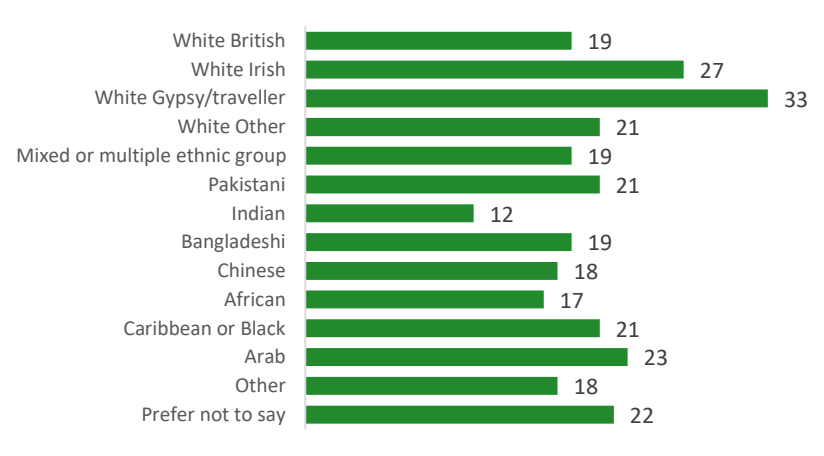


Figure 5.32. Percentage who have been cyber-bullied in the past couple of months by gender and year group

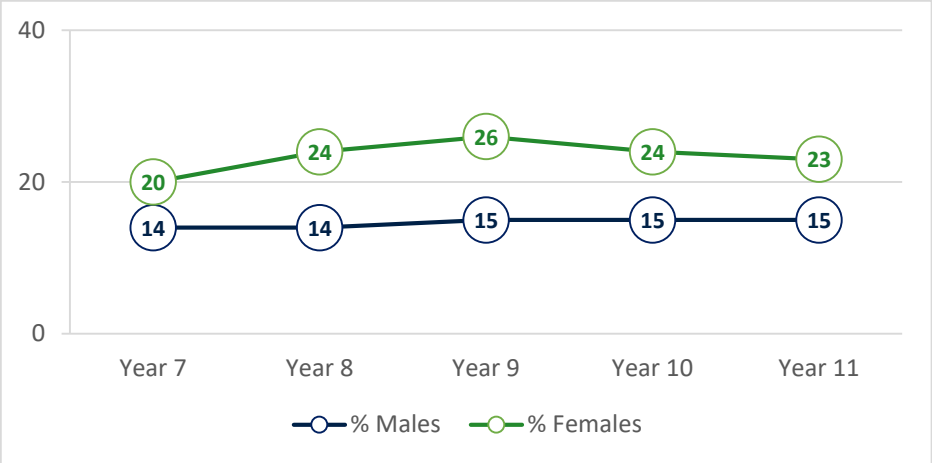


Table 5.8. Percentage who have been cyber-bullied in the past couple of by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	20	16	24
Aneurin Bevan	20	15	25
Betsi Cadwaladr	19	14	24
Cardiff & Vale	18	14	20
Cwm Taf	20	16	25
Hywel Dda	18	14	22
Powys	18	14	22

6 Relationships

Introduction

The World Health Organization's definition of sexual health acknowledges that it goes beyond the absence of sexual disease or dysfunction to include *"physical, emotional, mental and social well-being in relation to sexuality"*[51]. It further recognises that sexual health *"requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence"*.

Adolescence is an important time for sexual health development when young people establish norms around sexual activity, form attitudes towards sex and sexuality and may experience sexual behaviours for the first time[52].

Early sexual initiation and inconsistent condom use are recognised risk factors for Sexually Transmitted Infection (STI) transmission and unplanned pregnancy[1 53]. The situation in Wales regarding STIs and adolescent conceptions is mixed. There have been substantial improvements in conception rates for under-18 year olds, which in 2016 were at an all time low since 1998 (20.9/1000 women aged 15-17 in 2016, versus 55.0/1000 in 1998)[54]. Similar improvements have not, however, been seen in STI rates. Diagnoses of gonorrhoea, chlamydia, HIV and herpes have all increased between 2011 and 2017 in both the general population and among young people aged 15-24 years old, the age group most frequently affected by STIs in Wales[55].

Sexual risk behaviour, including early sexual initiation, clusters with other health risk behaviours. Longitudinal research in Scotland has found strong associations between early substance use (smoking, drinking alcohol and illicit drug use) and early sexual initiation (before 16 years of age) and between late adolescent substance use and having had multiple sexual partners. There was little difference in these relationships by gender or across social class groups[56]. Cross-national analyses of HBSC data have found similar for alcohol and tobacco use and early sexual initiation. They also found a negative relationship between early sexual initiation and attachment to school, a concept including liking school, being treated fairly and belonging at their school[57].

Sexting, the exchange of sexually explicit images, is associated with being sexually active among adolescents[58 59] and with other health risk behaviours. There is evidence, however, that the risk of substance use is higher in single adolescents who engage in sexting compared to their counterparts who are in a romantic relationship[60].

Sexual health is a priority in Wales that is being addressed in a number of ways. Welsh Government's recent Sexual Health and Wellbeing Action Plan sought to promote positive sexual health and wellbeing and improve delivery of sexual health services[61]. This has been followed by a comprehensive review of sexual health services in Wales[62] and creation of a Sex and Relationships Education Expert Panel to examine the current and future status and development of the Sex and Relationships Education curriculum in Wales[63]. Furthermore, the recent Violence against Women, Domestic Abuse and Sexual Violence (Wales) Act 2015 has placed a statutory duty on Local Authorities and LHBs to prepare joint local strategies to tackle violence against women, domestic abuse and sexual violence, which must include increasing awareness in children and young people of the importance of safe, equal and healthy relationships[64].

Findings

The survey included questions on sexting for students in all year groups and on sexual behaviour for students in year 11. Year 11 students who stated they had ever had sexual intercourse where asked about contraceptive use and age at first sex. Data on sexual behaviour by ethnicity are not presented due to low base sizes.

Sending a sexually explicit image (sexting)

Overall, 11% of adolescents reported that they had ever sent a sext and 7% had sent more than one (Figure 6.1). There were very small differences in the proportion who had ever sent a sext by gender and by FAS category, but a striking increase by year group, particularly across years 9 to 11, peaking at 25% in year 11 (Figures 6.2 and 6.4).

Ever having sent a sext was most likely to be reported among adolescents from White Gypsy/Traveller, Caribbean or Black, and Arab backgrounds (Figure 6.3).

Across the LHBs, the proportion of adolescents who had ever sent a sext did not vary widely, but was lowest in Powys (8%) and highest in Abertawe Bro Morgannwg and Cwm Taf (12%) (Table 6.1).

Sexual intercourse

One quarter (25%) of Year 11 students reported that they had ever had sexual intercourse (Figure 6.5). A slightly higher proportion of females and adolescents from the least affluent households had ever had sexual intercourse (Figure 6.6).

Adolescents in Cardiff and Vale LHB were least likely to have ever had sexual intercourse (20%), whilst those in Anuerin Bevan and Cwm Taf LHBs were most likely to (28%) (Table 6.2).

Contraception

The proportion of sexually active adolescents who reported that they or their partner had used a condom the last time they had sexual intercourse was 47%. Five percent did not know if a condom had been used (Figure 6.7). There was small increase in condom use at last sexual intercourse with increasing family affluence (Figure 6.8).

Condom use at last sex varied a little by LHB, with the lowest proportion reporting condom use in Betsi Cadwaladr (43%) and the highest in Powys (59%), although the sample in Powys was small (Table 6.3).

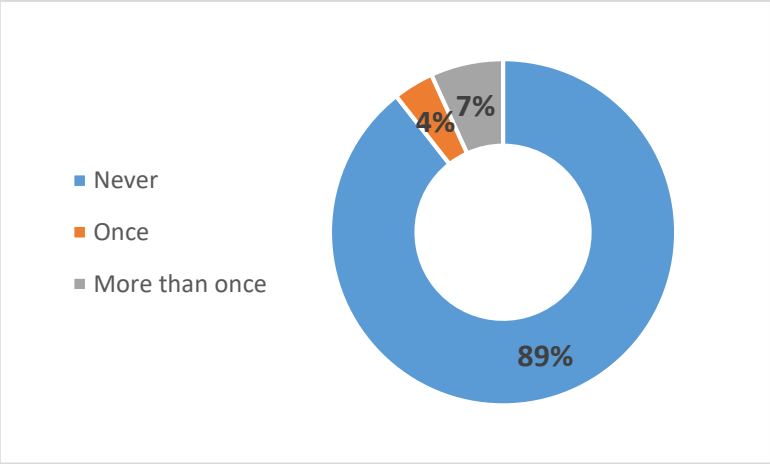
Age at first sexual intercourse

Nearly all (94%) sexually active adolescents had first had sex below the age of consent (16 years), although the most frequently cited age at first sex was 15 years old (45%) (Figure 6.9).

Overall, 20% of sexually active adolescents reported they had first had sex at age 13 years or younger, although the proportion was higher among males compared to females (24% and 16% respectively) and among those from the least affluent households (25%) (Figure 6.10).

There were small differences in first having sex at age 13 years or younger across the LHBs, but the size of the gender difference within LHBs varied from 3% in Abertawe Bro Morgannwg and Cwm Taf to 16% in Cardiff and Vale (Table 6.4). (Note, this excludes Powys where the total sample was less than 100 students.)

Figure 6.1. Sent a sexually explicit image of themselves



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (90,051)

Figure 6.2. Percentage who have ever sent a sexually explicit image of themselves by gender, year group and family affluence

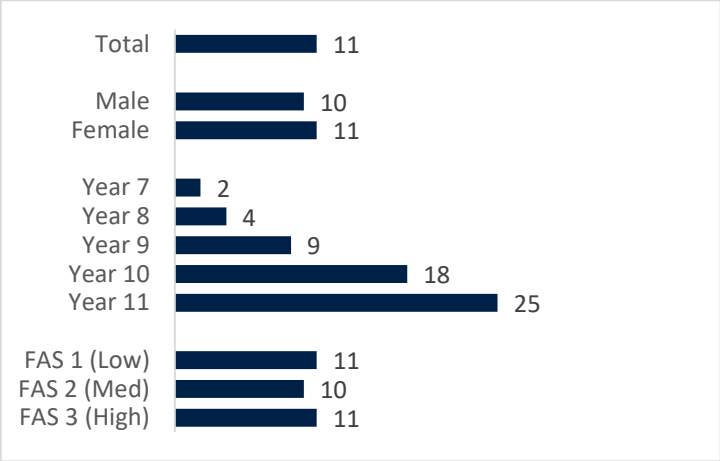


Figure 6.3. Percentage who have ever sent a sexually explicit image of themselves by ethnic group

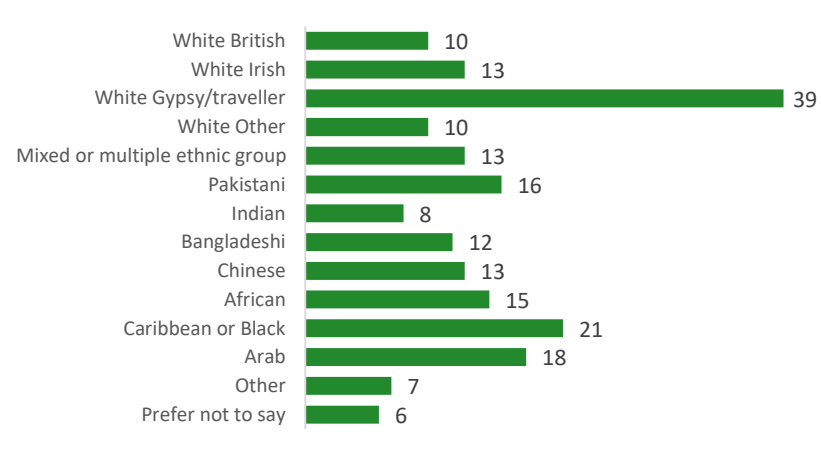


Figure 6.4. Percentage who have ever sent a sexually explicit image of themselves by gender and year group

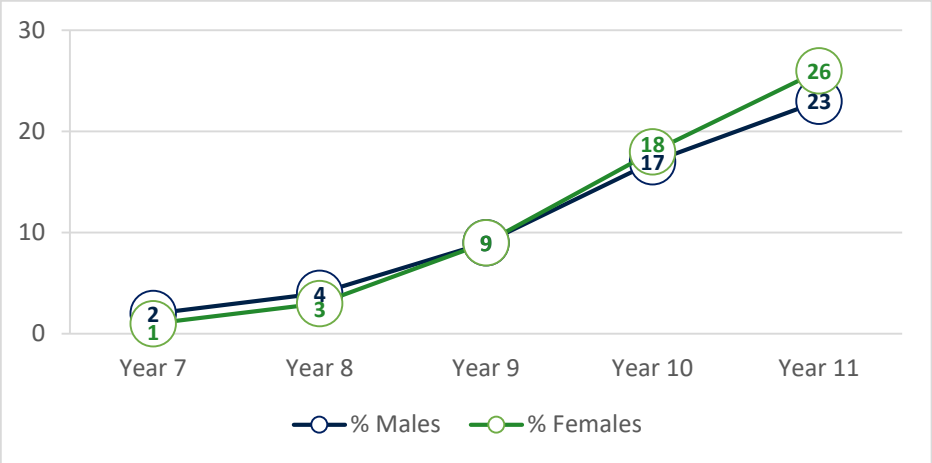
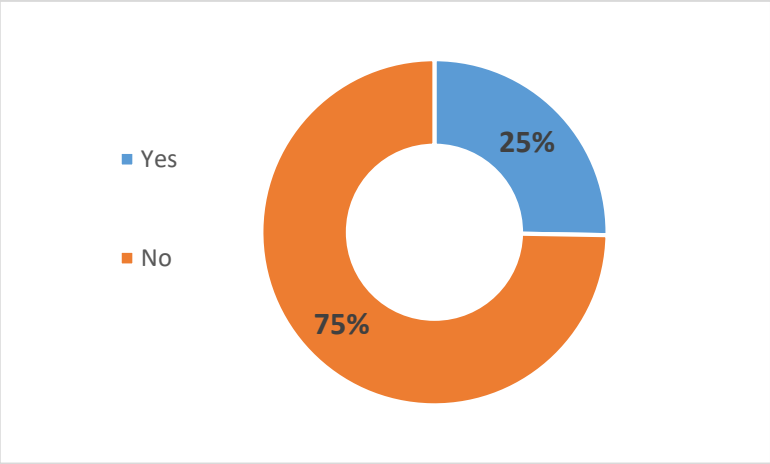


Table 6.1. Percentage who have ever sent a sexually explicit image of themselves by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	12	12	12
Aneurin Bevan	11	10	12
Betsi Cadwaladr	10	10	10
Cardiff & Vale	9	9	9
Cwm Taf	12	11	13
Hywel Dda	9	9	8
Powys	8	6	8

Figure 6.5. Ever had sexual intercourse (year 11 only)



Base: All respondents in year 11 who gave an answer, surveyed between September and December 2017 (14,539)

Figure 6.6. Percentage in Year 11 who have ever had sexual intercourse by gender and family affluence

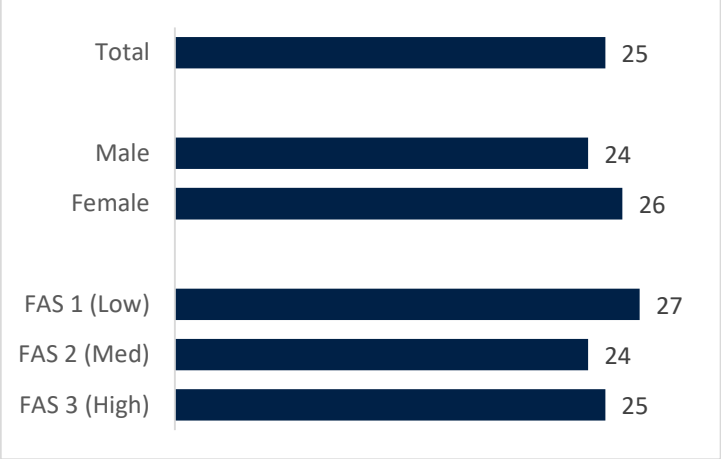
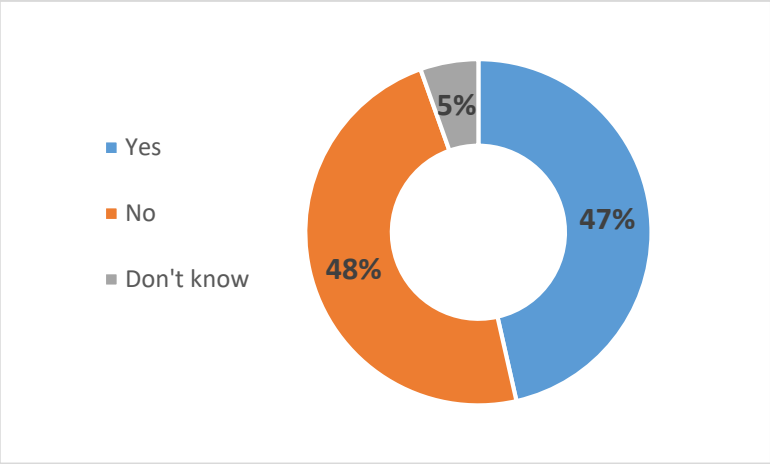


Table 6.2. Percentage in Year 11 who have ever had sexual intercourse by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	26	24	27
Aneurin Bevan	28	26	28
Betsi Cadwaladr	27	26	27
Cardiff & Vale	20	22	18
Cwm Taf	28	28	28
Hywel Dda	23	21	25
Powys	24	21	27

Figure 6.7. Condom use at last sexual intercourse



Base: All respondents in year 11 who gave an answer and reported ever having had sexual intercourse, surveyed between September and December 2017 (3,480)

Figure 6.8. Percentage using a condom at last sexual intercourse by gender and family affluence

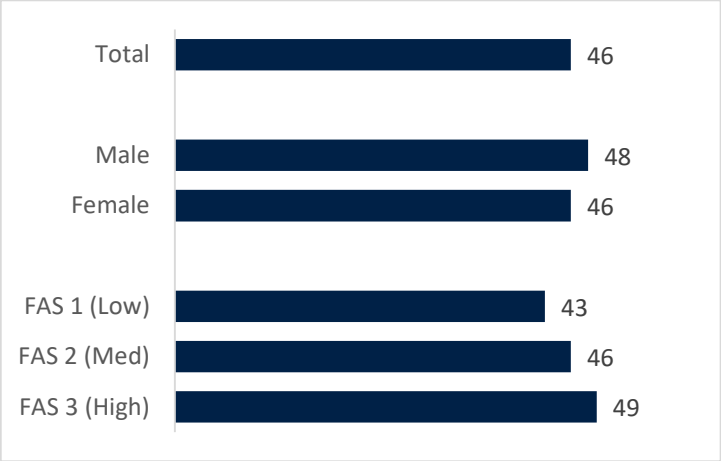
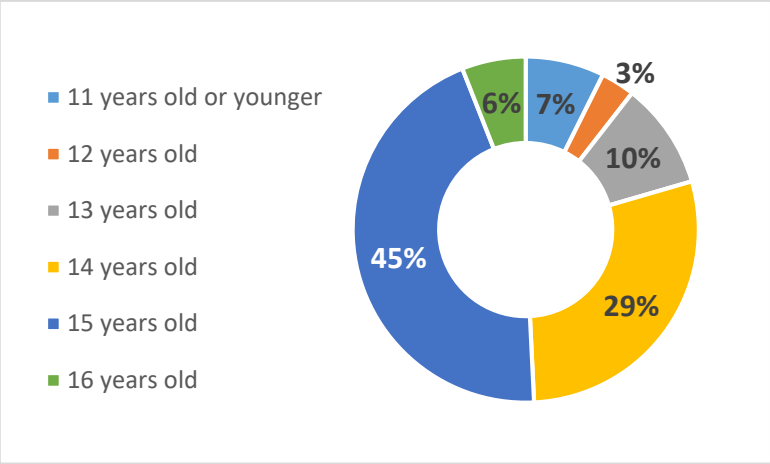


Table 6.3. Percentage using a condom at last sexual intercourse by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	46	47	45
Aneurin Bevan	47	48	47
Betsi Cadwaladr	43	42	44
Cardiff & Vale	47	56	40
Cwm Taf	49	51	47
Hywel Dda	48	48	49
Powys*	59	***55***	***61***

* Base sizes for males and females in Powys < 100

Figure 6.9. Age at first sexual intercourse



Base: All respondents in year 11 who gave an answer and reported ever having had sexual intercourse, surveyed between September and December 2017 (3,435)

Figure 6.10. Percentage who had first sexual intercourse at age 13 years or younger by gender and family affluence

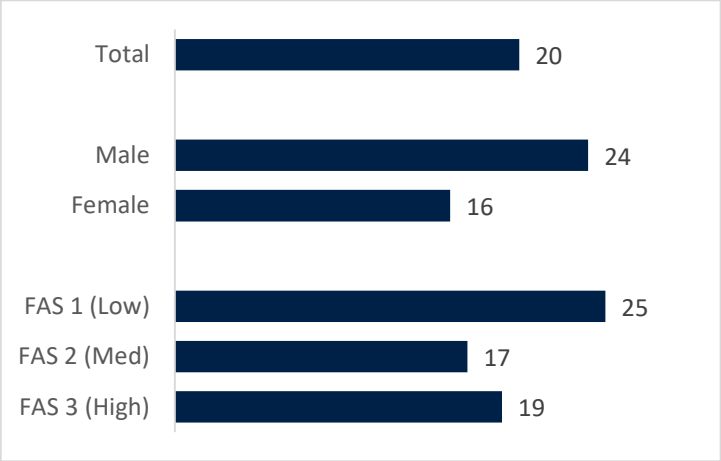


Figure 6.4. Percentage who had first sexual intercourse at age 13 years or younger by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	20	21	18
Aneurin Bevan	22	27	16
Betsi Cadwaladr	21	25	16
Cardiff & Vale	19	26	10
Cwm Taf	22	22	19
Hywel Dda	18	22	12
Powys*	***22***	***23***	***23***

* Base sizes in Powys < 100

7 Smoking, drinking and drug-taking

Introduction

Misuse of substances causes significant harm to the individuals involved, their families and to wider society. These include negative impacts on individuals' physical and mental health and on wider society through crime and anti-social behaviour[65]. Most people first experiment with and become users of substances in adolescence, so it is a key stage of the lifecourse in which to address substance misuse[1]. This was recognised in 'Working Together to Reduce Harm', Welsh Government's recently completed 10 year strategy for tackling the harms associated with the misuse of alcohol, drugs and other substances. The strategy emphasised prevention work with children and young people in relation to alcohol and other substances and committed to tackling substance misuse amongst vulnerable adolescents, such as looked after children, who are at greatest risk[65].

Rates of smoking among adults in Wales have declined steadily from 2003 to 2015, but plateaued between 2016 and 2018 and currently stand at 19%[66]. HBSC data for adolescents in Wales show a similar decline from 10% in 1985/86 to 3% in 2013/14 and the gender gap between male and female rates has also diminished[2]. Differences in smoking rates across social classes remain a major concern, however, as smoking is more than twice as common in adults in the most deprived areas of Wales (28%) compared to the least deprived (13%)[66]. As smoking is a leading cause of death and ill health, this means it is a major driver of health inequalities, the reduction of which is a key focus of Welsh Government's current tobacco control delivery plan[67].

Use of e-cigarettes (electronic cigarettes) among children and adolescents has been the focus of intense scrutiny internationally and has been monitored in Wales since 2013. Between 2013 and 2015 experimentation with e-cigarettes among 11 to 16 year olds grew rapidly and in 2015 was almost twice as common as experimentation with tobacco. Regular use of e-cigarettes though remained concentrated primarily among current or ex-smokers, with little regular use among never smokers[6].

The misuse of alcohol and cannabis in adolescence is associated with a range of mental and physical health outcomes and education outcomes, including attainment and dropping out of school[68 69]. It is encouraging, therefore, that rates of weekly drinking among adolescents in Wales reduced by more than a quarter between 1985/86 and 2013/14 and the proportion of adolescents who have ever used cannabis halved between 2001/02 and 2013/14[2].

It is important to recognise, however, that risk behaviours tend to cluster in adolescence. This phenomenon, known as multiple risk behaviours (MRB), has been identified in contemporary longitudinal UK data which found strong associations between health risk behaviours in adolescents, including smoking, alcohol and illicit drug use, delinquency and unsafe sexual behaviour. Tobacco and alcohol use were identified as 'stepping stone' behaviours, whereby their use in early adolescence strongly predicted drug use in late adolescence[70].

Wales and the UK have enacted a range of legislation to support efforts to minimise exposure to substances and their misuse, such as the Psychoactive Substances Act 2016, which made it an offence to produce, supply or possess psychoactive substances, and the Smoke-free Premises etc. (Wales) (Amendment) Regulations 2015, which made it an offence for a person of any age to smoke in a private vehicle when someone under the age of 18 is present and for a driver, including a provisional driver, not to stop someone smoking in these circumstances. More recently the Public Health (Minimum Price for Alcohol) (Wales) Act 2018 came into being as part of the Welsh Government's wider efforts to reduce excessive drinking. Expected to be in place by Summer 2019, a

minimum price of 50 pence per unit has been agreed by Ministers following public consultation and regulations will be laid before the National Assembly for Wales.

Findings

The survey included questions for all year groups on a range of substances including tobacco, e-cigarettes, alcohol and illicit drugs. Findings on each of these is presented below. Findings on 'age at first use' of various substances are presented for year 11 students only.

Tobacco smoking

Current smoking

An overwhelming majority of adolescents (94%) reported that they do not currently smoke tobacco and a further 2% that they smoke less than weekly (Figure 7.1). Overall 4% of adolescents reported that they smoke weekly or daily, indicating no change since 2013/14. Rates of smoking at least weekly increased with age, however, rising to 9% of students in year 11, and decreased as family affluence increased (Figure 7.2). The highest rates of weekly smoking were reported by adolescents from White Gypsy/Traveller, Pakistani and Arab backgrounds (Figure 7.3).

There were very small gender differences in weekly smoking rates at all ages and across LHBs (Figure 7.4 and Table 7.1).

Age at first cigarette

Among year 11 students who had ever tried a cigarette, over half (59%) reported they first did so at age 14 or 15 years (Figure 7.5). Thirty-eight percent, however, reported they first did so at age 13 years or younger (Figure 7.6). Males were more likely than females to have first tried a cigarette at a young age (41% compared to 35%) and there was an increase in early experimentation with decreasing family affluence, with 46% of year 11 students from the least affluent families first trying a cigarette at age 13 years or younger compared to 34% of year 11 students from the most affluent families (Figure 7.6).

The proportion of adolescents who reported trying cigarettes at a young age by LHB ranged from 34% in Hywel Dda to 43% in Cwm Taf. The size and direction of the gender gap also varied across the LHBs from 2% higher in females in Abertawe Bro Morgannwg and Aneurin Bevan to 15% higher in males in Betsi Cadwaladr (Table 7.2).

Exposure to smoke in cars

Eight percent of adolescents reported that during the last journey they took by car, there was someone smoking (Figure 7.7). There was no difference in exposure to smoke by gender overall (Figure 7.8) and only small differences when gender was disaggregated by age (Figure 7.10).

The proportion of adolescents reporting exposure to smoke, however, increased with age (6% in year 7 compared to 11% in year 11) and decreased substantially with family affluence (14% in the least affluent families and 5% in the most affluent) (Figure 7.8).

Adolescents from White Gypsy/Traveller backgrounds were most likely to report being with someone who was smoking on their last journey by car, followed by those from Pakistani, White Irish and Arab backgrounds (Figure 7.9).

Exposure to smoke in cars varied to a very small degree by LHB (Table 7.3).

E-cigarette use

E-cigarette experimentation

Three-quarters of adolescents reported that they had never tried e-cigarettes and a further 11% that they had tried them only once (Figure 7.11).

Males were more likely than females to report that they had tried e-cigarettes (27% compared to 22%), although this difference was widest at years 8 and 9 (Figures 7.12 and 7.14). Older adolescents were more likely than younger adolescents to report they had tried e-cigarettes; there was a steady increase from 7% in year 7 students to 46% in year 11 students (Figure 7.12). Differences in experimentation by family affluence were smaller, but adolescents from the least affluent families were most likely to report having tried e-cigarettes (Figure 7.12).

Adolescents from Indian backgrounds were least likely to report that they had tried e-cigarettes, whilst those from White Gypsy/Traveller and Caribbean or Black backgrounds were most likely to report having done so (Figure 7.13).

Rates of e-cigarette experimentation varied across the LHBs from 19% in Hywel Dda to 29% in Anuerin Bevan. The differences between genders varied from 4% to 6%, similar to the gender difference at the national level (Table 7.4).

Current e-cigarette use

E-cigarette use among adolescents was rare, with 94% reporting that they do not currently use them. A further 3% reported that they use them less than weekly (Figure 7.15).

Overall 3% reported that they use e-cigarettes at least weekly, but this varied by age, increasing from 1% in year 7 to 7% in year 11 (Figure 7.16). There were small differences in the rates of e-cigarette use by gender overall and family affluence (Figure 7.16), but a gender gap was evident at older ages, where males were more likely to use e-cigarettes than females (Figure 7.18). The rate of regular (at least weekly) e-cigarette use among adolescents who were regular smokers was 40%, whilst among those that did not smoke or smoked less than weekly, it was 2%.

Adolescents from White Gypsy/Traveller, Arab and Pakistani backgrounds were most likely to report using e-cigarettes at least weekly (Figure 7.17).

Rates of weekly or daily e-cigarette use varied from 2% (Hywel Dda and Powys) to 4% (Aneurin Bevan, Betsi Cadwaladr and Cwm Taf) across the LHBs and were always slightly higher in males than females, with the exception of Hywel Dda, where there was no difference by gender (Table 7.5).

Alcohol consumption

Current drinking– frequency of consumption

Students were asked how often they drank six different types of alcohol and their responses were combined to produce a measure of overall drinking frequency. Figure 7.19 shows that almost half of adolescents (48%) reported that they do not drink alcohol and a further 44% that they drink less than weekly.

Among those that reported drinking alcohol at least weekly, there was a small gender difference (9% of males and 7% females), although this widened with increasing age (Figures 7.20 and 7.22). There was a clear increase in the rate of weekly drinking with age after Year 8, culminating in 17% of year 11 students reporting weekly drinking. There was little difference in weekly drinking by family affluence (Figure 7.20).

The highest rates of drinking alcohol at least weekly were reported by adolescents of White Gypsy/Traveller, Caribbean or Black, and Arab backgrounds (Figure 7.21).

There was a small degree of variation in rates of weekly drinking by LHB (7% in Cardiff and Vale to 11% in Powys) and the gender gap was of a similar magnitude to that seen at the national level with the exception of Powys, where it was slightly larger (5%) (Table 7.6).

Current drinking– quantity of alcohol consumed

Figure 7.23 shows the number of drinks adolescents typically consume on a day when they drink alcohol. Of those that drink alcohol, 30% reported that they typically consume less than one drink. Nineteen percent, however, reported that they typically drink five or more drinks.

Just over half of adolescents (52%) reported that they typically drink more than one drink on days when they drink alcohol. Females were slightly more likely than males to have more than one drink, but this gap was widest for students in years 9 and 10 (Figures 7.24 and 7.26). As with drinking frequency, the proportion who reported that they typically drink more than one drink increased with age, rising to 77% of year 11 students who drink alcohol, and there was little variation in the quantity of alcohol consumed by family affluence (Figure 7.24).

Adolescents from Pakistani, Bangladeshi and Arab backgrounds were most likely to report that they typically had more than one drink on days when they drank alcohol (Figure 7.25).

Rates of drinking more than one alcoholic drink were highest in Cwm Taf LHB (56%) and lowest in Cardiff and Vale (48%) and the gender gap was smallest in Hywel Dda (2%) (Table 7.7).

Experience of being drunk – in lifetime

Students were asked whether they had ever had so much alcohol that they were “really drunk” in their lifetime and in the last 30 days. For the lifetime question, 78% reported that they had never been drunk and a further 9% that they had only been drunk once. Four percent reported that they had been drunk more than ten times (Figure 7.27).

Overall, 6% of adolescents reported that they had been drunk at least four times in their life and this did not vary to any degree by gender or family affluence (Figures 7.28 and 7.30). There was a stark increase by age, however, particularly in years 10 and 11, where 10% and 19% respectively reported that they had been drunk more than four times in their life (Figure 7.28).

The proportion of adolescents who reported that they had been drunk at least four times in their life ranged between 3% and 8% for most ethnic groups, but was higher for adolescents from Chinese, Pakistani, Caribbean or Black, Arab, and White Gypsy/Traveller backgrounds (Figure 7.29).

Reflecting the national data, there were minimal differences in the proportion of adolescents who reported that they had been drunk at least four time in their life across the LHBs (Table 7.8).

Experience of being drunk – in last 30 days

Drunkenness in the last 30 days was much less common, with 90% of adolescents reporting that they had not been drunk in this time window. Only 2% reported they had been drunk four or more times (Figure 7.31).

Overall, 10% of adolescents reported that they had been drunk at least once in the last 30 days and there was little difference by gender or family affluence (Figure 7.32). When gender was disaggregated by year group, however, there was a widening gender gap from year 9 onwards, with females more likely to report being drunk than males (Figure 7.34). There was also a clear increase in drunkenness in the last 30 days by age, reaching 25% by year 11 (Figure 7.32).

Having been drunk at least once in the last 30 days was most likely to be reported by adolescents from White Gypsy/Traveller, Caribbean or Black, and Arab backgrounds (Figure 7.33).

There was little variation in rates of been drunk in the last 30 days across the LHBs, with overall rates ranging from 8% in Cardiff and Vale to 12% in Powys (Table 7.9).

Age at first experience of being drunk

Of those year 11 students who said they had ever been drunk, nearly half (47%) reported that they had first been drunk at age 15 years and a further 29% at age 14 years (Figure 7.35). Nineteen percent reported that they had first been drunk at age 13 years or younger. Males and adolescents from the least affluent households were most likely to report that they had first been drunk at a young age (Figure 7.36).

Rates of first being drunk at age 13 years or younger varied quite widely across the LHBs from 16% in Abertawe Bro Morgannwg to 29% in Powys. Gender differences also varied across the LHBs in both size and direction, for example there was no difference by gender in Aneurin Bevan, in Cardiff and Vale there was an 8% difference with the rate higher in males, and in Powys there was a 4% difference with the rate higher in females (Table 7.10).

Illicit drug use

Experience of being offered cannabis

One-fifth (20%) of adolescents reported that they had been offered cannabis in the last 12 months. There was little difference in the proportion who reported being offered cannabis by family affluence, but there was a marked increase in the proportion with increasing age, so that by year 11 42% reported being offered the drug in the last 12 months (Figures 7.37 and 7.38). Males were slightly more likely to report being offered cannabis than females and this remained consistent across the year groups (Figures 7.38 and 7.40).

Being offered cannabis in the last 12 months was most likely to be reported by adolescents from White Gypsy/Traveller and Caribbean or Black backgrounds (Figure 7.39).

Adolescents in Aneurin Bevan were most likely to report being offered cannabis in the last 12 months (23%) and least likely in Hywel Dda (16%). Powys was the only LHB with no difference in the proportion of males and females who reported having been offered cannabis (Table 7.11).

Cannabis use in lifetime

The majority (92%) of adolescents in Wales reported that they have never used cannabis and only 2% reported that they have used cannabis on 30 or more days in their lifetime (Figure 7.41).

Reported lifetime cannabis use varied little by gender and family affluence, but increased with age from 1% in year 7 students to 21% in year 11 students (Figures 7.42 and 7.44). Adolescents from White Gypsy/Traveller, Caribbean or Black, Pakistani, and Arab backgrounds were most likely to report lifetime cannabis use (Figure 7.43).

Across the LHBs, reported lifetime cannabis use ranged from 5% to 9% and was highest (10%) in males in Aneurin Bevan and lowest in females in Cwm Taf (4%) (Table 7.12).

Other illicit drugs

Students were asked when they had last taken, if ever, eight different types of illicit drug. The six most frequently cited drugs are shown in Figure 7.45. Laughing gas (nitrous oxide) and cannabis were the drugs most commonly reported for both lifetime use and use in the last 12 months, but their order was reversed across the two time periods, with laughing gas being most common for lifetime use (8%) and cannabis for use in the last 12 months (6%).

Responses to use of the six most frequently cited drugs were combined to create a measure of any drug use. Fifteen percent of adolescents reported that they had ever used drugs, with very small differences by gender and family affluence (Figures 7.46 and 7.48). Reported lifetime drug use did, however, increase with age from 9% in year 7 to 27% in year 11 (Figure 7.46).

Adolescents from Indian backgrounds were least likely to report ever having used drugs and those from White Gypsy/Traveller backgrounds were the most likely (Figure 7.47).

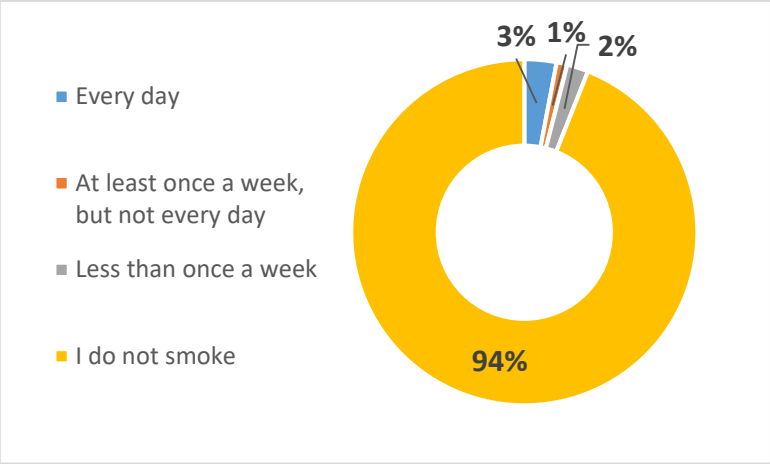
Reported lifetime drug use varied by 4% across the LHBs, although the range was wider for females (7%) when broken down by gender. Powys was the only LHB where reported lifetime drug use was higher in females than in males (Table 7.13).

Age at first use of cannabis

Students in year 11 who reported that they had ever used cannabis were most likely to have first tried it at age 15 years (Figure 7.49). Twenty-one percent reported that they first used cannabis at a young age (13 years or younger), although this differed between males and females (24% of males compared to 16% of females). Adolescents from the least affluent households were also more likely to report first using cannabis at a young age than those from the most affluent households (29% compared to 18% respectively) (Figure 7.50).

There was some variation in the rate of first using cannabis at a young age across the LHBs, but small numbers of year 11 cannabis users in some LHBs mean these figures should be treated with caution (Table 7.14).

Figure 7.1. Current tobacco smoking



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (100,005)

Figure 7.2. Percentage who currently smoke tobacco at least weekly by gender, year group and family affluence

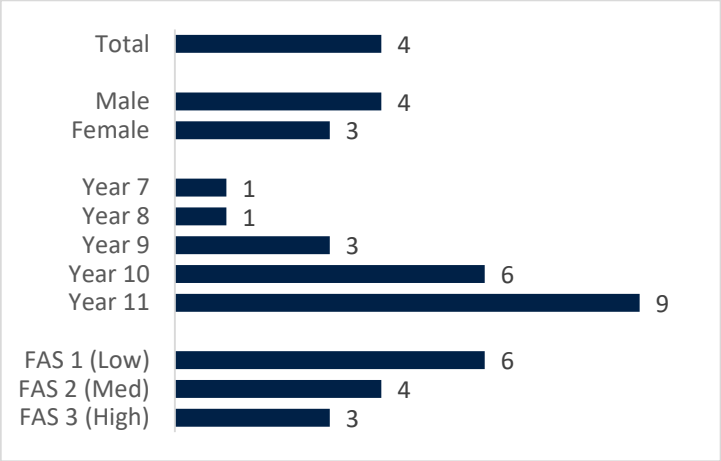


Figure 7.3. Percentage who currently smoke tobacco at least weekly by ethnic group

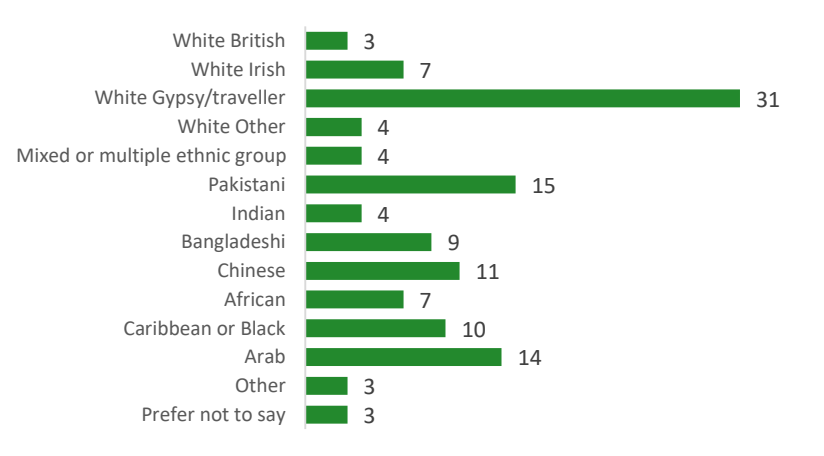


Figure 7.4. Percentage who currently smoke tobacco at least weekly by gender and year group

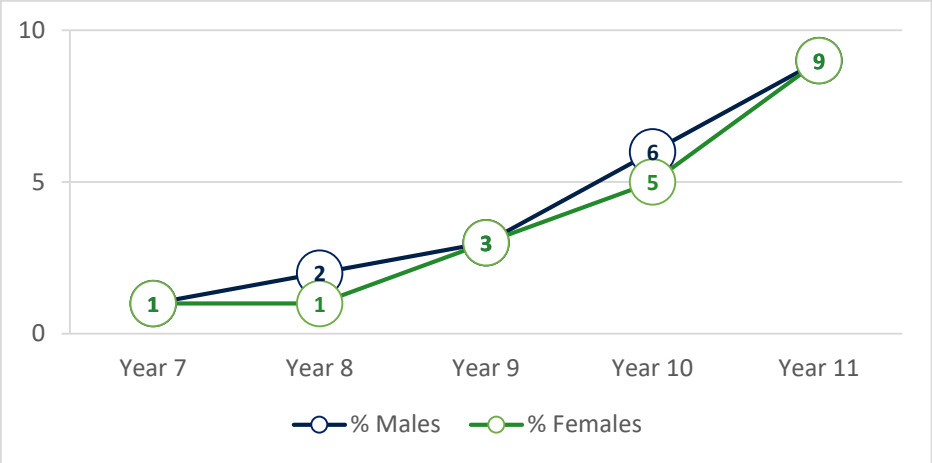
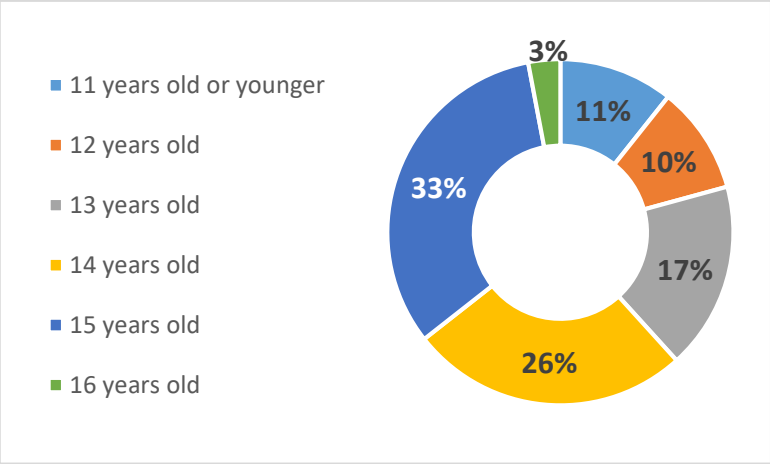


Table 7.1. Percentage who currently smoke tobacco at least weekly by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	3	3	3
Aneurin Bevan	4	4	4
Betsi Cadwaladr	5	4	4
Cardiff & Vale	3	3	2
Cwm Taf	3	3	2
Hywel Dda	4	3	3
Powys	4	3	4

Figure 7.5. Age first smoked a cigarette



Base: All respondents in year 11 who have ever smoked and gave an answer, surveyed between September and December 2017 (4,316)

Figure 7.6. Percentage of year 11 students who smoked their first cigarette at age 13 years or younger by gender and family affluence

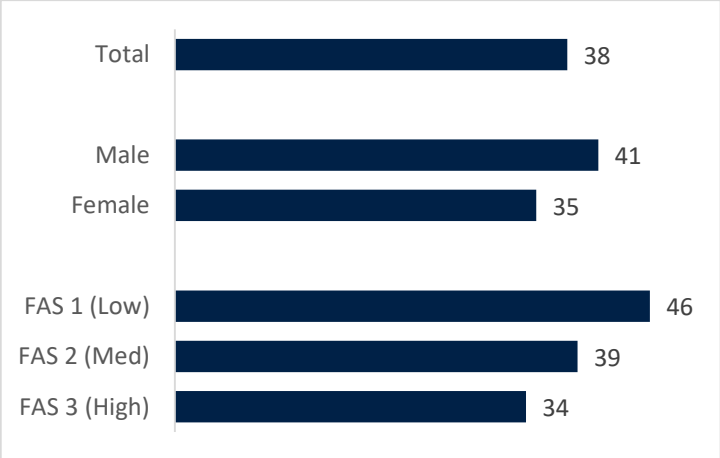
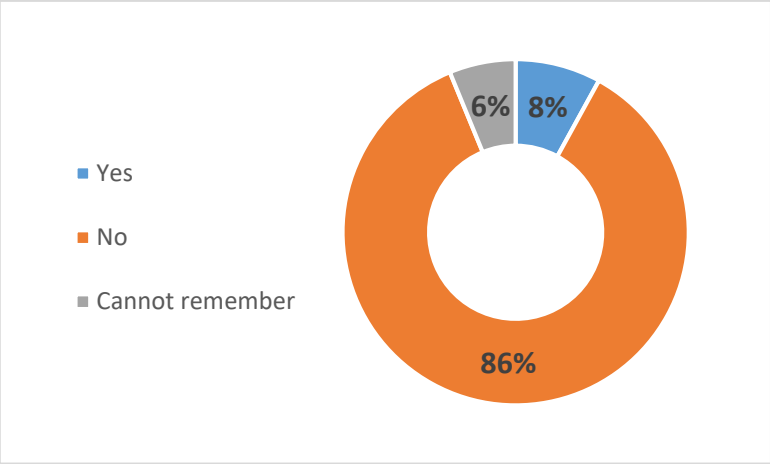


Table 7.2. Percentage of year 11 students who smoked their first cigarette at age 13 years or younger by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	38	36	38
Aneurin Bevan	38	37	39
Betsi Cadwaladr	39	47	32
Cardiff & Vale	38	44	32
Cwm Taf	43	47	40
Hywel Dda	34	35	31
Powys*	36	***40***	***31***

* Base sizes for males and females in Powys < 100

Figure 7.7. Smoking in the car during most recent car journey



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (36,728)

Figure 7.8. Percentage exposed to tobacco smoke during their last journey by car by gender, year group and family affluence

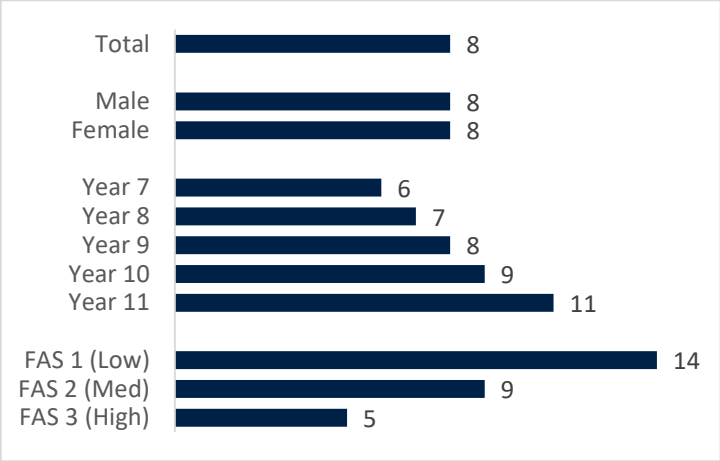


Figure 7.9. Percentage exposed to tobacco smoke during their last journey by car by ethnic group

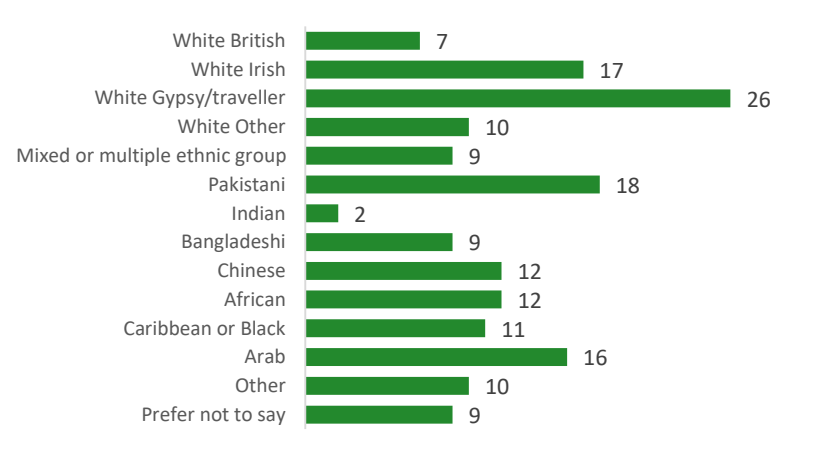


Figure 7.10. Percentage exposed to tobacco smoke during their last journey by car by gender and year group

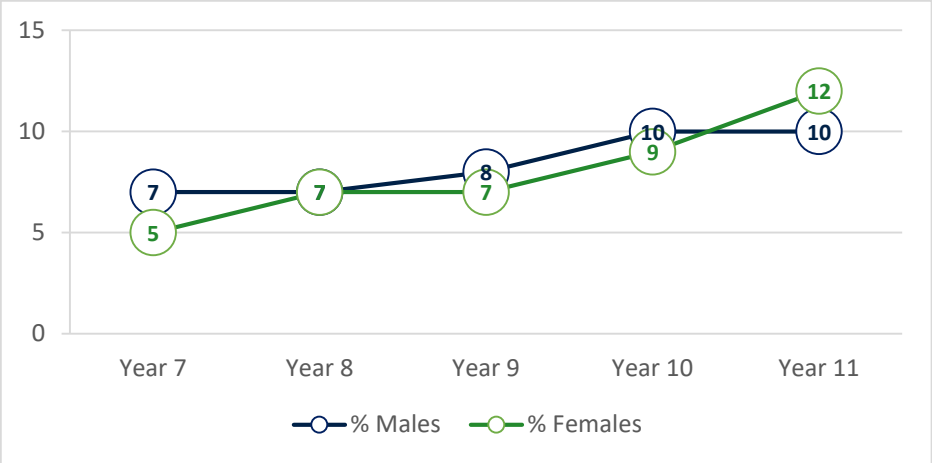
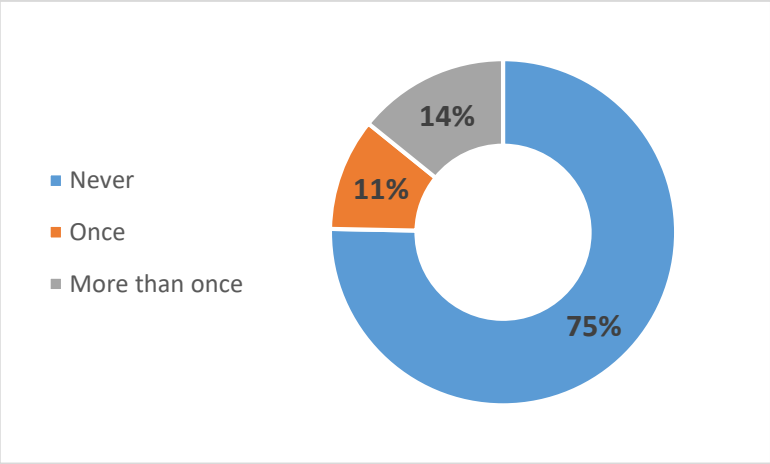


Table 7.3. Percentage exposed to tobacco smoke during their last journey by car by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	8	8	8
Aneurin Bevan	8	8	8
Betsi Cadwaladr	8	9	8
Cardiff & Vale	7	8	6
Cwm Taf	8	8	8
Hywel Dda	8	8	7
Powys	8	7	9

Figure 7.11. Tried e-cigarettes



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (98,622)

Figure 7.12. Percentage who have ever tried e-cigarettes by gender, year group and family affluence

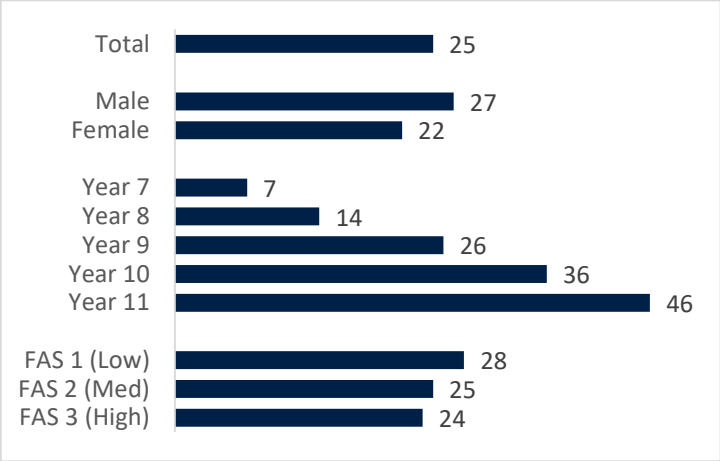


Figure 7.13. Percentage who have ever tried e-cigarettes by ethnic group

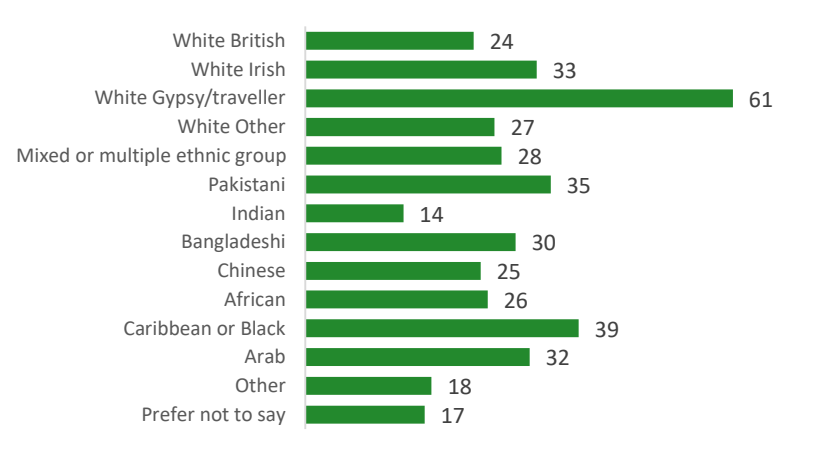


Figure 7.14. Percentage who have ever tried e-cigarettes by gender and year group

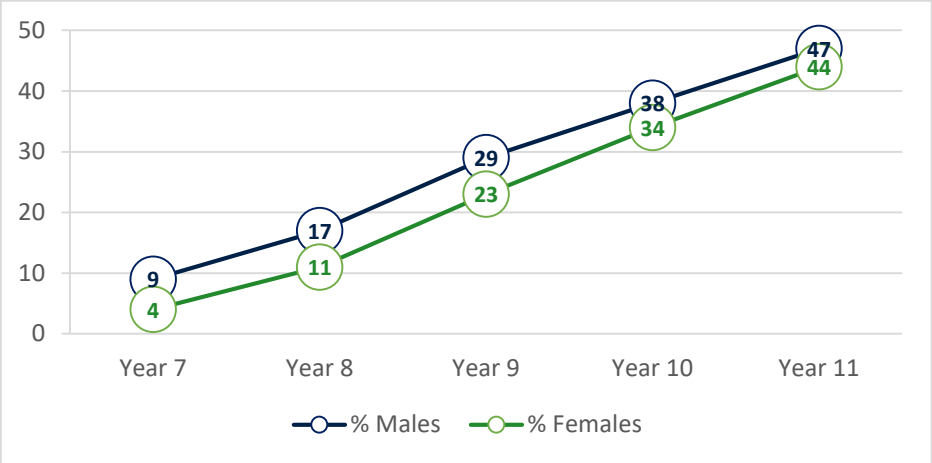
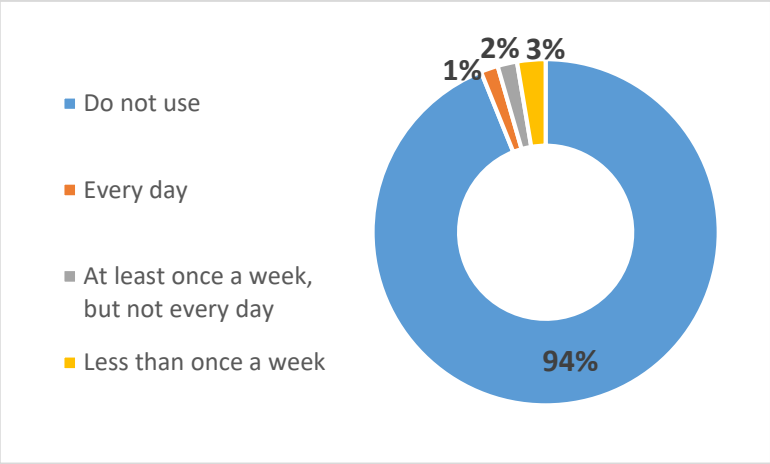


Table 7.4. Percentage who have ever tried e-cigarettes by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	25	27	21
Aneurin Bevan	29	31	26
Betsi Cadwaladr	25	27	23
Cardiff & Vale	23	26	20
Cwm Taf	26	29	23
Hywel Dda	19	21	17
Powys	21	23	19

Figure 7.15. Current e-cigarette usage



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (97,978)

Figure 7.16. Percentage who use e-cigarettes at least weekly by gender, year group and family affluence

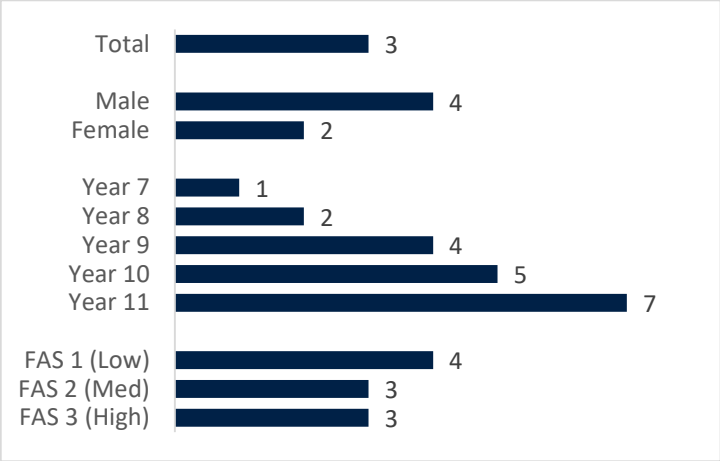


Figure 7.17. Percentage who use e-cigarettes at least weekly by ethnic group

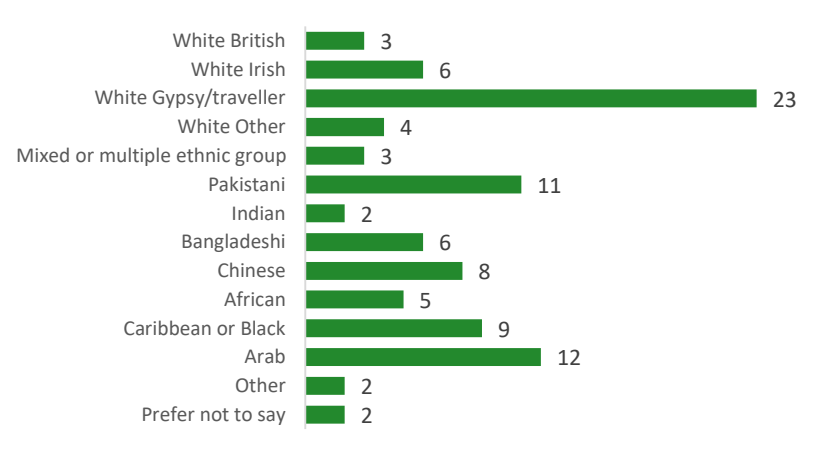


Figure 7.18. Percentage who use e-cigarettes at least weekly by gender and year group

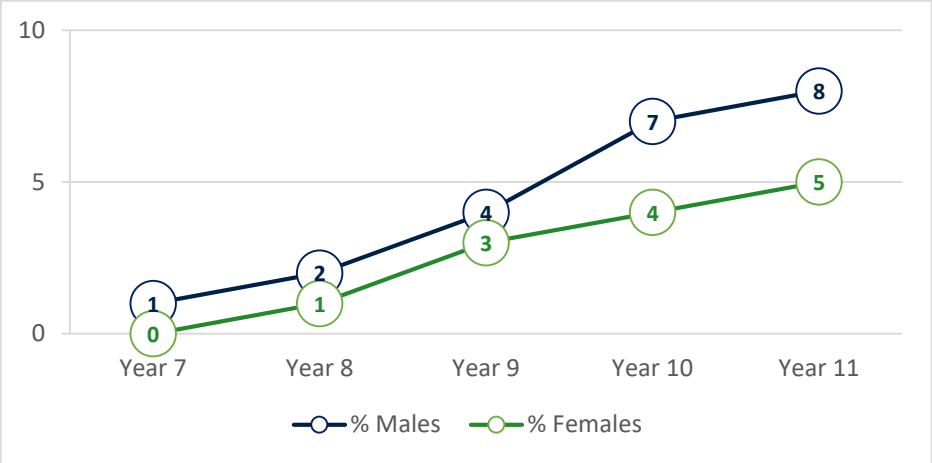
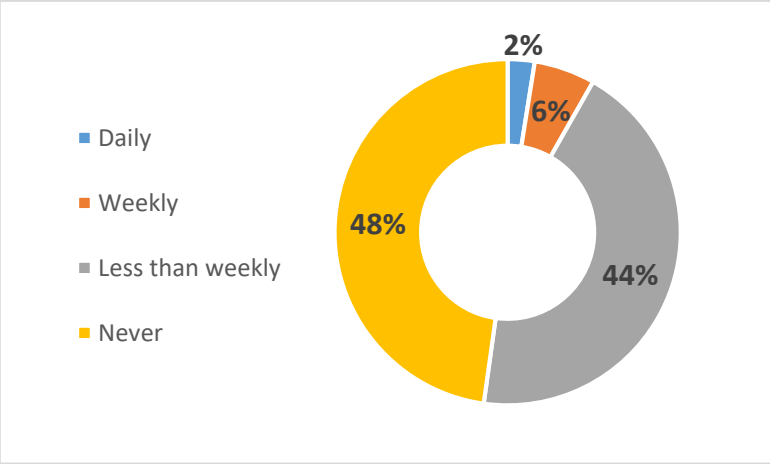


Table 7.5. Percentage who use e-cigarettes at least weekly by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	3	4	2
Aneurin Bevan	4	5	3
Betsi Cadwaladr	4	5	3
Cardiff & Vale	3	4	2
Cwm Taf	4	4	2
Hywel Dda	2	2	2
Powys	2	3	1

Figure 7.19. Current frequency of drinking anything alcoholic



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (63,851)

Figure 7.20. Percentage who drink anything alcoholic at least weekly by gender, year group and family affluence

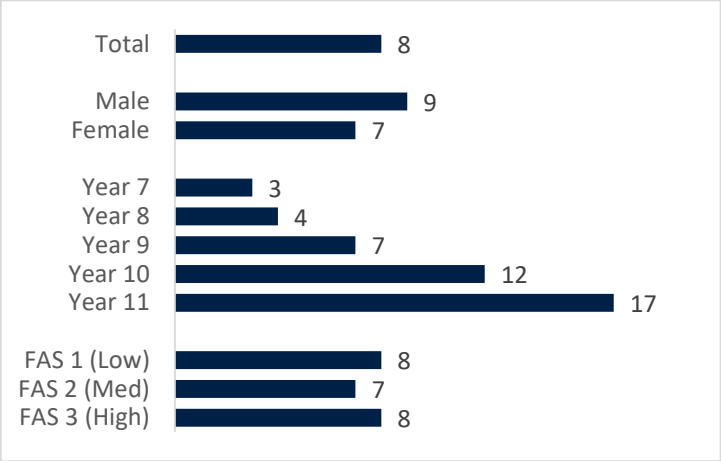


Figure 7.21. Percentage who drink anything alcoholic at least weekly by ethnic group

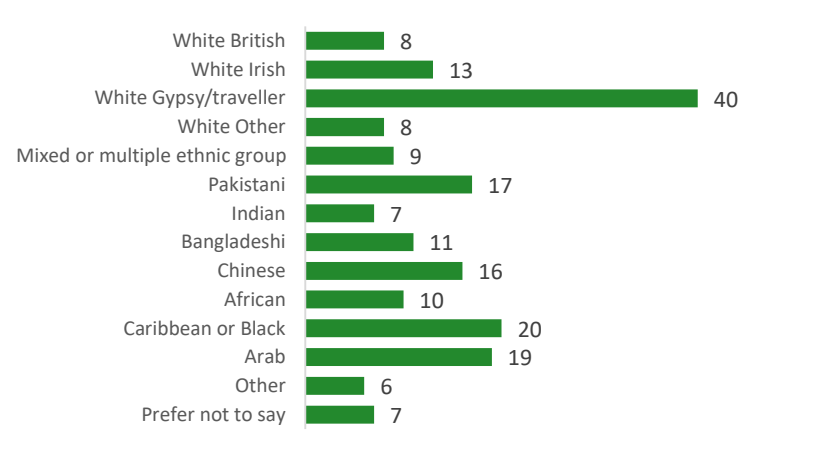


Figure 7.22. Percentage who drink anything alcoholic at least weekly by gender and year group

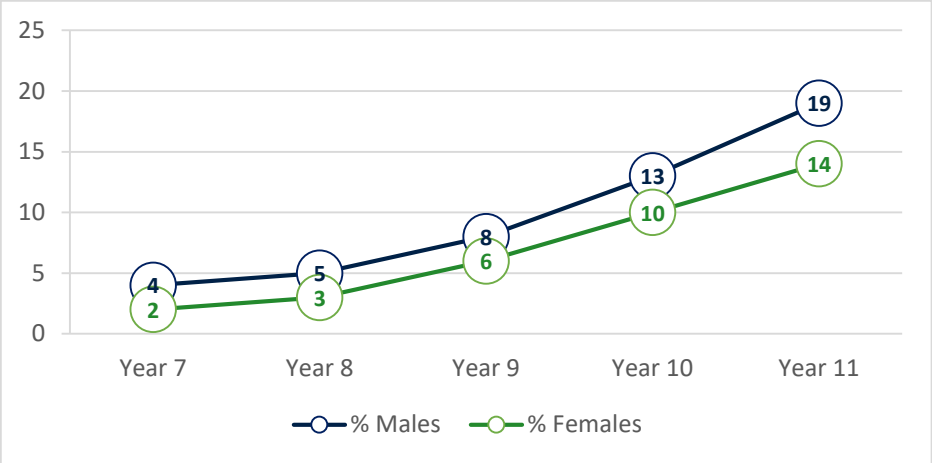
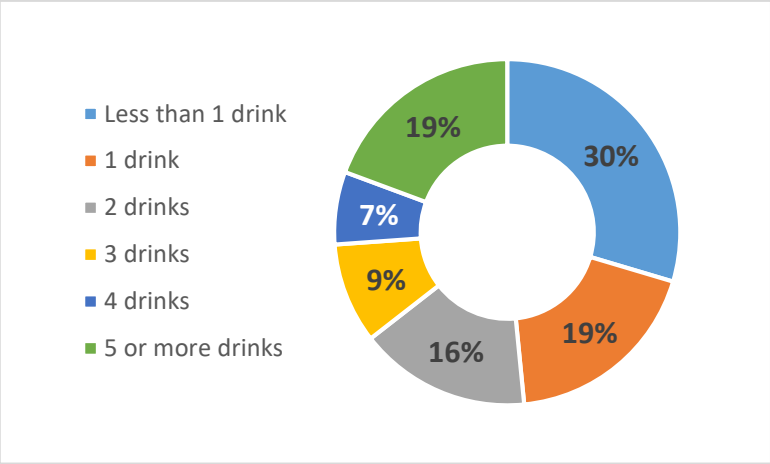


Table 7.6. Percentage who drink anything alcoholic at least weekly by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	8	8	6
Aneurin Bevan	9	10	8
Betsi Cadwaladr	8	9	7
Cardiff & Vale	7	8	5
Cwm Taf	9	10	8
Hywel Dda	8	9	7
Powys	11	13	8

Figure 7.23. Number of alcoholic drinks consumed



Base: All respondents in years 7 to 11 who drink alcohol and gave an answer, surveyed between September and December 2017 (45,396)

Figure 7.24. Percentage who typically have more than one drink when they drink alcohol by gender, year group and family affluence

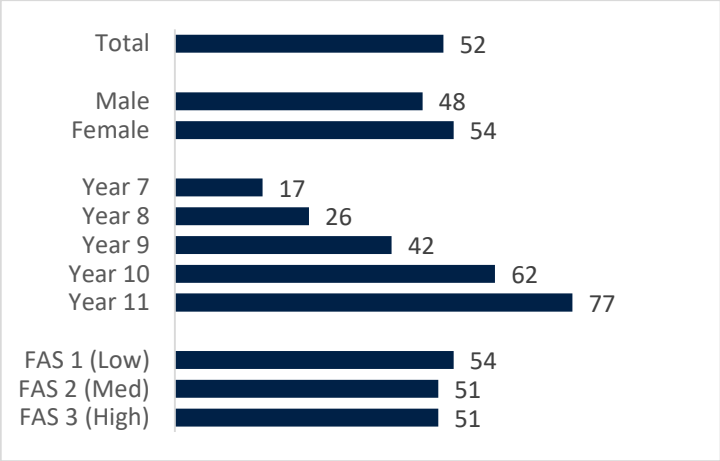


Figure 7.25. Percentage who typically have more than one drink when they drink alcohol by ethnic group

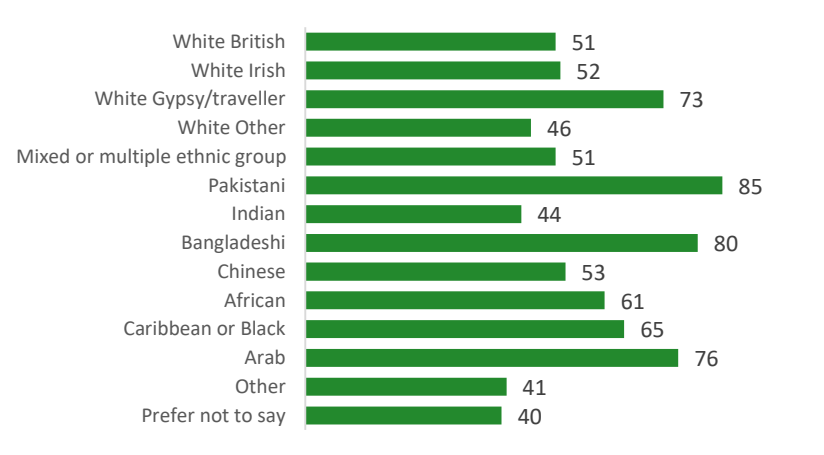


Figure 7.26. Percentage who typically have more than one drink when they drink alcohol by gender and year group

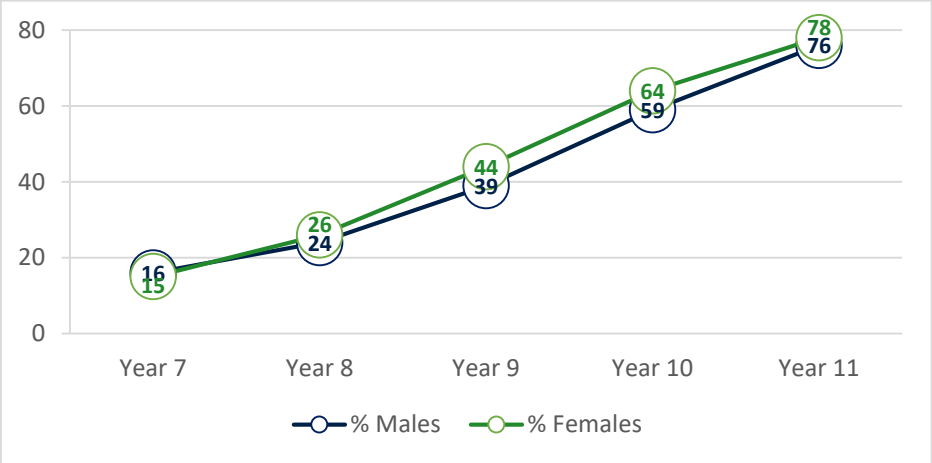
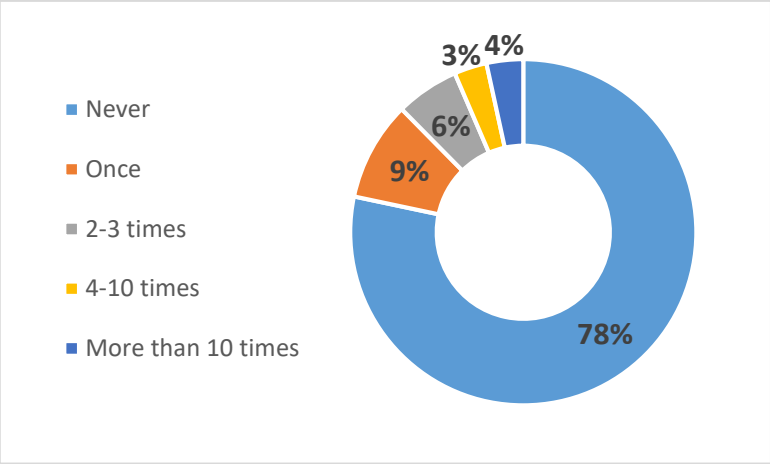


Table 7.7. Percentage who typically have more than one drink when they drink alcohol by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	54	50	57
Aneurin Bevan	52	48	55
Betsi Cadwaladr	51	48	54
Cardiff & Vale	48	45	51
Cwm Taf	56	53	58
Hywel Dda	49	48	50
Powys	50	47	52

Figure 7.27. Been drunk in lifetime



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (63,630)

Figure 7.28. Percentage who have been drunk at least four times in their life by gender, year group and family affluence

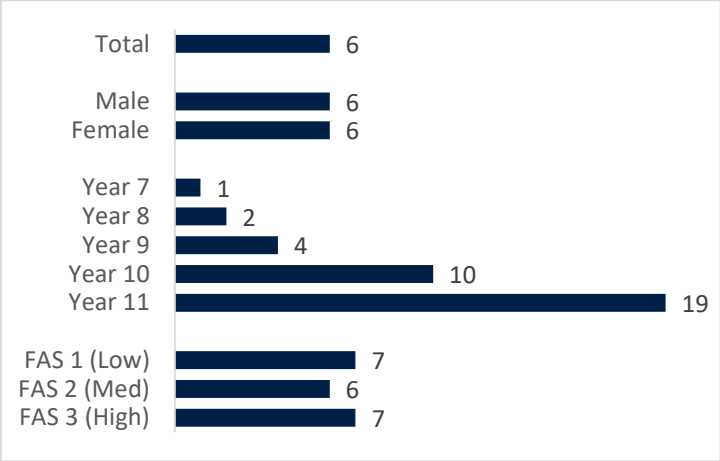


Figure 7.29. Percentage who have been drunk at least four times in their life by ethnic group

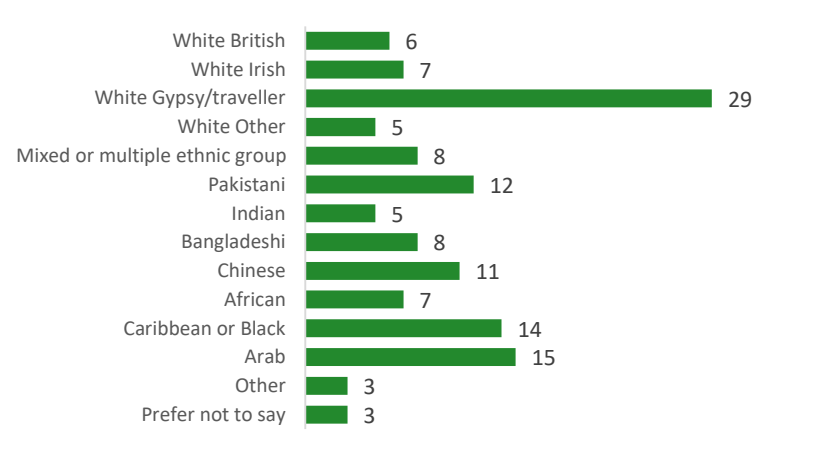


Figure 7.30. Percentage who have been drunk at least four times in their life by gender and year group

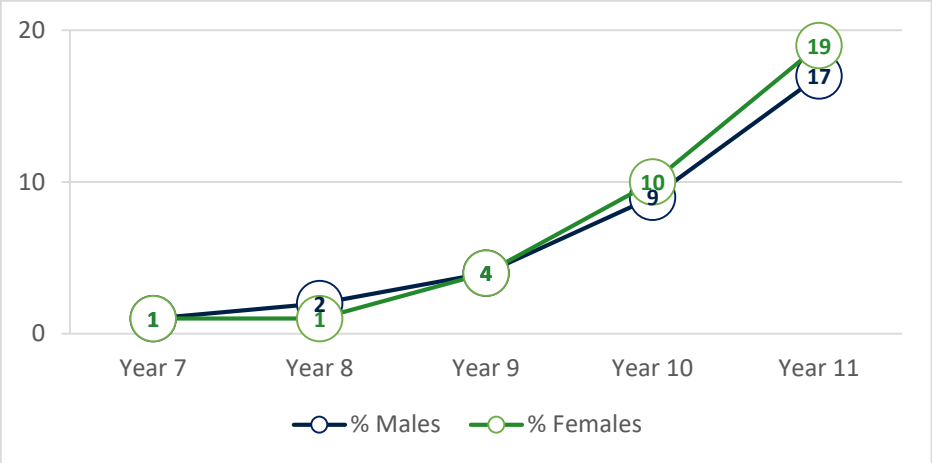
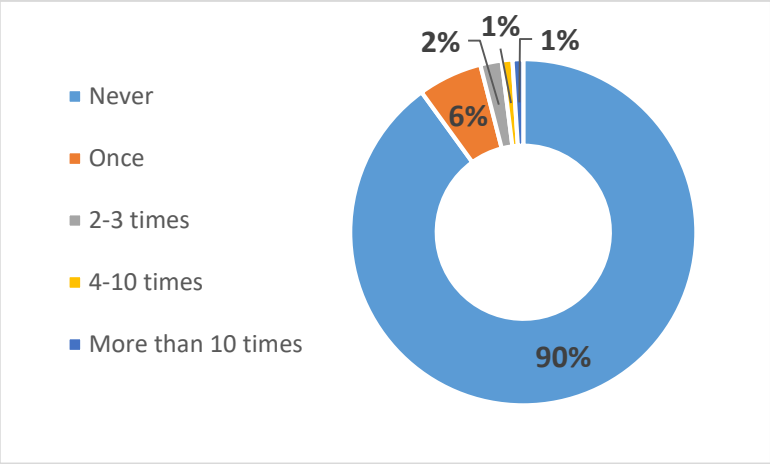


Table 7.8. Percentage who have been drunk at least four times in their life by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	6	5	7
Aneurin Bevan	7	7	7
Betsi Cadwaladr	7	6	6
Cardiff & Vale	5	5	5
Cwm Taf	7	7	7
Hywel Dda	7	6	7
Powys	8	8	8

Figure 7.31. Been drunk in the last 30 days



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (63,560)

Figure 7.32. Percentage who have been drunk in the last 30 days by gender, year group and family affluence

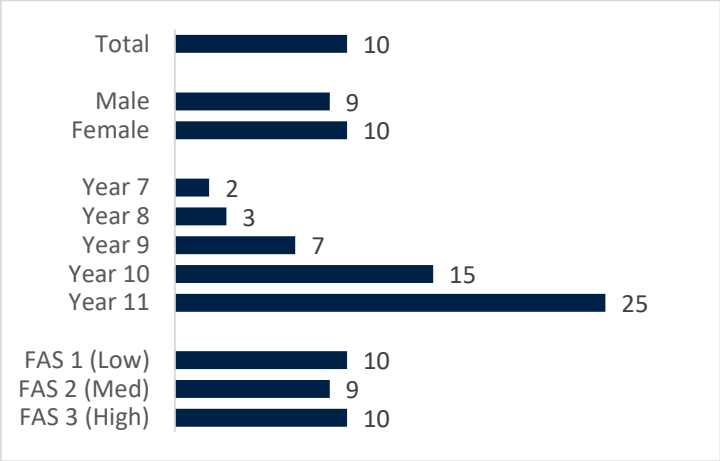


Figure 7.33. Percentage who have been drunk in the last 30 days by ethnic group

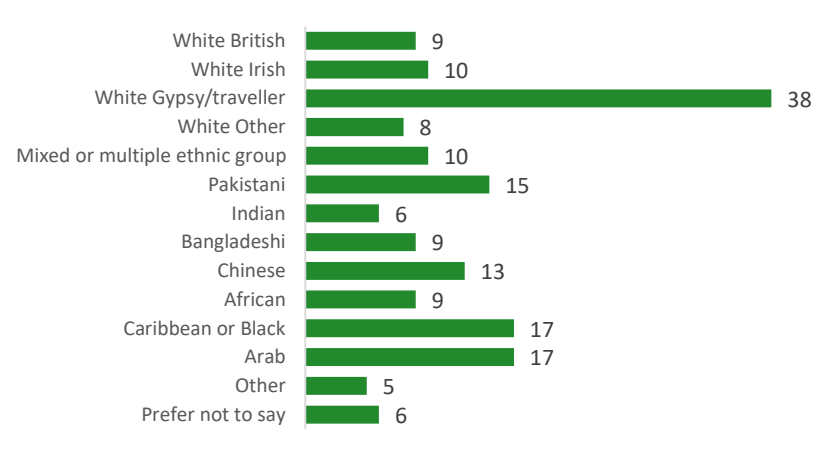


Figure 7.34. Percentage who have been drunk in the last 30 days by gender and year group

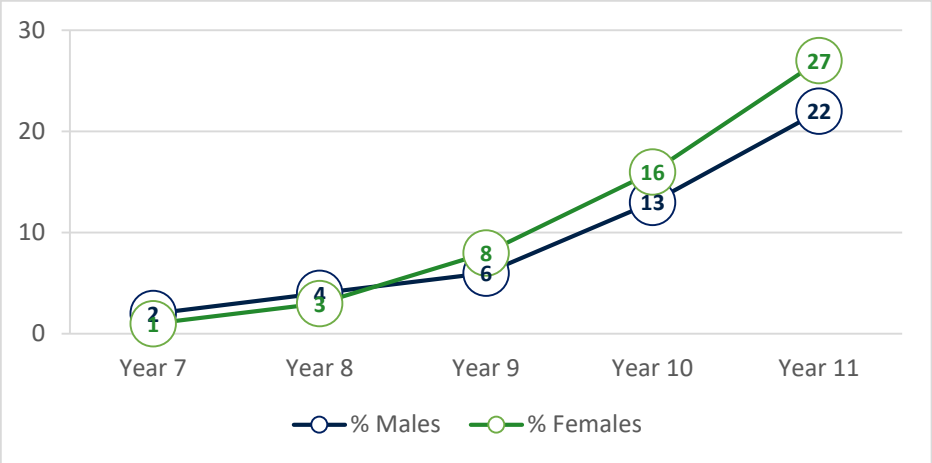
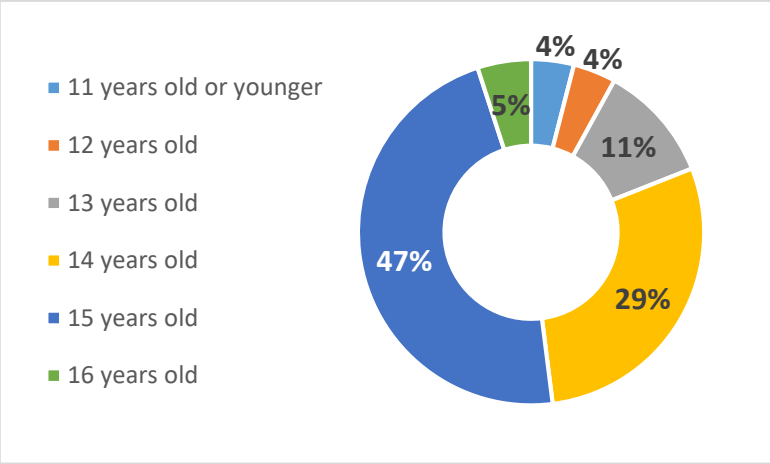


Table 7.9. Percentage who have been drunk in the last 30 days by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	10	9	10
Aneurin Bevan	11	10	11
Betsi Cadwaladr	9	8	10
Cardiff & Vale	8	7	7
Cwm Taf	10	9	11
Hywel Dda	9	9	10
Powys	12	10	12

Figure 7.35. Age first got drunk



Base: All respondents in year 11 who have ever been drunk and gave an answer, surveyed between September and December 2017 (8,245)

Figure 7.36. Percentage in year 11 who first got drunk at age 13 years or younger by gender and family affluence

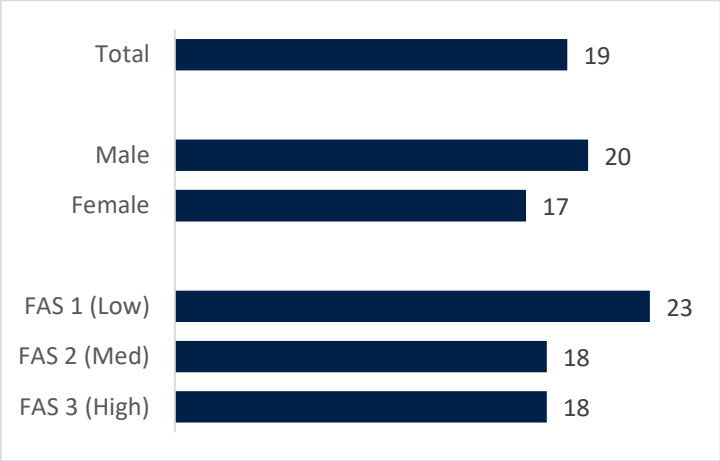
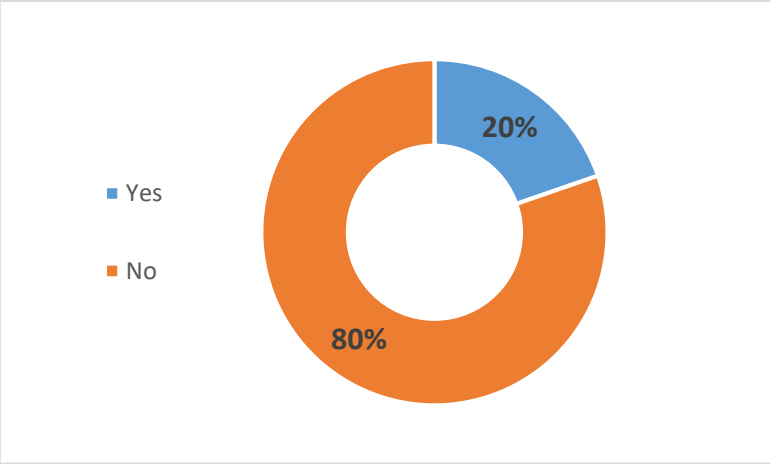


Table 7.10. Percentage in year 11 who first got drunk at age 13 years or younger by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	16	18	14
Aneurin Bevan	20	19	19
Betsi Cadwaladr	21	22	19
Cardiff & Vale	17	20	12
Cwm Taf	18	21	16
Hywel Dda	20	21	18
Powys	29	26	30

Figure 7.37. Offered cannabis in the last 12 months



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (98,332)

Figure 7.38. Percentage who have been offered cannabis in the last 12 months by gender, year group and family affluence

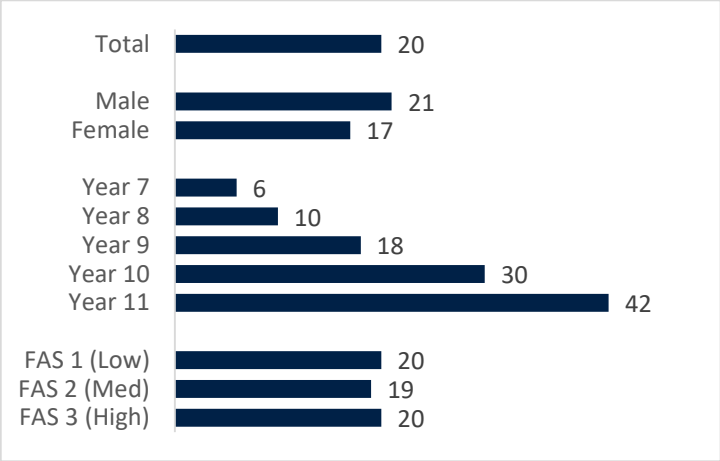


Figure 7.39. Percentage who have been offered cannabis in the last 12 months by ethnic group

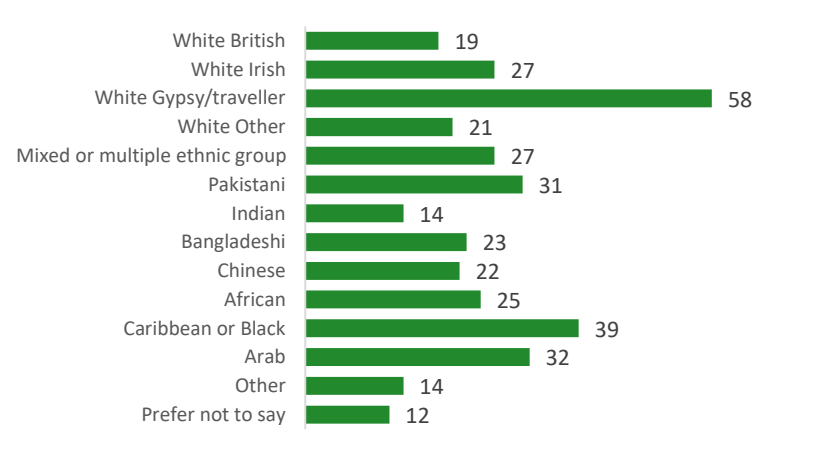


Figure 7.40. Percentage who have been offered cannabis in the last 12 months by gender and year group

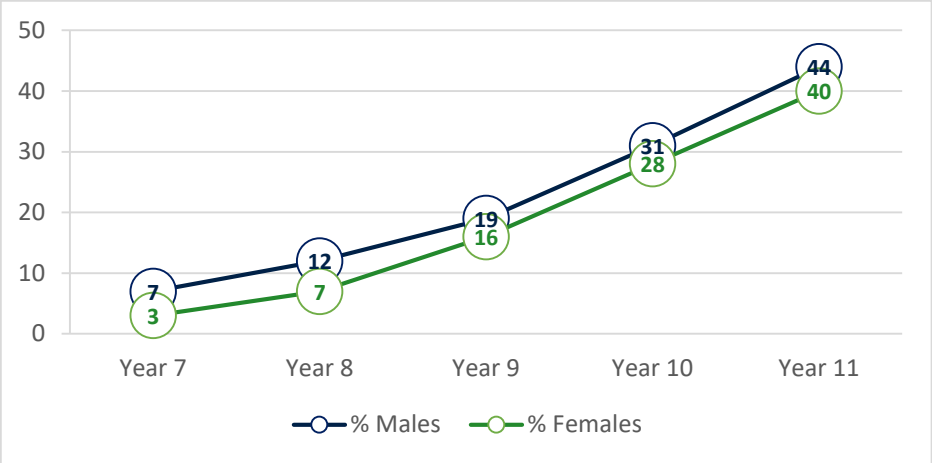
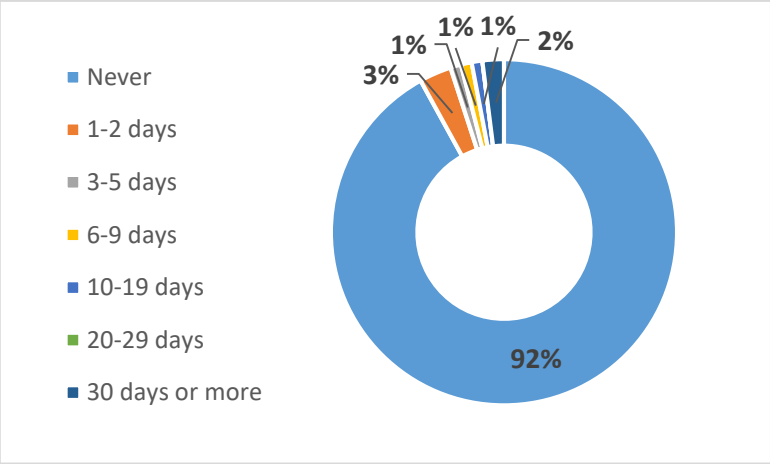


Table 7.11. Percentage who have been offered cannabis in the last 12 months by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	20	22	17
Aneurin Bevan	23	25	21
Betsi Cadwaladr	20	21	18
Cardiff & Vale	20	23	17
Cwm Taf	17	19	15
Hywel Dda	16	17	15
Powys	17	17	17

Figure 7.41. Number of days used cannabis in lifetime



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (98,318)

Figure 7.42. Percentage who have ever used cannabis by gender, year group and family affluence

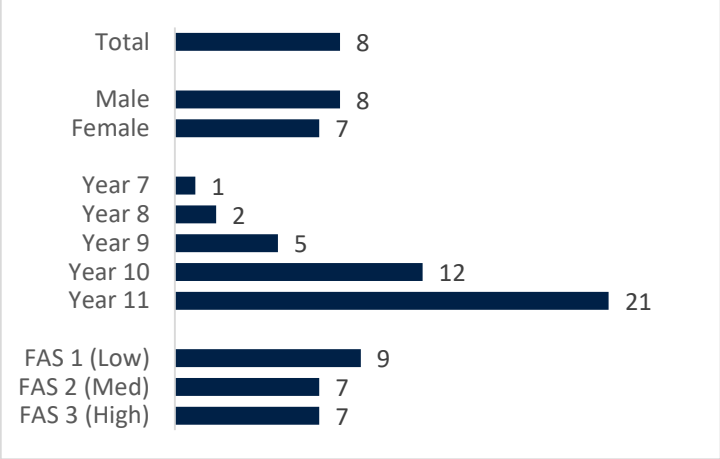


Figure 7.43. Percentage who have ever used cannabis by ethnic group

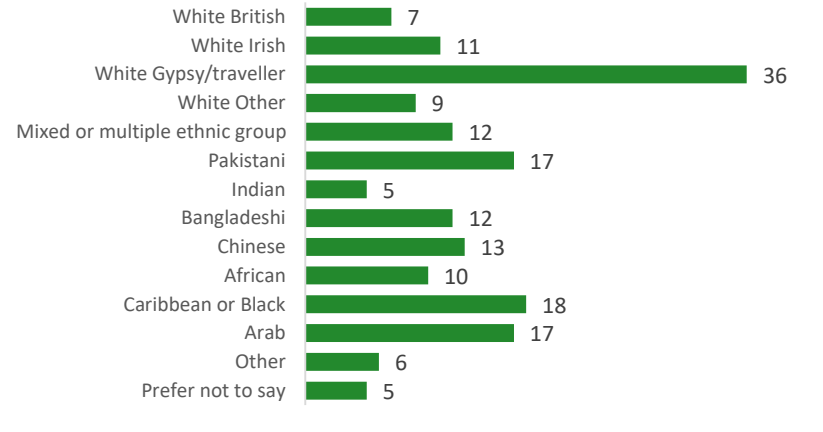


Figure 7.44. Percentage who have ever used cannabis by gender and year group

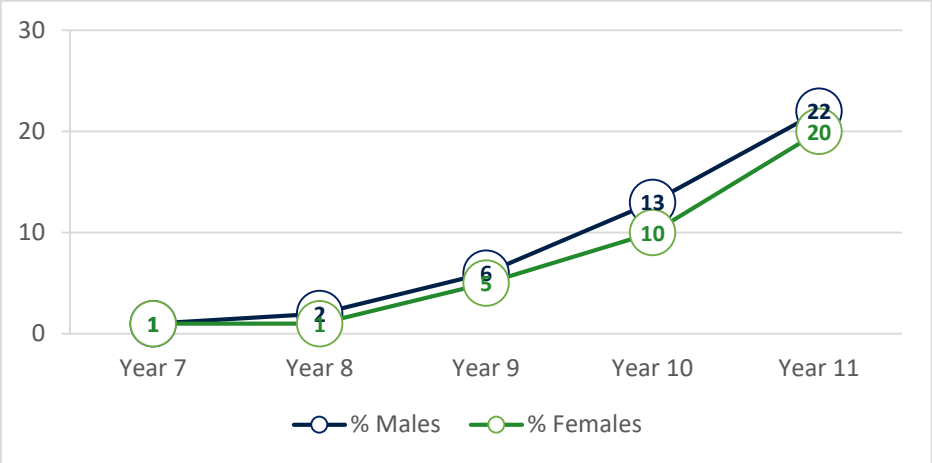
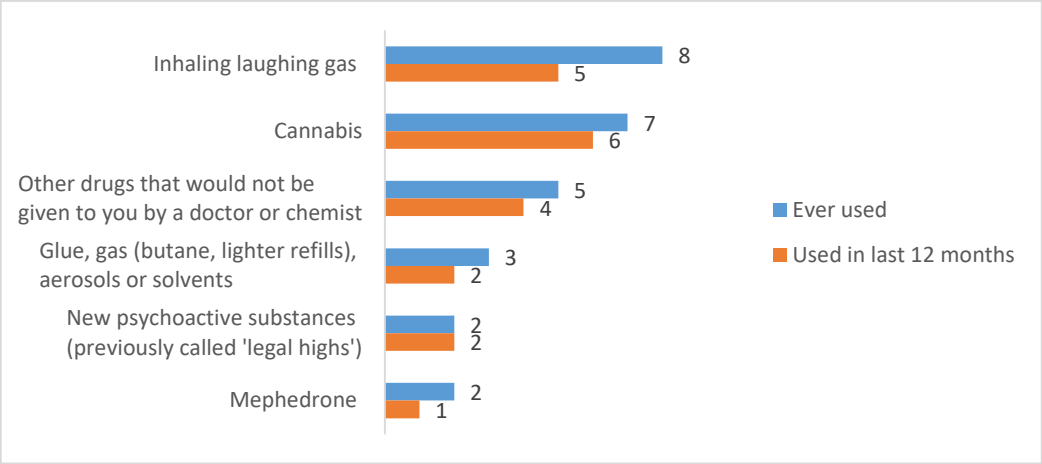


Table 7.12. Percentage who have ever used cannabis by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	7	8	6
Aneurin Bevan	9	10	8
Betsi Cadwaladr	8	9	7
Cardiff & Vale	8	8	7
Cwm Taf	5	6	4
Hywel Dda	6	6	6
Powys	7	7	7

Figure 7.45. Drug use in lifetime and last 12 months



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (34,874 to 97,849 depending on drug; 35,142 for subsequent figures and table; top 6 drugs only)

Figure 7.46. Percentage use of any drug in lifetime by gender, year group and family affluence

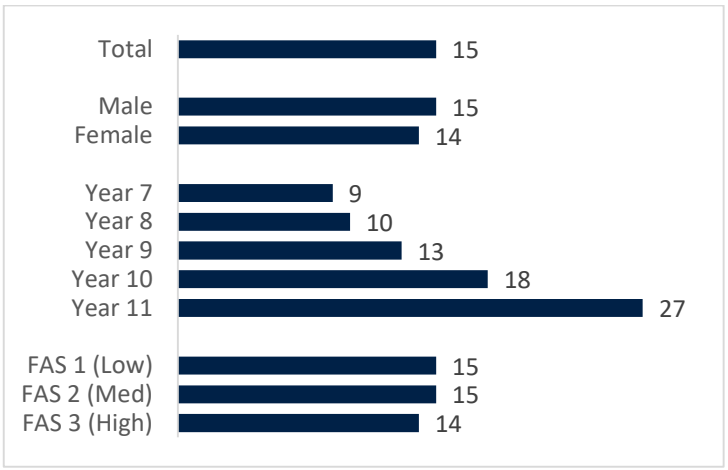


Figure 7.47. Percentage use of any drug in lifetime by ethnic group

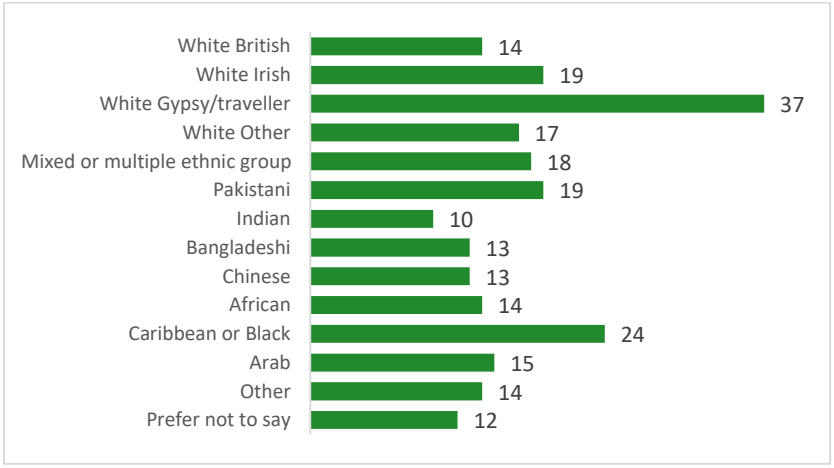


Figure 7.48. Percentage use of any drug in lifetime by gender and year group

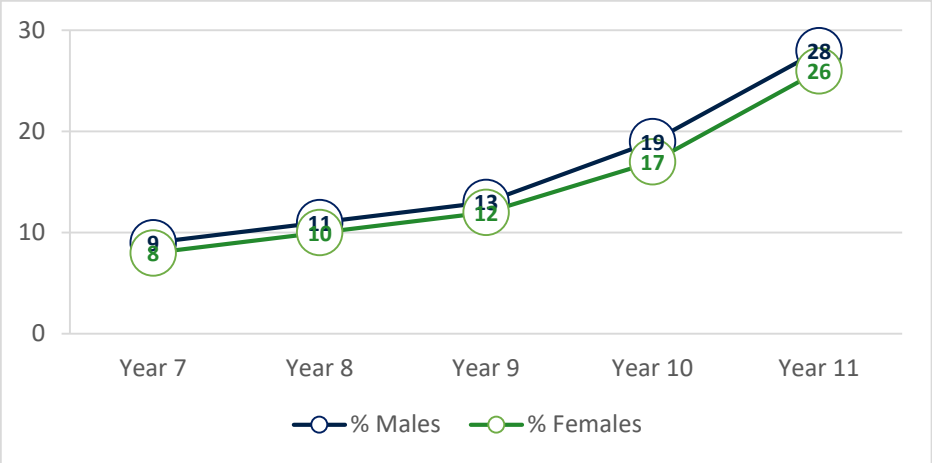
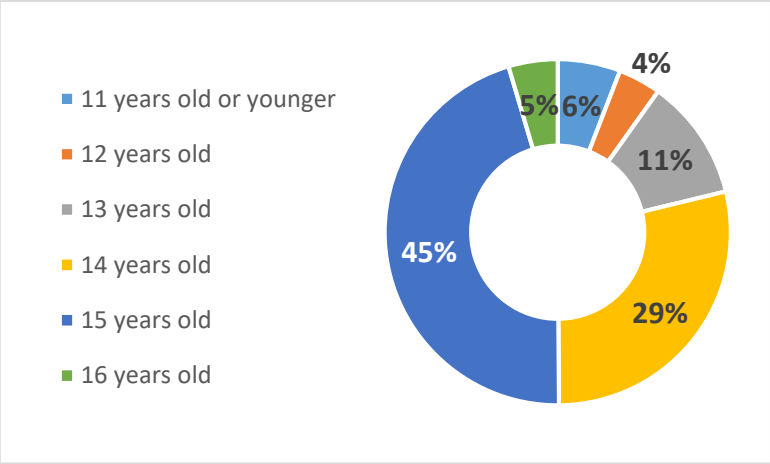


Table 7.13. Percentage use of any drug in lifetime by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	16	16	15
Aneurin Bevan	14	15	13
Betsi Cadwaladr	15	16	15
Cardiff & Vale	14	16	13
Cwm Taf	12	12	11
Hywel Dda	14	14	14
Powys	16	15	18

Figure 7.49. Age first used cannabis



Base: All respondents in year 11 who have used cannabis and gave an answer, surveyed between September and December 2017 (3,358)

Figure 7.50. Percentage of year 11 who first used cannabis at age 13 years or younger by gender and family affluence

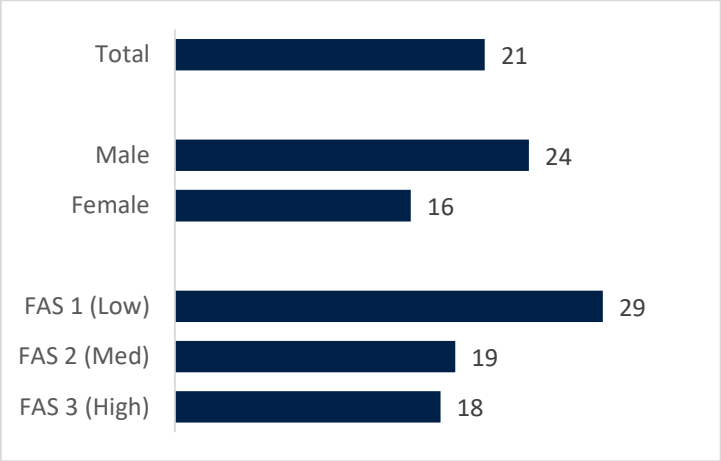


Table 7.14. Percentage of year 11 who first used cannabis at age 13 years or younger by Local Health Board

	All	Males	Females
Abertawe Bro Morgannwg	19	20	16
Aneurin Bevan	20	20	18
Betsi Cadwaladr	22	28	13
Cardiff & Vale	22	25	15
Cwm Taf*	25	27	***21***
Hywel Dda	22	22	18
Powys*	***27***	***31***	***22***

* Base sizes in Powys and for females in Cwm Taf < 100

8 Gambling

Introduction

Gambling is defined as "Staking money or something of material value on an event having an uncertain outcome in the hope of winning additional money and/or goods"[71]. With increasing accessibility to gambling opportunities and normalisation of gambling in our society, gambling is a widespread and socially acceptable form of entertainment for adolescents[72 73]. Among adolescents in England, sports betting, scratch cards, instant win games and roulette are the most popular land-based gambling activities and sports betting the most popular internet-based activity[74]. Global estimates suggest that between 37.5% and 74.4% of adolescents have gambled over the past year[75]. The latest study of UK adolescents' gambling behaviour found that a small proportion (1.7%) of all participants were identified as problem gamblers[76], defined as 'persistent and recurrent problematic gambling behaviour leading to clinically significant impairment or distress'[77].

As explained in the previous chapter, the developmental period of adolescence is characterised by increased risk-taking behaviours, such as experimenting with smoking, alcohol and illicit drug use, delinquency and unsafe sexual behaviour[52]. Risk behaviours tend to cluster in adolescence and evidence has consistently shown that adolescent gambling is associated with a range of health risk behaviours, including substance misuse[78 79], sexual activity[80] and anti-social behaviours[81 82]. It has been proposed that adolescent gambling is a high-risk behaviour, similar to alcohol, substance or tobacco use and unprotected sexual activity[83].

Harms from gambling manifest at the individual, social (family and friends) and community levels, and include financial hardship and relationship breakdowns[84]. At an individual level, adolescent gambling is associated with outcomes such as lower reported physical and mental health[85 86], as well as lower school performance, prosocial behaviours[87], and self-esteem[88]. Problem gambling has been associated with increased risk for other addictions, delinquent behaviours and suicide in adolescents[89]. At a population level, harms include fraud, theft, loss of productivity in the workplace, and the cost of treatment[90].

The harms associated with gambling are unequal, with lower income households spending a higher proportion of their income on gambling[91]. Research has additionally shown that problematic gambling occurs more frequently in males[87 92 93], older adolescents[94], those with lower levels of education[87] and adolescents living with parents with lower educational qualifications[92]. Given the accessibility to gambling opportunities and associated harms, a recent review recommends that gambling should be considered a public health issue in Wales[95].

Regulation of gambling in Wales is at the UK Parliament level. Under the Gambling Act 2005, all commercial gambling in Britain is regulated by the Gambling Commission, which regulates personal and operator licenses. In Wales, local authorities retain powers over the licensing of premises for gambling, register societies allowing them to hold small lotteries and are responsible for all compliance and enforcement of the Gambling Act 2005 locally[96].

Findings

The survey included questions for all year groups on recent gambling activity, the impact on students of both their own gambling and gambling within their family or household.

Gambling in the past seven days

A small proportion of adolescents (13%) reported that they had spent their own money on gambling activities in the past seven days (Figure 8.2). The gambling activities most frequently reported were fruit/slot machines, placing a private bet for money (e.g. with friends), playing cards for money with friends, playing lotto and national lottery scratchcards (Figure 8.1).

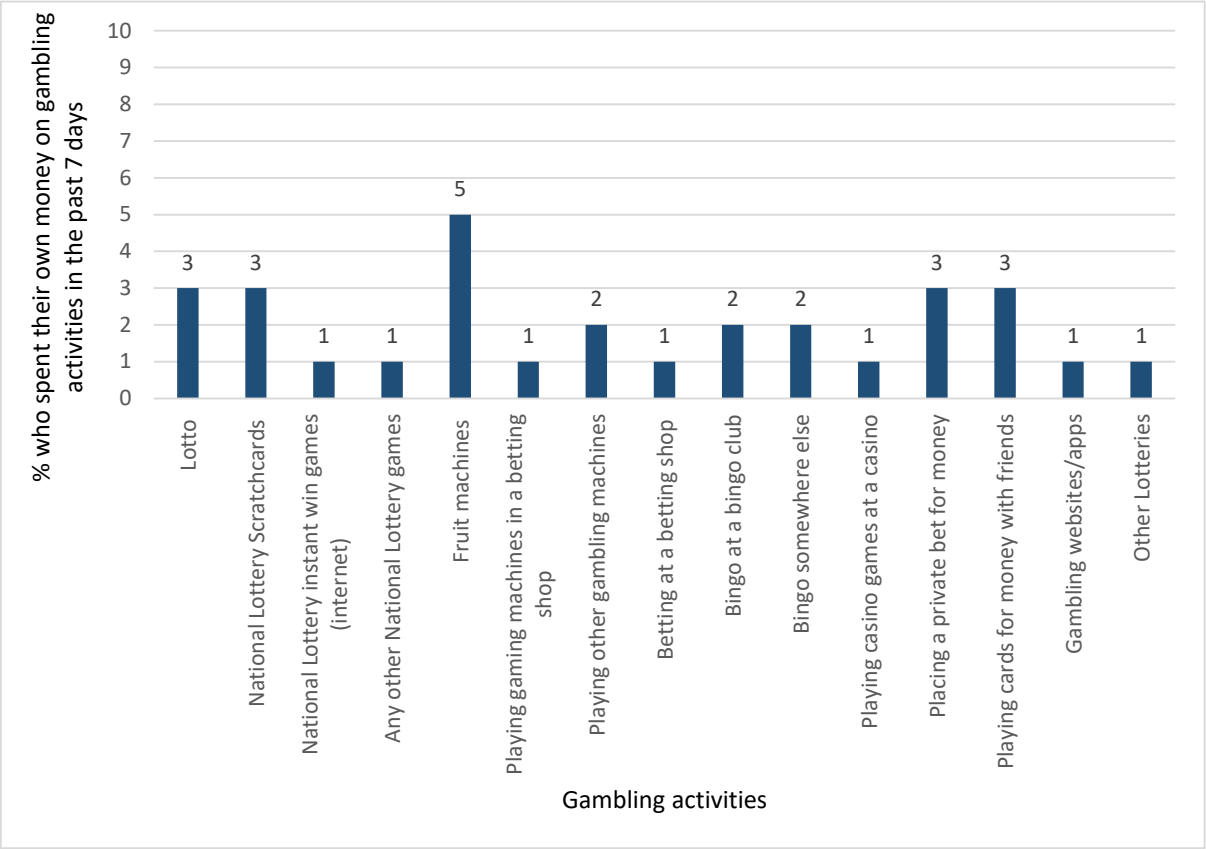
Double the percentage of males (18%) compared to females (9%) reported gambling in the past seven days (Figure 8.3). There were large gender differences in gambling in the past seven days for all year groups and across LHBs (Figure 8.5 and Table 8.1). Adolescents reporting gambling in the past seven days increased with age, from 11% in year 7 to 17% by year 11. Adolescents reporting gambling in the past seven days increased slightly from 12% in low and medium family affluence households to 14% in high family affluence households (Figure 8.3). The highest rates of gambling in the past seven days were reported by adolescents from White Gypsy/Traveller, Caribbean or black, Arab and White Irish backgrounds (Figure 8.4).

At the LHB level, results showed differences ranging from 12% of adolescents in Cardiff and Vale through to 15% in Cwm Taf who had gambled in the past seven days (Table 8.1). For a full list of possible gambling activities, see Annex.

Feeling bad about own or family gambling

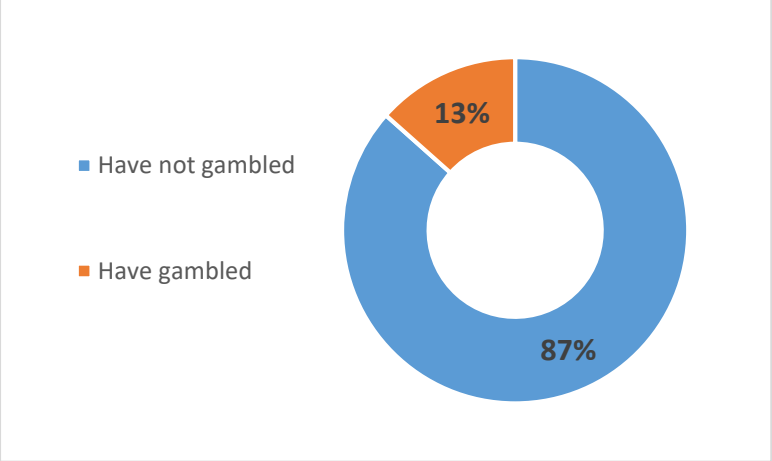
Only 1% of adolescents reported feeling bad about *their* gambling often or all of the time over the past 12 months (Figure 8.6). Furthermore, only 2% reported feeling bad often or all the time over the past 12 months as a result of a *family member or person they live with* gambling (Figure 8.7). Due to this, no further analysis comparing differences was carried out.

Figure 8.1. Percentage who spent their own money on gambling activities in the past seven days



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (29,807)

Figure 8.2 Gambling in the past seven days



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (29,807)

Figure 8.3. Percentage who have gambled in the past seven days by gender, year group and family affluence

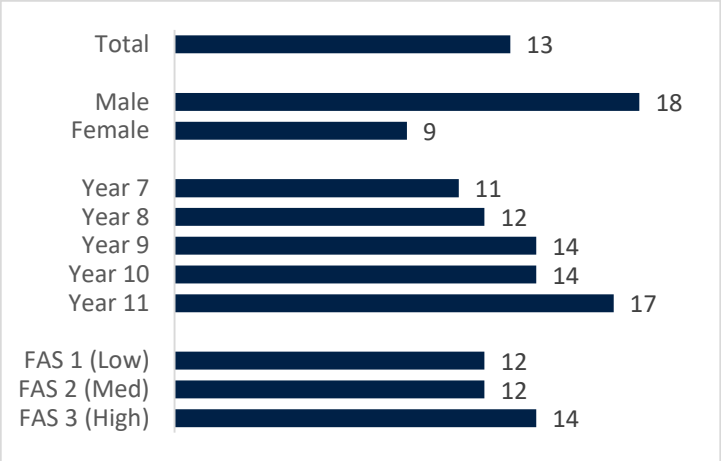


Figure 8.4. Percentage who have gambled in the past seven days by ethnic group

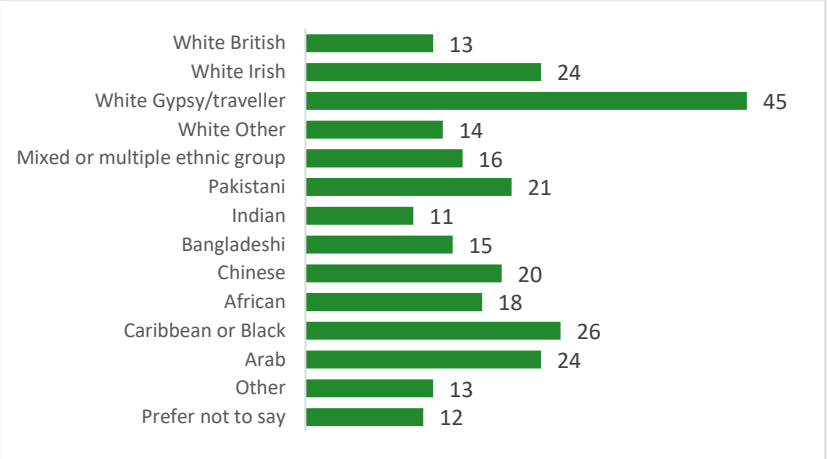


Figure 8.5. Percentage who have gambled in the past seven days by gender and year group

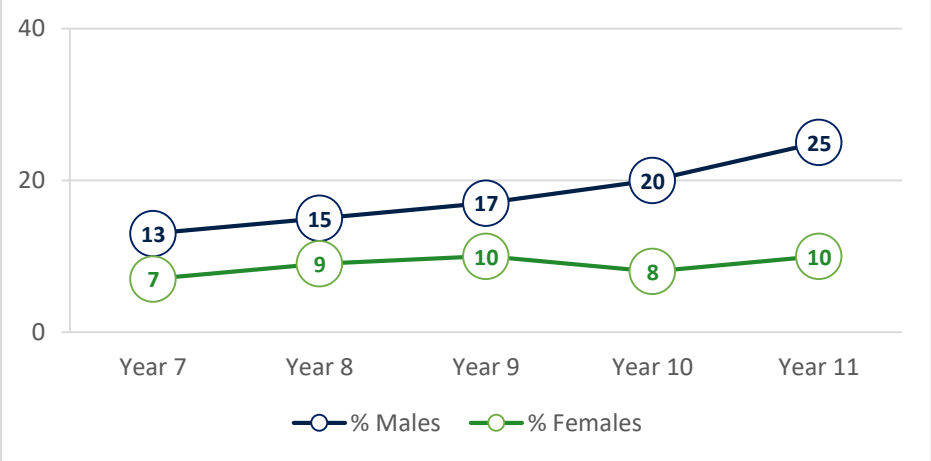
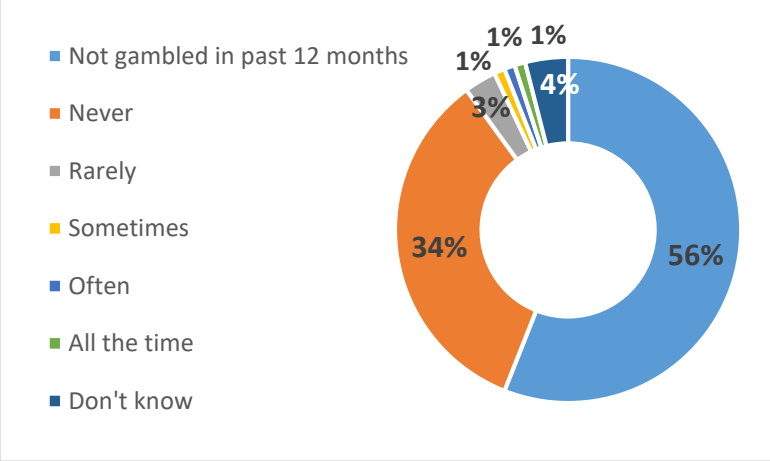


Table 8.1. Percentage who have gambled in the past seven days by Local Health Board

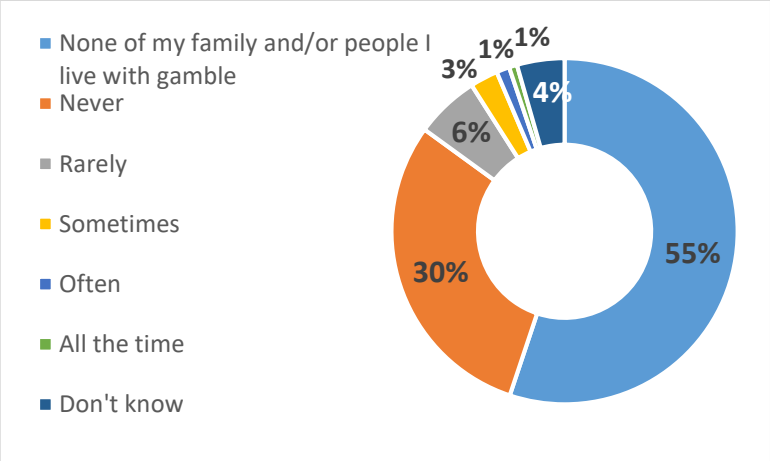
	All	Males	Females
Abertawe Bro Morgannwg	14	17	10
Aneurin Bevan	14	18	9
Betsi Cadwaladr	13	18	8
Cardiff & Vale	12	17	8
Cwm Taf	15	21	9
Hywel Dda	13	18	8
Powys	14	17	10

Figure 8.6. Percentage who have felt bad in the past 12 months as a result of their own gambling



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (30,452)

Figure 8.7. Percentage who have felt bad in the past 12 months as a result of a family member or person they live with gambling



Base: All respondents in years 7 to 11 who gave an answer, surveyed between September and December 2017 (30,366)

Annex

Sample characteristics

Table A1. Sample characteristics

Characteristic	N	%	Characteristic	N	%
Gender			Ethnicity		
Male	50 452	49	White British	86 000	83
Female	51 458	49	White Irish	877	1
Prefer not to say	2 061	2	White Gypsy/Traveller	799	1
Year group			White Other	3 114	3
Year 7	22 634	22	Mixed or multiple ethnic group	2 281	2
Year 8	22 421	22	Pakistani	816	1
Year 9	22 208	21	Indian	596	1
Year 10	19 704	19	Bangladeshi	752	1
Year 11	17 004	16	Chinese	478	<0.5
Family affluence scale			African	732	1
FAS1 (low)	12 091	12	Caribbean or Black	501	<0.5
FAS2 (medium)	36 367	35	Arab	829	1
FAS3 (high)	49 205	47	Other	2 673	3
Incomplete responses	6 308	6	Prefer not to say	3 523	3
Local Health Board					
Abertawe Bro Morgannwg	19 253	19			
Aneurin Bevan	18 546	18			
Betsi Cadwaladr	25 080	24			
Cardiff & Vale	15 066	14			
Cwm Taf	9 586	9			
Hywel Dda	13 255	13			
Powys	3 185	3			

Family Affluence Scale

A total family affluence scale (FAS) score was calculated for each student who answered all six FAS questions by summing the responses to the following:

Does your family own a car, van or truck?
(No (=0) / Yes, one (=1) / Yes, two or more (=2))

Do you have your own bedroom for yourself?
(No (=0) / Yes (=1))

How many computers does your family own (including PCs, Macs, laptops and tablets, not including game consoles and smartphones)?
(None (=0) / One (=1) / Two (=2) / More than two (=3))

How many times did you and your family travel out of Wales for a holiday/vacation last year?
(Not at all (=0) / Once (=1) / Twice (=2) / More than twice (=3))

How many bathrooms (room with a bath/shower or both) are in your home?
(None (=0) / One (=1) / Two (=2) / More than two (=3))

Does your family have a dishwasher at home?
(No (=0) / Yes (=1))

Students were assigned low, medium or high FAS classification where FAS 1 (score = 0-6) indicates low affluence; FAS 2 (score = 7-9) indicates middle affluence; and FAS 3 (score = 10-13) indicates high affluence.

Students who did not respond to all six questions (6% of the sample) are not included in the figures showing breakdowns by FAS classification.

Reporting by gender

The gender item in the questionnaire came from the mandatory core HBSC questionnaire and asked 'Are you a boy or a girl?'. It had three response options: Boy, Girl, and 'I do not want to answer'.

The need for a more inclusive question on gender was recognised in Wales, but to maintain consistency across countries in the international HBSC survey, items from the core HBSC questionnaire cannot be substantively altered at the national level. 'I do not want to answer' was added to all questions in Wales because the electronic questionnaire was forced answer (i.e. students could not move forward to the next page without giving a response), but students had to be able to not respond if they so chose. This made the electronic format equivalent to those countries using paper questionnaires, where students could simply miss out a question they did not want to answer. No exception to this was made for the gender question, despite binary gender being the demographic factor by which international HBSC findings are presented.

Overall, 2% of students selected 'I do not want to answer' and Table A.2 shows how this varied by year group.

Table A.2. Percentage of students responding 'I do not want to answer' to the gender item

Year Group	7	8	9	10	11
% responding 'I do not want to answer'	1.4	1.7	2.4	2.6	1.9

In this report, results for students who responded 'I do not want answer' to the gender question are not included in figures reporting a gender breakdown. This was in recognition of the inadequacy of the question to capture non-binary and transgender identities and that subsequently, the subsample of students who selected 'I do not want to answer' to the gender question are likely to be a mixture of students who do not identify as a boy or a girl and those not engaged with the survey. Findings across a range of variables for this subsample are erratic and difficult to interpret, supporting this conclusion.

A revised gender question will be considered for the next round of the survey.

Questionnaire items

Questions included in the report are listed below under their relevant chapter headings. All questions had an additional response option of 'I do not want to answer'.

Chapter 3: General health and wellbeing

GENERAL HEALTH AND WELLBEING

Would you say your health is.....? *(Excellent / Good / Fair / Poor)*

Students were shown a picture of a ladder and given the following description and question: Here is a picture of a ladder – the top of the ladder '10' is the best possible life for you and the bottom '0' is the worst possible life. In general, where on the ladder do you feel you stand at the moment? In this adapted version of the Cantril Ladder, a score of six or more was defined as high life satisfaction.

(The Short Warwick-Edinburgh Mental Wellbeing Scale) Below are some statements about feelings and thoughts. Please select the option that best describes your experience of each over the last 2 weeks. I've been feeling optimistic about the future / I've been feeling useful / I've been feeling relaxed / I've been dealing with problems well / I've been thinking clearly / I've been feeling close to other people / I've been able to make up my own mind about things. (*None of the time / Rarely / Some of the time / Often / All of the time*)

How much do you agree with the following statement? Adults usually listen to the views of children and young people before making decisions that affect them. (*Strongly disagree / Disagree / Neither agree nor disagree / Agree / Strongly agree*)

During the most recent summer holidays, how often did you feel lonely? (*None of the time / Rarely / Some of the time / Often / All of the time*)

In the last 6 months: how often have you had the following….? Headache / Stomach ache / Backache / Feeling low / Irritability or bad temper / Feeling nervous / Difficulties in getting to sleep / Feeling dizzy. (*About every day / more than once a week / About every week / About every month / Rarely or never*)

Do you have a long-term illness, disability or medical condition (like diabetes, arthritis, allergy, or cerebral palsy) that has been diagnosed by a doctor? (*Yes / No*)

Does your long-term illness, disability or medical condition affect your attendance and participation at school? (*I do not have a long-term illness, disability or medical condition / Yes / No*)

Many young people get hurt or injured from activities such as playing sports or fighting with others at different places such as the street or home. Injuries can include being poisoned or burned. Injuries do not include illnesses such as Measles or the Flu. The following question is about injuries you may have had during the past 12 months. During the past 12 months, how many times were you injured and had to be treated by a doctor or nurse? (*I was not injured in the past 12 months / 1 time / 2 times / 3 times / 4 times or more*)

When do you usually go to bed if you have to go to school the next morning? (*No later than 9pm / 9.30pm / 10pm / 10.30pm / 11pm / 11.30pm / Midnight / 12.30 am / 1am / 1.30am / 2am or later*)

NIGHT TIME SCREEN USE AND SOCIAL MEDIA

What is the latest time you usually look at an electronic screen (TV computer, tablet or phone) before you go to sleep on a school night? (*No later than 9pm / 9.30pm / 10pm / 10.30pm / 11pm / 11.30pm / Midnight / 12.30 am / 1am / 1.30am / 2am or later*)

We are interested in your experiences of social media. The term social media refers to social network sites (e.g. Facebook) and instant messengers (e.g. WhatsApp, Snapchat, Facebook messenger). During the past year have you… Regularly found that you can't think of anything else but the moment that you will be able to use social media again / Regularly felt dissatisfied because you wanted to spend more time on social media / Often felt bad when you could not use social media / Tried to spend less time on social media, but failed / Regularly neglected other activities (e.g. hobbies, sport) because you wanted to use social media / Regularly had arguments with others because of your social media use / Regularly lied to your parents or friends about the amount of time you spend on social media / Often used social media to escape from negative feelings / Had serious conflict with your parents, brother(s) or sister(s) because of your social media use. (*No / Yes*)

PHYSICAL ACTIVITY, TIME SPENT SEDENTARY AND WEIGHT

Physical activity is any activity that increases your heart rate and makes you get out of breath some of the time. Physical activity can be done in sports, school activities, playing with friends, or walking to school. Some examples of physical activity are running, brisk walking, rollerblading, biking, dancing, skateboarding, swimming, netball, basketball, football, and rugby. For this next question add up all the time you spend doing physical activity each day. Over the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (*0 days / 1 / 2 / 3 / 4 / 5 / 6 / 7 days*)

On a typical day, is the main part of your journey TO school made by…. ? (*Walking / Bicycle / Bus, train, tram, underground or boat / Car, motorcycle or moped / Other means*)

Outside school hours: How many hours a day do you usually spend time sitting in your free time (for example, watching TV, using a computer or mobile phone, travelling in a car or by bus, sitting and talking, eating, studying)? Please be aware that if activities take place at the same time, these only count once. Weekdays. (*None at all / About half an hour a day / About 1 hour a day / About 2 hours a day / About 3 hours a day / About 4 hours a day / About 5 hours a day / About 6 hours a day / About 7 or more hours a day*)

How much do you weigh without clothes? *Free response (metric or imperial)*
How tall are you without shoes? *Free response (metric or imperial)*

EATING AND DRINKING PATTERNS

How often do you usually have breakfast (more than a glass of milk or fruit juice)? WEEKDAYS (*I never have breakfast during the week / One day / Two days / Three days / Four days / Five days*)

How many times a week do you usually eat or drink…? Fruits / Vegetables / Sweets (candy or chocolate) / Coke or other soft drinks that contain sugar / Energy drinks (such as Red Bull, Monster, Rockstar). (*Never / Less than once a week / Once a week / 2-4 days a week / 5-6 days a week / Once a day, every day / Every day, more than once*)

ORAL HYGIENE
How often do you brush your teeth? (*More than once a day / Once a day / At least once a week, but not daily / Less than once a week / Never*)

VOLUNTEERING
In your free time, do you do any of these organised activities? Organised activities refer to those activities that are done in a sport or another club or organisation. Volunteering for a club or organisation. (*Yes, at school (outside of lessons) / Yes, outside of school / No*)

Chapter 4: School life

FEELINGS ABOUT SCHOOL
How do you feel about school at present? (*I like it a lot / I like it a bit / I don't like it very much / I don't like it at all*)

How pressured do you feel by the schoolwork you have to do? (*Not at all / A little / Some / A lot*)

RELATIONSHIPS WITH SCHOOL STAFF
Here are some statements about your teachers. Please show how much you agree or disagree with each one. I feel that my teachers accept me as I am / I feel that my teachers care about me as a person / There is at least one teacher or other member of staff at this school who I can talk to about things that worry me. (*Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree*)

PARTICIPATION IN SCHOOL LIFE
Here are some statements about the pupils in your school. Please show how much you agree or disagree with each one. At our school, pupils have a say in planning and organising school activities and school events (project weeks or days, sport weeks or days, excursions, field trips etc.) / At our school, pupils have a lot of chances to help decide and plan school projects / At our school, pupils' ideas are treated seriously / At our school my ideas are taken seriously. (*Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree*)

BULLYING
Here are some questions about bullying. We say a person is BEING BULLIED when another person or a group of people repeatedly say or do unwanted nasty and unpleasant things to him or her. It is also bullying when a person is teased in a way he or she does not like or when he or she is left out of things on purpose. The person that bullies has more power than the person being bullied and wants to cause harm to him or her. It is NOT BULLYING when two people of about the same strength or power argue or fight. How often have you taken part in bullying another person(s) at school in the past couple of months? (*I have not bullied another person(s) at school in the past couple of months / It has happened once or twice / 2 or 3 times a month / About once a week / Several times a week*)

How often have you been bullied at school in the past couple of months? (*I have not been bullied at school in the past couple of months / It has happened once or twice / 2 or 3 times a month / About once a week / Several times a week*)

MENTAL HEALTH SUPPORT AT SCHOOL
How much do you agree with the following statement? There is support at my school for pupils who feel unhappy, worried or unable to cope. (*Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree*)

Chapter 5: Family life and friendships

FAMILY COMMUNICATION AND SUPPORT

How easy is it for you to talk to the following people about things that really bother you? Mother / Father. (*Very easy / Easy / Difficult / Very difficult / Don't have or don't see this person*)

We are interested in how you feel about the following statements. Please show how much you agree or disagree with each one. I get the emotional help and support I need from my family. (*1 Very strongly disagree / 2 / 3 / 4 / 5 / 6 / 7 Very strongly agree*)

YOUNG CARERS

Some young people have to help look after other people in their family because they are disabled, physically or mentally unwell or have a problem with alcohol or drugs. Is there anyone in your family that you regularly look after or give special help to for these reasons? (*No / Yes, one person in my family / Yes, two or more people in my family*)

PEER RELATIONSHIPS

We are interested in how you feel about the following statement(s). Please show how much you agree or disagree. I can count on my friends when things go wrong. (*1 Very strongly disagree / 2 / 3 / 4 / 5 / 6 / 7 Very strongly agree*)

During the past 12 months, how many times were you in a physical fight? (*I have not been in a physical fight in the past 12 months / 1 time / 2 times / 3 times / 4 times or more*)

In the past couple of months, how often have you taken part in cyberbullying (e.g. sent mean instant messages, email or text messages, wall postings, created a website making fun of someone, posted unflattering or inappropriate pictures online without permission or shared them with others)? (*I have not cyberbullied another person in the past couple of months / It has happened once or twice / 2 or 3 times a month / About once a week / Several times a week*)

In the past couple of months, how often have you been cyberbullied (e.g. someone sent mean instant messages, email or text messages about you, wall postings, created a website making fun of you, posted unflattering or inappropriate pictures of you online without permission and or shared them with others)? (*I have not been cyberbullied in the past couple of months / It has happened once or twice / 2 or 3 times a month / About once a week / Several times a week*)

Chapter 6: Relationships

SENDING A SEXUALLY EXPLICIT IMAGE (SEXTING)

Have you ever sent someone a sexually explicit image of yourself? (*Never / Once / More than once*)

SEXUAL INTERCOURSE

Have you ever had sexual intercourse (sometimes this is called "making love," "having sex", or "going all the way")? (*Yes / No*)

CONTRACEPTION

The last time you had sexual intercourse, did you or your partner use a condom? (*Yes / No / Don't know*)

AGE AT FIRST SEXUAL INTERCOURSE

How old were you when you had sexual intercourse for the first time? (*11 years old or younger / 12 years old / 13 years old / 14 years old / 15 years old / 16 years old*)

Chapter 7: Smoking, drinking and drug-taking

TOBACCO SMOKING

How often do you smoke tobacco at present? (*Every day / At least once a week, but not every day / Less than once a week / I do not smoke*)

At what age did you first do the following things? If there is something that you have not done, choose the 'never' category. Smoke a cigarette (more than a puff). (*Never / 11 years old or less / 12 years old / 13 years old / 14 years old / 15 years old / 16 years old*)

Thinking about the last time you were in a car, was anybody in the car smoking? (*Yes / No / Can't remember*)

E-CIGARETTE USE

The next question is about electronic cigarettes. An electronic cigarette is any device that a person uses to breath in a vapour. This is sometimes called 'vaping'. The vapour often contains nicotine or is flavoured. Electronic cigarettes can be called e-cigarettes, e-cigs, e-pens, e-fags, vapes, e-shisha or hookah pens. They may look like a conventional cigarette with a glowing tip or they may look like a pen or a small bottle (a 'tank'). Have you ever tried electronic cigarettes (sometimes called an 'e-cigarette')? (*I have never tried e-cigarettes / I have tried e-cigarettes once / I have tried e-cigarettes more than once*)

How often do you use e-cigarettes at present? (*Every day / at least once a week, but not every day / Less than once a week / I do not use e-cigarettes at present*)

ALCOHOL CONSUMPTION

At present how often do you drink anything alcoholic such as beer, wine, cider, alcopops or spirits? Try to include even those times when you only drink a small amount. Beer (including lager) / Wine / Spirits (e.g. Whisky, Vodka etc.) / Alcopops (e.g. Bacardi Breezer, Red Square, Smirnoff Ice, WKD etc) / Cider / Any other drink that contains alcohol. (*Every day / Every week / Every month / Rarely / Never*)

On days when you drink alcohol, how many drinks (e.g. cans of cider, cups of wine) do you usually have? (*I never drink alcohol / Less than 1 drink / 1 drink / 2 drinks / 3 drinks / 4 drinks / 5 or more drinks*)

Have you ever had so much alcohol that you were really drunk? In your lifetime / In the last 30 days. (*No, never / Yes, once / Yes, 2-3 times / Yes, 4-10 times / Yes, more than 10 times*)

At what age did you first do the following things? If there is something that you have not done, choose the 'never' category. Get drunk. (*Never / 11 years old or less / 12 years old / 13 years old / 14 years old / 15 years old / 16 years old*)

ILLICIT DRUG USE

Have you been offered cannabis (Weed, marijuana, dope, pot, hash, grass, bud, skunk, spliff/joints) in the last 12 months? (*Yes / No*)

This question is asking about the drug Cannabis again. Please answer the question honestly: nobody you know will see your answers. Have you ever taken Cannabis (Weed, Marijuana, Dope, Pot, Hash, Grass, Bud, Skunk, Spliff/ Joints)? In your life. (*Never / 1 – 2 days / 3 – 5 days / 6 – 9 days / 10 – 19 days / 20 – 29 days / 30 days or more*)

When was the last time you ever tried, used or took any of the following? Cannabis (Marijuana, Dope, Pot, Hash, Grass, Weed, Skunk, Spliff/Joints) / Semeron (Sem) / Magic Mushrooms (Shrooms, mushies) / Anabolic Steroids / Inhaling laughing gas (nitrous oxide, nos, whippits; DO NOT include

breathing in helium from party balloons or nitrous oxide from your doctor or dentist) / Mephedrone (M-Cat, Meow, Bubble, Charge, Drone, 4MMC) / New psychoactive substances (previously called 'Legal highs', such as pep stoned, BZP, black mamba spice) / Glue, gas (butane, lighter refills), aerosols or solvents (to inhale or sniff) / Other drugs that would not be given to you by a doctor or chemist. (*In the last month / In the last 12 months / More than 12 months ago / Never*)

At what age did you first do the following things? If there is something that you have not done, choose the 'never' category. Use cannabis. (*Never / 11 years old or less / 12 years old / 13 years old / 14 years old / 15 years old / 16 years old*)

Chapter 8: Gambling

GAMBLING

Have you spent any of YOUR money on any of the following in the past 7 days? We want to know about games you played yourself. (*Lotto (the main National Lottery draw) / National Lottery Scratchcards which you bought in a shop (not free Scratchcards) / National Lottery instant win games on the internet (e.g. National Lottery Gamestore) / Any other National Lottery games (e.g. EuroMillions, Thunderball, Hotpicks) / Fruit machines (e.g. at an arcade, pub or club) / Personally visiting a betting shop to play gaming machines / Playing other gambling machines / Personally placing a bet at a betting shop (e.g. on football or horse racing) / Bingo at a bingo club / Bingo somewhere other than a bingo club (e.g. social club, holiday park, etc.) / Personally visiting a casino to play casino games / Placing a private bet for money (e.g. with friends) / Playing cards for money with friends / Gambling websites/apps where you can win real money (e.g. poker, casinos, bingo, betting on sport or racing) / Other Lotteries (e.g. The Health Lottery, People's Postcode Lottery or other smaller lotteries available in shops) / Any other gambling / No, none of the above*)

In the past 12 months how often, if at all, would you say you have felt bad as a result of your own gambling? (*I have not gambled in the past 12 months / Never / Rarely / Sometimes / Often / All the time / Don't know*)

In the past 12 months how often, if at all, would you say that gambling among your family members and/or people you live with has made you feel bad? (*None of my family members and/or people I live with gamble* / *Never / Rarely / Sometimes / Often / All the time / Don't know*)

References

1. Patton GC, Sawyer SM, Santelli JS, et al. Our future: a Lancet commission on adolescent health and wellbeing. Lancet 2016;**387**(10036):2423-78.

2. Welsh Government Social Research. 2013/14 Health Behaviour in School-aged Children (HBSC) Wales: key findings implementation of the Child Practice Review Framework. Cardiff, UK: Welsh Government, 2015.

3. Littlecott HJ, Long S, Hawkins J, et al. Health Improvement and Educational Attainment in Secondary Schools: Complementary or Competing Priorities? Exploratory Analyses From the School Health Research Network in Wales. Health Education & Behavior 2018;**45**(4):635-44.

4. Donaldson G. Successful Futures. Independent Review of Curriculum and Assessment Arrangements in Wales: OGL, 2015.

5. Murphy S, Littlecott H, Hewitt G, et al. A Transdisciplinary Complex Adaptive Systems (T-CAS) Approach to Developing a National School-Based Culture of Prevention for Health Improvement: the School Health Research Network (SHRN) in Wales. Prevention Science 2018.

6. de Lacy E, Fletcher A, Hewitt G, et al. Cross-sectional study examining the prevalence, correlates and sequencing of electronic cigarette and tobacco use among 11-16-year olds in schools in Wales. BMJ Open 2017;**7**(2):e012784.

7. Long SJ, Evans RE, Fletcher A, et al. Comparison of substance use, subjective well-being and interpersonal relationships among young people in foster care and private households: a cross sectional analysis of the School Health Research Network survey in Wales. BMJ Open 2017;**7**(2):e014198.

8. Young H, Long SJ, Hallingberg B, et al. School practices important for students' sexual health: analysis of the school health research network survey in Wales. European Journal of Public Health 2018;**28**(2):309-14.

9. Black C, Murray L, Setterfield L, et al. Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS). Mode Effect Study Report. Edinburgh: The Scottish Government, 2015.

10. Currie C, Molcho M, Boyce W, et al. Researching health inequalities in adolescents: The development of the Health Behaviour in School-Aged Children (HBSC) Family Affluence Scale. Social Science & Medicine 2008;**66**(6):1429-36.

11. Torsheim T, Cavallo F, Levin KA, et al. Psychometric Validation of the Revised Family Affluence Scale: a Latent Variable Approach. Child Indicators Research 2016;**9**(3):771-84.

12. Knifton KQ, N. *Public mental health: global perspectives.*: Mc-Graw-Hill Education (UK), 2013.

13. Woodward M, Oliphant J, Lowe G, et al. Contribution of contemporaneous risk factors to social inequality in coronary heart disease and all causes mortality. Preventive Medicine 2003;**36**(5):561-8.

14. World Health Organization. Diet, nutrition, and the prevention of chronic diseases. Report of a joint WHO/FAO expert consultation. Geneva, 2003.

15. Schroder H, Mendez MA, Ribas L, et al. Caloric beverage drinking patterns are differentially associated with diet quality and adiposity among Spanish girls and boys. European Journal of Pediatrics 2014;**173**(9):1169-77.

16. Wang Y, Lobstein T. Worldwide trends in childhood overweight and obesity. International Journal of Pediatric Obesity 2006;**1**(1):11-25.

17. Doll HA, Petersen SE, Stewart-Brown SL. Obesity and physical and emotional well-being: associations between body mass index, chronic illness, and the physical and mental components of the SF-36 questionnaire. Obesity Research 2000;**8**(2):160-70.

18. Janssen I, Craig WM, Boyce WF, et al. Associations between overweight and obesity with bullying behaviors in school-aged children. Pediatrics 2004;**113**(5):1187-94.

19. Gradisar M, Gardner G, Dohnt H. Recent worldwide sleep patterns and problems during adolescence: a review and meta-analysis of age, region, and sleep. Sleep Medicine 2011;**12**(2):110-8.

20. Warner S, Murray G, Meyer D. Holiday and school-term sleep patterns of Australian adolescents. Journal of Adolescence 2008;**31**(5):595-608.

21. Bartel KA, Gradisar M, Williamson P. Protective and risk factors for adolescent sleep: a meta-analytic review. Sleep Medicine Reviews 2015;**21**:72-85.

22. Crowley SJ, Acebo C, Carskadon MA. Sleep, circadian rhythms, and delayed phase in adolescence. Sleep Medicine 2007;**8**(6):602-12.

23. Verduyn P, Ybarra O, Resibois M, et al. Do social network sites enhance or undermine subjective well-being? A critical review. Social Issues and Policy Review 2017;**11**(1):274-302.

24. Janssen I, Leblanc AG. Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. International Journal of Behavioral Nutrition and Physical Activity 2010;**7**:40.

25. Cantril H. *The pattern of human concerns*. New Brunswick: Rutgers University Press, 1965.

26. Haver A, Akerjordet K, Caputi P, et al. Measuring mental well-being: A validation of the Short Warwick-Edinburgh Mental Well-Being Scale in Norwegian and Swedish. Scandinavian Journal of Public Health 2015;**43**(7):721-7.

27. van den Eijnden RJJM, Lemmens JS, Valkenburg PM. The Social Media Disorder Scale. Computers in Human Behavior 2016;**61**:478-87.

28. Department of Health Physical Activity Health Improvement and Protection. Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officers. London, UK: Department of Health, 2011.

29. Marraccini ME, Brier ZM. School connectedness and suicidal thoughts and behaviors: A systematic meta-analysis. School Psychology Quarterly 2017;**32**(1):5-21.

30. Weatherson KA, O'Neill M, Lau EY, et al. The Protective Effects of School Connectedness on Substance Use and Physical Activity. Journal of Adolescent Health 2018;**63**(6):724-31.

31. Kidger J, Heron J, Leon DA, et al. Self-reported school experience as a predictor of self-harm during adolescence: a prospective cohort study in the South West of England (ALSPAC). Journal of Affective Disorders 2015;**173**:163-9.

32. Jain S, Cohen AK, Paglisotti T, et al. School climate and physical adolescent relationship abuse: Differences by sex, socioeconomic status, and bullying. Journal of Adolescence 2018;**66**:71-82.

33. Moore GF, Littlecott HJ, Evans R, et al. School composition, school culture and socioeconomic inequalities in young people's health: Multi-level analysis of the Health Behaviour in School-aged Children (HBSC) survey in Wales. British Educational Research Journal 2017;**43**(2):310-29.

34. Education Wales. Respecting Others – Schools. Inspiring rights, respect and equality – preventing and challenging bullying. Draft guidance document no: 246/2018: Welsh Government, 2018.

35. Arseneault L. Annual Research Review: The persistent and pervasive impact of being bullied in childhood and adolescence: implications for policy and practice. Journal of Child Psychology and Psychiatry 2018;**59**(4):405-21.

36. Evans CBR, Smokowski PR, Rose RA, et al. Cumulative Bullying Experiences, Adolescent Behavioral and Mental Health, and Academic Achievement: An Integrative Model of Perpetration, Victimization, and Bystander Behavior. Journal of Child and Family Studies 2018;**27**.

37. Vignoles A, Meschi E. The Determinants of Non-Cognitive and Cognitive Schooling Outcomes. Report to the Department of Children, Schools and Families. CEE Special Report 004. London, UK: Centre for the Economics of Education, Institute of Education, 2010.

38. Brown S, Taylor K. Bullying, education and earnings: Evidence from the National Child Development Study. Economics of Education Review 2008;**27**(4):387-401.

39. Jamal F, Fletcher A, Harden A, et al. The school environment and student health: a systematic review and meta-ethnography of qualitative research. BMC Public Health 2013;**13**:798.

40. Collishaw S. Annual research review: Secular trends in child and adolescent mental health. Journal of Child Psychology and Psychiatry 2015;**56**(3):370-93.

41. Farrand P, Parker M, Lee C. Intention of adolescents to seek professional help for emotional and behavioural difficulties. Health and Social Care in the Community 2007;**15**(5):464-73.

42. Welsh Assembly Government. Thinking positively: Emotional health and well-being in schools and Early Years settings: Welsh Assembly Government, 2010.

43. Statistics for Wales. Counselling for Children and Young People, 2016/17 (Statistical First Release: SFR 24/2018): OGL, 2018.

44. Schwartz OS, Byrne ML, Simmons JG, et al. Parenting During Early Adolescence and Adolescent-Onset Major Depression: A 6-Year Prospective Longitudinal Study. Clinical Psychological Science 2014;**2**(3):272-86.

45. Moore GF, Cox R, Evans RE, et al. School, Peer and Family Relationships and Adolescent Substance Use, Subjective Wellbeing and Mental Health Symptoms in Wales: a Cross Sectional Study. Child Indicators Research 2018;**11**(6):1951-65.

46. Welsh Government. Respecting others: Cyberbullying. Cardiff, UK: Welsh Government, 2011.

47. Fletcher A, Fitzgerald-Yau N, Jones R, et al. Brief report: Cyberbullying perpetration and its associations with socio-demographics, aggressive behaviour at school, and mental health outcomes. Journal of Adolescence 2014;**37**(8):1393-8.

48. Lloyd K. Happiness and Well-Being of Young Carers: Extent, Nature and Correlates of Caring Among 10 and 11 Year Old School Children. Journal of Happiness Studies 2013;**14**:67-90.

49. Hounsell D. Hidden from view: The experiences of young carers in England. London, UK: The Children's Society, 2013.

50. Welsh Government. The Carers Strategy for Wales 2013. Cardiff, UK: Welsh Government, 2013.

51. World Health Organization. Secondary 2018. http://www.euro.who.int/en/health-topics/Life-stages/sexual-and-reproductive-health/news/news/2011/06/sexual-health-throughout-life/definition.

52. Tucker Halpern C, Haydon AA. Sexual Timetables for Oral-Genital, Vaginal, and Anal Intercourse: Sociodemographic Comparisons in a Nationally Representative Sample of Adolescents. American Journal of Public Health 2012;**102**(6):1221-28.

53. Gravningen K, Furberg AS, Simonsen GS, et al. Early sexual behaviour and Chlamydia trachomatis infection - a population based cross-sectional study on gender differences among adolescents in Norway. BMC Infectious Diseases 2012;**12**:319.

54. Office for National Statistics. Conceptions in England and Wales: 2016: Office for National Statistics, 2018.

55. Communicable Disease Surveillance Centre. HIV and STI trends in Wales Surveillance Report, September 2018: Public Health Wales, 2018.

56. Jackson C, Sweeting H, Haw S. Clustering of substance use and sexual risk behaviour in adolescence: analysis of two cohort studies. BMJ Open 2012;**2**:e000661.

57. Madkour AS, Farhat T, Halpern CT, et al. Early adolescent sexual initiation as a problem behavior: a comparative study of five nations. Journal of Adolescent Health 2010;**47**(4):389-98.

58. Handschuh C, La Cross A, Smaldone A. Is Sexting Associated with Sexual Behaviors During Adolescence? A Systematic Literature Review and Meta-Analysis. Journal of Midwifery and Women's Health 2018.

59. Temple JR, Choi H. Longitudinal association between teen sexting and sexual behavior. Pediatrics 2014;**134**(5):e1287-92.

60. Van Ouytsel J, Walrave M, Lu Y, et al. The Associations between Substance Use, Sexual Behavior, Deviant Behaviors and Adolescents' Engagement in Sexting: Does Relationship Context Matter? Journal of Youth and Adolescence 2018;**47**(11):2353-70.

61. Welsh Assembly Government. Sexual Health And Wellbeing Action Plan For Wales, 2010-2015: Welsh Assembly Government, 2010.

62. Couzens Z, Jones A, Shankar G. A review of sexual health in Wales: Public Health Wales, 2018.

63. Sex and Relationships Education Expert Panel. The Future of the Sex and Relationships Education Curriculum in Wales. Recommendations of the Sex and Relationships Education Expert Panel. Cardiff, UK: Welsh Government, 2017.

64. Welsh Government. National Strategy on Violence against Women, Domestic Abuse and Sexual Violence – 2016 - 2021: Welsh Government, 2016.

65. Welsh Assembly Government. Working Together to Reduce Harm The Substance Misuse Strategy for Wales 2008-2018: Welsh Assembly Government.

66. Statistics for Wales. National Survey for Wales 2017-18: Population Health - Lifestyle (Statistical Bulletin SB 37/2018): Welsh Government, 2018.

67. Welsh Government. Tobacco Control Delivery Plan For Wales 2017-2020. Cardiff: Welsh Government, 2017.

68. Donaldson L. Guidance on the consumption of alcohol by children and young people. London, UK: Department of Health, 2009.

69. Stiby AI, Hickman M, Munafo MR, et al. Adolescent cannabis and tobacco use and educational outcomes at age 16: birth cohort study. Addiction 2015;**110**(4):658-68.

70. Hale DR, Viner RM. The correlates and course of multiple health risk behaviour in adolescence. BMC Public Health 2016;**16**:458.

71. Williams RJ, Volberg RA, Stevens RMG, et al. The Definition, Dimensionalization, and Assessment of Gambling Participation. Report prepared for the Canadian Consortium for Gambling Research: University of Lethbridge, 2017.

72. Terrone J, Musetti A, Raschielli S, et al. Attachment relationships and internalization and externalization problems in a group of adolescents with pathological gambling disorder. Clinical Neuropsychiatry 2018;**15**(1):66-74.

73. Floros G. Gambling disorder in adolescents: prevalence, new developments, and treatment challenges. Adolescent Health, Medicine and Therapeutics 2018;**9**:43-51.

74. Calado F, Alexandre J, Griffiths M. Gambling Among Adolescents and Emerging Adults: A Cross-Cultural Study Between Portuguese and English Youth. International Journal of Mental Health and Addiction 2018;**DOI: 10.1007/s11469-018-9980-y**.

75. Calado F, Alexandre J, Griffiths MD. Prevalence of Adolescent Problem Gambling: A Systematic Review of Recent Research. Journal of Gambling Studies 2017;**33**:397-424.

76. Gambling Commission. Young People & Gambling 2018. A research study among 11-16 year olds in Great Britain: Gambling Commission, 2018.

77. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders DSM-5*. 5th ed. Washington DC, USA: American Psychiatric Association, 2013.

78. Cronce JM, Bittinger JN, Di Lodovico CM, et al. Independent Versus Co-occurring Substance Use in Relation to Gambling Outcomes in Older Adolescents and Young Adults. Journal of Adolescent Health 2017;**60**(5):528-33.

79. Froberg F, Hallqvist J, Tengstrom A. Psychosocial health and gambling problems among men and women aged 16-24 years in the Swedish National Public Health Survey. European Journal of Public Health 2013;**23**(3):427-33.

80. Proimos J, DuRant RH, Pierce JD, et al. Gambling and other risk behaviors among 8th- to 12th-grade students. Pediatrics 1998;**102**(2):e23.

81. Afifi TO, Nicholson R, Martins SS, et al. A Longitudinal Study of the Temporal Relation Between Problem Gambling and Mental and Substance Use Disorders Among Young Adults. Canadian Journal of Psychiatry 2016;**61**(2):102-11.

82. Richard J, Derevensky J. Identifying the Relationship Between Mental Health Symptoms, Problem Behaviors and Gambling Among Adolescents. Annals of Behavioural Science 2017;**3**(2):8.

83. Messerlian C, Gillespie M, Derevensky JL. Beyond drugs and alcohol: Including gambling in a high-risk behavioural framework. Paediatrics and Child Health 2007;**12**(3):199-204.

84. Browne M, Langham E, Rawat V, et al. Assessing gambling-related harm in Victoria: a public health perspective. Melbourne, Australia: Victorian Responsible Gambling Foundation, 2016.

85. Chaumeton NR, Ramowski SK, Nystrom RJ. Correlates of gambling among eighth-grade boys and girls. Journal of School Health 2011;**81**(7):374-85.

86. Forrest D, McHale IG. Gambling and problem gambling among young adolescents in Great Britain. Journal of Gambling Studies 2012;**28**(4):607-22.

87. Giralt S, Muller KW, Beutel ME, et al. Prevalence, risk factors, and psychosocial adjustment of problematic gambling in adolescents: Results from two representative German samples. Journal of Behavioral Addictions 2018;**7**(2):339-47.

88. Gupta R, Derevensky JL. Adolescents with gambling problems: from research to treatment. Journal of Gambling Studies 2000;**16**(2-3):315-42.

89. Blinn-Pike L, Worthy SL, Jonkman JN. Adolescent gambling: a review of an emerging field of research. Journal of Adolescent Health 2010;**47**(3):223-36.

90. Thorley C, Stirling A, Huynh E. Cards On The Table: The cost to government associated with people who are problem gamblers in Britain. London, UK: Institute for Public Policy Research, 2016.

91. Williams RJ, Rehm J, Stevens RMG. The Social and Economic Impacts of Gambling. Final Report prepared for the Canadian Consortium for Gambling Research. . Lethbridge, Canada: University of Lethbridge, 2011.

92. Vieno A, Canale N, Potente R, et al. The multiplicative effect of combining alcohol with energy drinks on adolescent gambling. Addictive Behaviors 2018;**82**:7-13.

93. Simmons JL, Whelan JP, Meyers AW, et al. Gambling Outcome Expectancies and Gambling Behavior Among African-American Adolescents: Gender as a Moderating Variable. Journal of Gambling Studies 2016;**32**(1):205-15.

94. Delfabbro P, King D, Griffiths MD. From Adolescent to Adult Gambling: An Analysis of Longitudinal Gambling Patterns in South Australia. Journal of Gambling Studies 2014;**30**:547-63.

95. Atherton F, Beynon C. Is gambling an emerging public health issue for Wales, UK? Journal of Public Health (Oxf) 2018;**DOI: 10.1093/pubmed/fdy164**.

96. Chief Medical Officer for Wales. Gambling with our Health. Chief Medical Officer for Wales Annual Report 2016/17. Cardiff, UK: Welsh Government, 2018.