

The Irish Health Behaviour in School-aged Children (HBSC) Study 2006



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August 2007

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Foreword



I welcome the publication of the national results of the 2006 study on the Health Behaviours of School-aged Children (HBSC). Our children are our most important resource and this research is essential in identifying lifestyle trends and will inform future health promotion policies for our children. This is the first time that HBSC is published separately; previously it was included as part of the National Health and Lifestyle Survey (SLAN).

The HBSC is a World Health Organisation (WHO) European collaborative study with over 40 participating countries and regions. The study aims to get new insights into, and increase our understanding of health behaviours, well-being and lifestyles in young people in different countries. This is the third time that my Department has funded the Irish phase of this important study. Ireland's continued participation will ensure the comparability of the data with previous Irish surveys as well as with our European neighbours. This is essential in identifying and monitoring health behaviour trends among both the national population and in an international context. In previous HBSC surveys, Ireland has collected data from children aged 10-18 years and this year for the first time, at the request of the Office of the Minister for Children, data were also collected from children in middle childhood i.e. 9 year old children in third and fourth class.

I am heartened at some of the main findings outlined in the report. Irish children are reporting high rates of self-reported health and happiness, and these have increased since 2002. There is a continuing decrease in smoking, as well as a sharp increase in the number of children who report that they always use a seat-belt in a car. There are also increases indicated in vegetable consumption, and decreases in frequent consumption of sweets and soft drinks. However, the finding that half of our 15-17 year olds consumed alcohol in the preceding month continues to be a cause for concern.

I wish to acknowledge the work of the Centre for Health Promotion Studies at the National University of Ireland, Galway in compiling this study. Finally I would like to thank all those students who took time to complete the questionnaires and the staff from the participating schools for their support.

A handwritten signature in black ink that reads "Pat the Cope Gallagher, T.D." The signature is written in a cursive, flowing style.

Pat the Cope Gallagher, T.D.
Minister for Health Promotion & Food Safety



Introduction

This report presents data from the HBSC Ireland 2006, the Irish Health Behaviour in School-aged Children survey. The 2006 HBSC survey is the third time that data of this kind has been collected from young people across the Republic of Ireland; previous surveys were conducted in 2002 and 1998 (www.nuigalway.ie/hbsc).

HBSC is a cross-national research study conducted in collaboration with the World Health Organisation (WHO) Regional Office for Europe. The HBSC international survey runs on an academic 4-year cycle and in 2005/6 there were 41 participating countries and regions (www.hbsc.org). The overall study aims are to gain new insight into, and increase our understanding of young people's health and well-being, health behaviours and their social context. As well as serving a monitoring and a knowledge-generating function, one of the key objectives of HBSC has been to inform policy and practice.

Cross-nationally, HBSC collects information on the key indicators of health, health attitudes and health behaviour, as well as the context of health for young people. HBSC is a school-based survey with data collected through self-completion questionnaires administered by teachers in the classroom. The HBSC survey instrument is a standard questionnaire developed by the international research network. The areas of interest are chosen in collaboration with the WHO and are designed to help assist developments at a national and international level in relation to youth health.

The issues identified for inclusion in this first report from the 2006 Irish survey are those identified in the National Health Promotion Strategy¹ and the Health Strategy: Quality and Fairness², and mirror the two previous National HBSC reports^{3,4}. These include general health, smoking, use of alcohol and other substances, food and dietary behaviour, exercise and physical activity, self-care, injuries and bullying. Variations by gender, age group and social class are presented in this report. The HBSC also provides further research data on health and lifestyle behaviours across a range of socio-demographic and economic parameters.

In previous HBSC surveys, the Republic of Ireland collected data from children aged 10-18 years. This year, for the first time, data were collected from children in middle childhood i.e. 9 year old children in 3rd and 4th class. The data on health and lifestyle in the middle childhood period presented in this report include general health, food and dietary behaviour, physical activity, self-care and bullying. Since comparison with previous survey years is not possible for the middle childhood study, data for these children are presented separately in this report.

The HBSC study was funded by the Department of Health and Children and the Office of the Minister for Children. The survey and analyses were carried out at the Health Promotion Research Centre, National University of Ireland, Galway.

¹ Department of Health and Children (2000). *The National Health Promotion Strategy 2000-2005*. http://www.healthpromotion.ie/health_promotion_strategy/.

² Department of Health and Children (2001). *Quality and Fairness: a health system for you*. http://www.dohc.ie/publications/quality_and_fairness.html.

³ Kelleher, C., Nic Gabhainn, S., Friel, S., Corrigan, H., Nolan, G., Sixsmith, J., Walsh, O. & Cooke, M. (2003). *National Health and Lifestyle Surveys: Survey of Lifestyle, Attitudes and Nutrition (SLÁN) and the Irish Health Behaviour in School-Aged children survey (HBSC)*. Department of Health and Children: Dublin.

⁴ Friel, S., Nic Gabhainn, S. & Kelleher, C. (1999). *The National Lifestyle Surveys: Survey of Lifestyle, Attitudes and Nutrition (SLÁN) and the Irish Health Behaviour in School-Aged children survey (HBSC)*. Department of Health and Children: Dublin.

Executive Summary

A summary of the main findings from HBSC Ireland 2006 is provided below:

General health

Since 2002, rates of excellent or good self-reported health remain the same in boys (89% in 2006 compared with 87% in 2002) and in girls (86% in 2006 compared with 84% in 2002). In terms of children's reported happiness, 92% of boys and 89% of girls feel very or quite happy with their lives at present; again a slight increase since 2002 across age groups and gender. Fewer girls than boys report excellent health and feeling very happy in 2006. Patterns continue to be inversely related to age for both self-reported health and happiness, and are inversely related to social class for good or excellent self-reported health. There is no evidence of a class gradient effect in children from middle childhood for self-reports of health (95% report excellent or good health) or happiness (95% report feeling very or quite happy).

Smoking

There continues to be a fall in reported smoking status since the first HBSC Ireland survey in 1998. Overall, 15% report they are current smokers, down from 21% in 1998 and 19% in 2002. Rates have dropped most for boys in the 15-17 year age group. As in previous years, a higher number of girls aged 15-17 years report that they are smokers (28%) compared to boys of the same age group (23%). Similar to the fall in current smoking status there has been a decline in reports of 'ever smoking' between 2002 and 2006. In particular, a sharp drop in 'ever smoking' is evident among the younger children and among 15-17 year old boys between 2002 and 2006. Less than 1% of children in middle childhood report that they are current smokers.

Alcohol

Overall, 47% of the children surveyed report that they have never had an alcoholic drink, up from 40% in 2002 and 31% in 1998. This effect is evident across all age categories between 2002 and 2006. Rates of girls (52%) reporting that they never had an alcoholic drink are higher than boys (43%). Marked changes between 2002 and 2006 are not evident for the other alcohol-related variables presented in this report. For example, the proportion of children reporting having had an alcoholic drink in the past month (defined as current drinkers) has remained stable between 2002 and 2006, with the exception of 15-17 year old boys, where a small decrease is evident. Similarly, rates of children who report having been 'really drunk' remained stable between 2002 and 2006. Nevertheless, although the figures have not increased over time, about half the children aged 15-17 years old report they are current drinkers and just over a third report they have been 'really drunk' in the last 30 days. There appears to be little evidence of a social class effect for the alcohol-related variables presented. Similarly, there are no gender differences, with the exception of never having had an alcoholic drink.

Drug use

Cannabis use remains relatively stable across most age groups, although there has been a decrease between 2002 and 2006 in reported use of cannabis in the last 12 months among 15-17 year old boys. Overall, 12% report using cannabis in the last 12 months in 2006 compared to 11% in 2002 with little evidence of a social class effect. However, a social class effect is clearly evident among 15-17 year old boys who report more recent cannabis consumption (last 30 days), with slightly more boys (8%) than girls (5%) report using cannabis in this time frame.

Food and dietary behaviour

In total, 19% of children report that they consume fruits more than once a day. Across all age groups, rates of fruit consumption in girls (23%) continue to be higher than for boys (16%), with a slight increase among girls only, between 2002 and 2006. A greater proportion of younger girls (10-11 years old) report that they consume fruit more frequently than daily, compared to older girls; this is not observed among boys. There are some similarities in reported vegetable consumption, with an increase observed from 2002, particularly among girls. Moreover the proportion of girls (20%) reporting vegetable consumption more frequently than daily is greater than the proportion of boys (16%), and this is the case across each age category. There is some evidence of a social class effect especially among girls, with those from higher social classes being more likely to report frequent vegetable consumption.

The percentage of children who report eating sweets (39%) and drinking soft drinks (26%) daily or more has decreased since 2002, in all age categories. There is some evidence of class and gender effects in soft drinks consumption. In middle childhood, 28% and 18% report eating sweets and drinking soft drinks daily or more, respectively, with a clear social class gradient in soft drinks consumption. Children from the higher social classes are less likely to report frequent consumption of soft drinks.

Overall, 14% of children report that they never have breakfast during weekdays and this remains unchanged from 2002 (15%). Similar to 2002, the rates increase with age and a greater proportion of girls than boys report not having breakfast on school days. In middle childhood, only 2% report not having breakfast on any day of the week. The proportion of children who report they ever go to school or to bed hungry because there is no food at home remains stable; 16% in 2002 versus 17% in 2006. There is no clear evidence of a social class effect.

Overall, 12% (8% of boys and 15% of girls) report being on a weight reducing diet and an additional 20% (15% of boys and 26% of girls) report that they needed to lose weight. The figures in 2002 were 13% and 22% respectively. There is an increase across age groups in this dieting behaviour among girls but among boys the figures remain rather stable. Gender differences are not apparent in the youngest age group but are clear in the older age groups; e.g. in the 15-17 year old age category, 20% of girls report being on a diet (9% of boys), while a further 32% of girls report the need to lose weight (14% of boys). There is no consistent pattern across the social classes.

Executive Summary

Exercise and physical activity

There has been little change in reported frequency of participation in physical activity, with 53% of children exercising four or more times a week (48% in 2002). Gender differences are evident with 63% of boys and 43% of girls exercising four or more times per week. Exercise participation decreases with age and this is particularly noticeable among girls (dropping from 58% of 10-11 year olds to 28% of 15-17 year olds). Reported inactivity rates are low generally with the exception of girls aged 15-17 years. These age and gender patterns are unchanged from 2002. In middle childhood there is a high percentage of children reporting participation in vigorous exercise four or more times a week (74% of boys and 69% of girls), and reported levels of inactivity are also low (6%).

In terms of moderate and vigorous physical activity, the percentages of boys and younger children reporting being physically active at recommended levels, is higher than that of girls and older children. The figures demonstrate an increase in levels of activity between 2002 and 2006 for both boys and girls and across each age category. Once again, a high percentage of children (79%) from middle childhood report being physically active most days of the week, with little gender and no social class effect.

Self-care

Rates of self-reported tooth-brushing remain unchanged from 2002. In 2006, 63% of children (64% in middle childhood) report brushing their teeth more than once a day, with 72% of girls and 54% of boys reporting tooth brushing at this frequency. There appears to be no change across age groups but there is some evidence of a social class effect with more children from higher social classes reporting that they brush their teeth more than once a day.

There has been an increase in reported seatbelt usage in 2006 (76% of boys and 83% of girls) compared to 2002 (57% of boys and 65% of girls). The gender differences described are not evident in middle childhood, with 88% reporting that they always wear a seatbelt in a car.

Injuries

Overall, 43% of children (51% of boys and 34% of girls) report being injured and needing treatment once or more in the last 12 months, a decrease from 2002. Fifteen percent of children report that they have missed three or more days of activity due to injury (19% of boys and 11% of girls). Injuries were most likely to occur in a sports facility followed by the home or yard and school. Children were most likely to sustain an injury during a sports activity. Comparable data for 2002 is not available.

Bullying

In general, reports of ever being bullied in school remain unchanged and bullying continues to be more frequent among 10-11 year old children than older children. In middle childhood, 37% report ever having been bullied. There is no consistent evidence of a social class effect. In terms of bullying others, the percentage of boys (29%) reporting that they have taken part in bullying others is substantially higher than girls (14%). A greater proportion of boys from the older age groups (12-17 years) report bullying others compared to the 10-11 year old age group. This pattern is not evident among girls. There is no consistent evidence of a social class effect.

Methodology

HBSC 2006 survey

The HBSC is a WHO (European) collaborative study. Principal investigators from all countries/regions co-operate in relation to survey content, methodology and timing, and an international protocol is developed. Strict adherence to the protocol is required for inclusion in the international database and this has been achieved with the current study.

In the Republic of Ireland, sampling was conducted in order to be representative of the proportion of children in each of 8 geographical regions. The objective was to achieve a nationally representative sample of school-aged children, and the procedures employed were the same as those for the 1998 and 2002 HBSC Ireland surveys. Data from the 2002 census were employed to provide a picture of the population distribution across geographical regions. The sampling frame consisted of primary and post-primary schools, lists of which were provided by the Department of Education and Science. A two-stage process identified study participants. Individual schools within regions were first randomly selected and subsequently, class groups within schools were randomly selected for participation. In primary schools both 5th and 6th class groups were included, while in post-primary schools all classes, with the exception of Leaving Certificate groups (i.e. final year examination classes) were sampled.

School principals were first approached by post and when positive responses were received, HBSC questionnaires in Irish or English were offered, along with blank envelopes to facilitate anonymity, parental consent forms, information sheets for teachers and classroom feedback forms. All returns were facilitated through the provision of FREEPOST envelopes. In order to maximise response rates, postal reminders were sent to schools, followed by telephone calls from research staff at the Health Promotion Research Centre, NUI Galway. Data entry was conducted according to the International HBSC protocol. A summary of the methodology employed can be found in Table 1.

Middle Childhood Survey

In previous HBSC surveys, the Republic of Ireland has collected data from children aged 10-18 years. This year, for the first time, data were collected from children in 3rd and 4th class, using an abbreviated version of the main HBSC questionnaire. The sampling procedure for the middle childhood study was exactly the same as that used for the Primary sample of the HBSC survey, as described above.

Methodology

Table 1: Summary of methodology for the HBSC and Middle Childhood Surveys

Population	School going children aged 9-18 years
Sampling frame	Department of Education and Science school lists
Sample	Cluster sample of students in a given classroom
Stratification	Proportionate to the distribution of pupils across geographical regions
Survey instrument	Self-completion questionnaire
Delivery/Reminders	Postal delivery via principals and teachers, letter and telephone reminders
Return	Freepost addressed envelopes provided
Response rate	HBSC: 63% of invited schools / 83% of students Middle Childhood: 73% of invited schools / 83% of students
Obtained sample	HBSC: 215 schools / 10,334 pupils Middle Childhood: 122 schools / 3,404 pupils
Data quality	Data were entered according to the HBSC international protocol
Ethics	Full ethical approval was granted by the National University of Ireland, Galway Research Ethics Committee

Details of the demographic representativeness of the sample for both studies can be found in Appendix 1.

The results section outlines children's perceptions and behaviours relating to health. Data are presented for HBSC and middle childhood surveys separately. Data are illustrated by gender, age group and social class (SC). Social class is represented by SC1-2, SC3-4 and SC5-6 corresponding to high, medium and low social classes, respectively. The categories used for social class are standard and were determined by parental occupation. Social class 1 represent professional occupations (i.e. solicitor, doctor), social class 2 represent managerial occupations (i.e. nurse, teacher), social class 3 represent non-manual occupations (i.e. salesperson, office clerk), social class 4 represent skilled-manual occupations (i.e. hairdresser, carpenter), social class 5 represent semi-skilled occupations (i.e. postman, driver), social class 6 represent unskilled occupations (i.e. cleaner, labourer).

Results



General Health

Children were asked a number of general questions concerning their lives and perceived health.

Excellent health

The first of these asks how they would rate their health. Overall, 33% report that they would say their health is excellent and a further 54% would say their health is good, however these figures mask age and gender differences. The figures presented below are for those who report that they would say their health is excellent, by gender, age group and social class, in both 2002 and 2006.

Figure 1: Percentages of boys who report their health is excellent

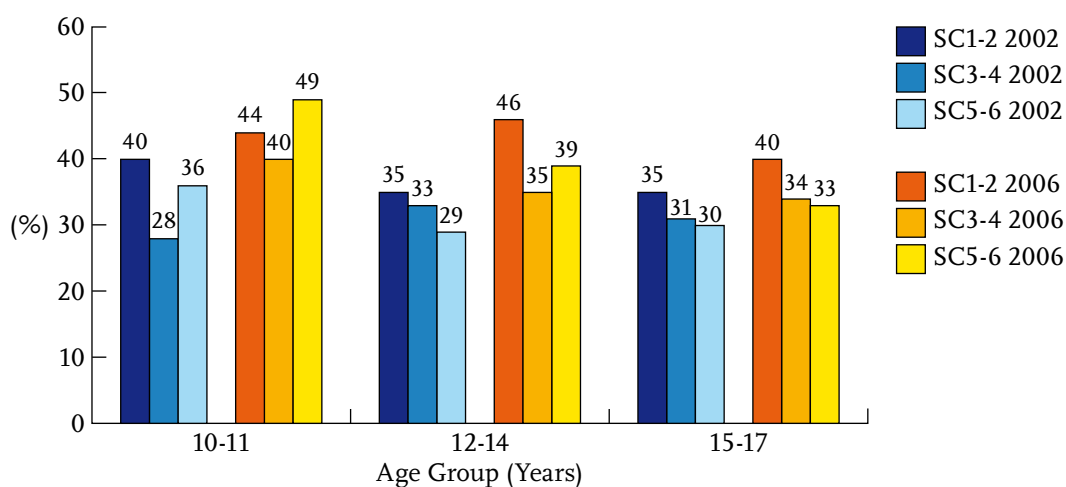
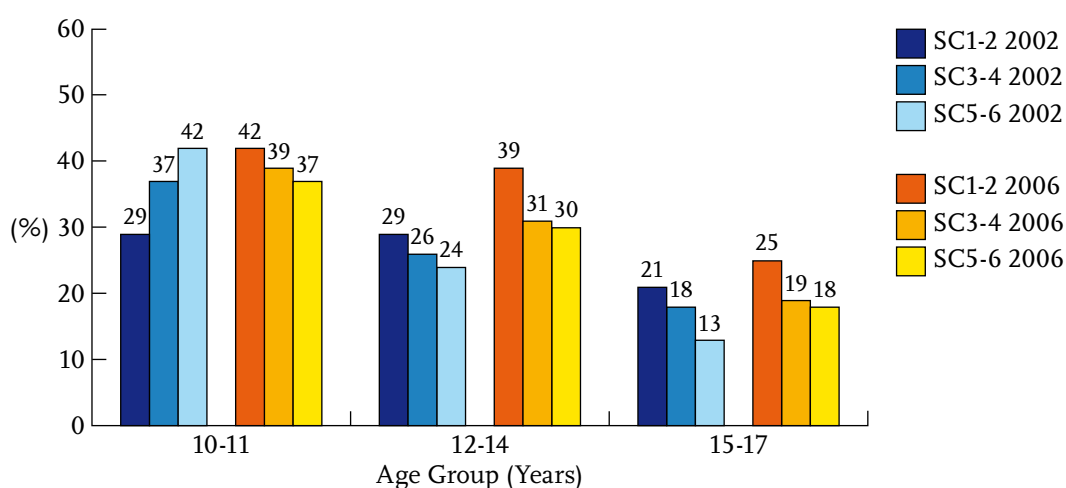


Figure 2: Percentages of girls who report their health is excellent



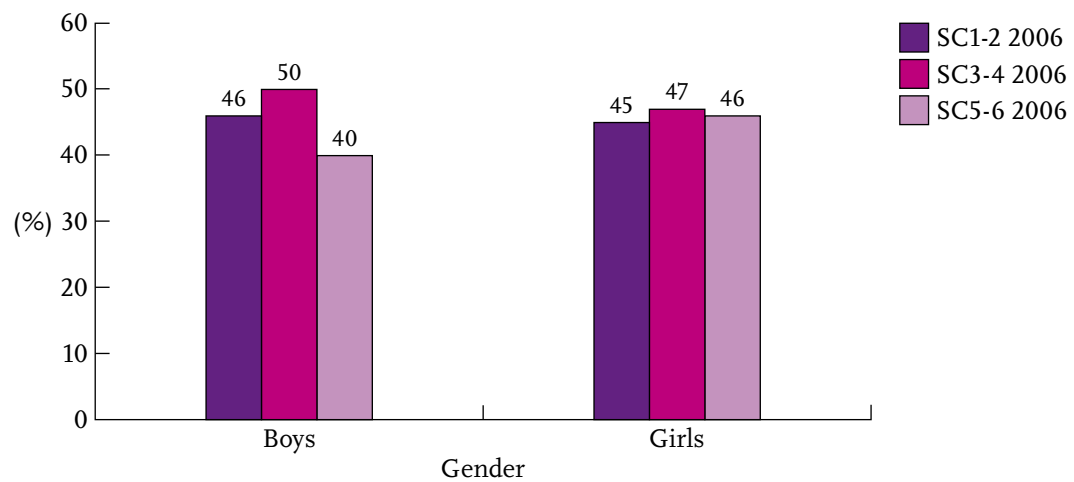
Overall, fewer girls than boys report excellent health and a larger proportion of younger children of both genders report that their health is excellent compared to older children (40% of 10-11 year olds; 36% of 12-14 year olds; 28% of 15-17 year olds). Data suggest the existence of a class gradient with more children from social classes 1-2 reporting excellent health in 2006. Generally, there is a slight increase in children reporting excellent health in 2006 compared to 2002.

General Health

Excellent health: Middle Childhood Study

Among 3rd and 4th class children 47% report that their health is excellent and a further 48% that their health is good, with no consistent evidence of a social class effect.

Figure 3: Percentages of 9 year old boys and girls who report their health is excellent



Life at present (happiness)

Another aspect of general health to be reported here concerns how children feel about their lives at present. Overall, 50% report that they are very happy and a further 41% that they are quite happy with their lives. The remaining 9% report that they are not very or not at all happy with their lives at present. Here again, these figures mask age and gender differences.

Figure 4: Percentages of boys who report feeling very happy about their lives at present

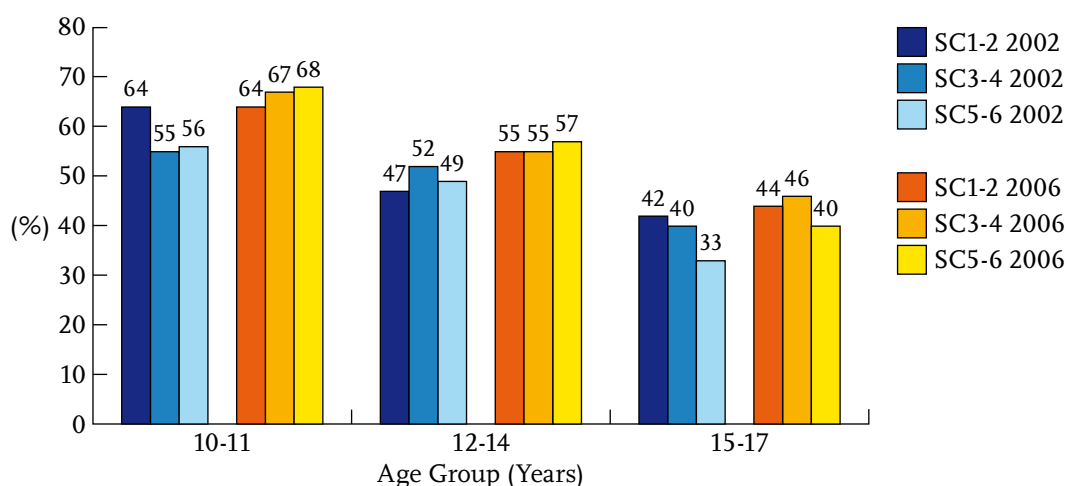
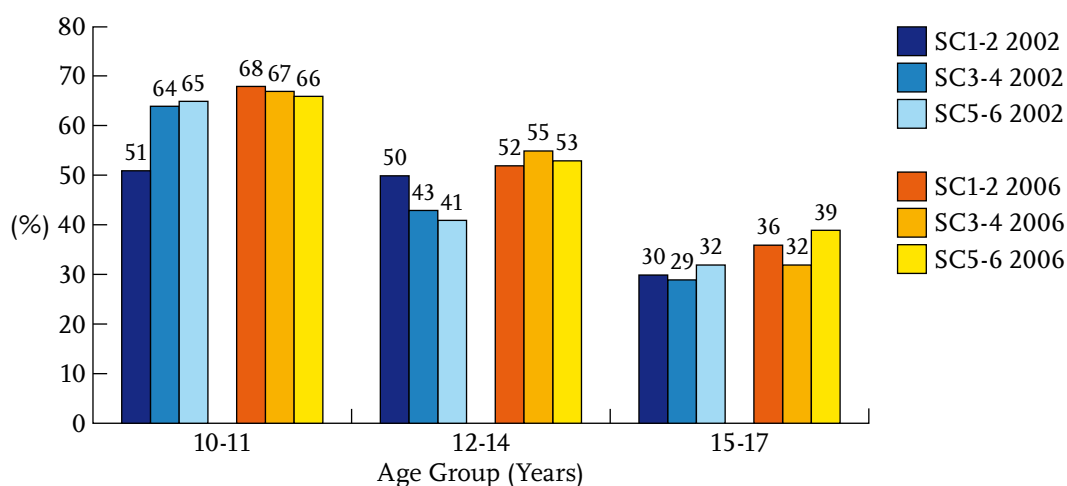


Figure 5: Percentages of girls who report feeling very happy about their lives at present



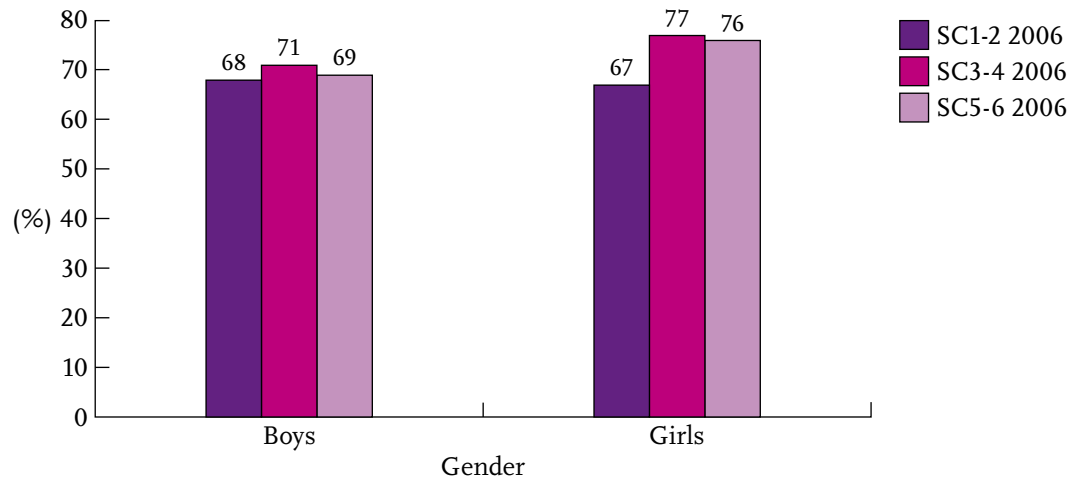
Boys are slightly more likely than girls to report feeling very happy, and a higher percentage of younger children of both genders report feeling very happy compared to children from older age groups (67% of 10-11 year olds; 54% of 12-14 year olds; 39% of 15-17 year olds). There is no evidence of a social class effect, but there has been an increase in self-reported happiness for most groups since 2002.

General Health

Life at present (happiness): Middle Childhood Study

Following the same pattern, 72% of 3rd and 4th class students reported feeling very happy and a further 32% report that they are quite happy with their lives, with slight gender differences and no evidence of a social class effect.

Figure 6: Percentages of 9 year old boys and girls who report feeling very happy about their lives at present



High life satisfaction

Children were also asked to report where they feel they stand at the moment on a scale from 0 to 10. Overall, 77% ranked themselves 7 or higher, with 1% reporting they have the worst possible life; a ranking of 0. A slightly higher percentage of boys (79%) reported high life satisfaction compared to girls (74%).

Figure 7: Percentages of boys who report high life satisfaction

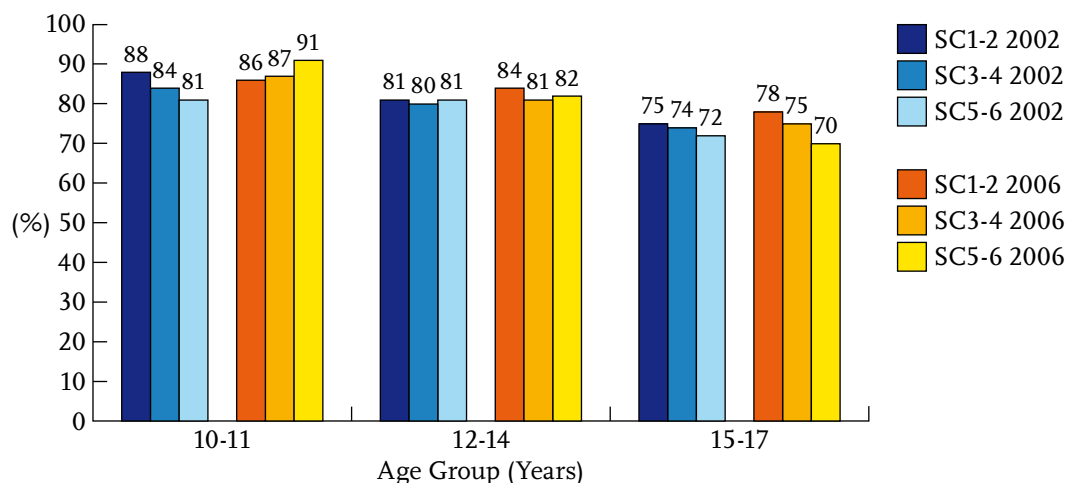
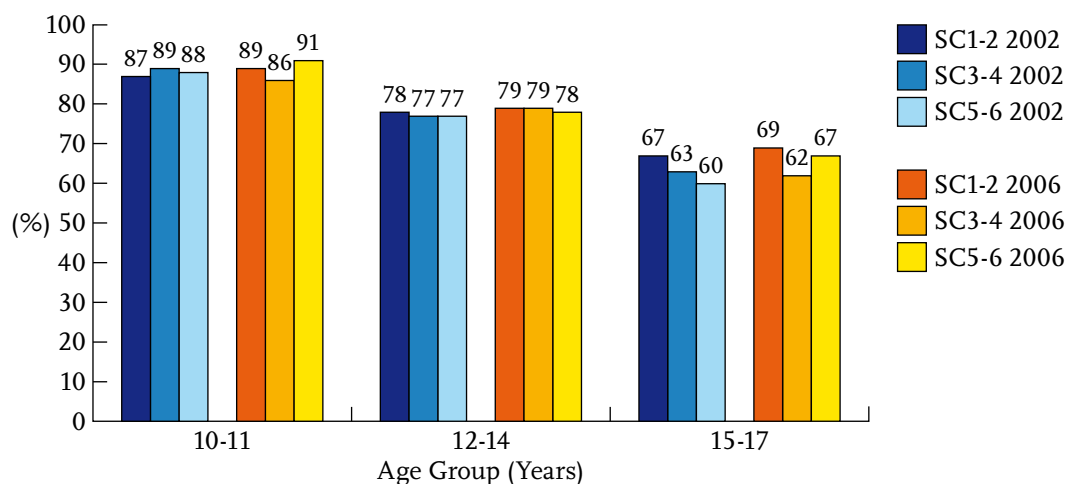


Figure 8: Percentages of girls who report high life satisfaction





Smoking

Children were asked about two aspects of smoking tobacco; having ever smoked and current smoking behaviour, which was defined as reporting smoking tobacco monthly or more frequently. Data are presented below by age group, gender, social class and survey year.

Ever smoked tobacco

Overall, 36% report that they have ever smoked tobacco, with substantial differences between age groups. These data illustrate a drop in ever smoking between 2002 and 2006.

Figure 9: Percentages of boys who report ever smoking tobacco

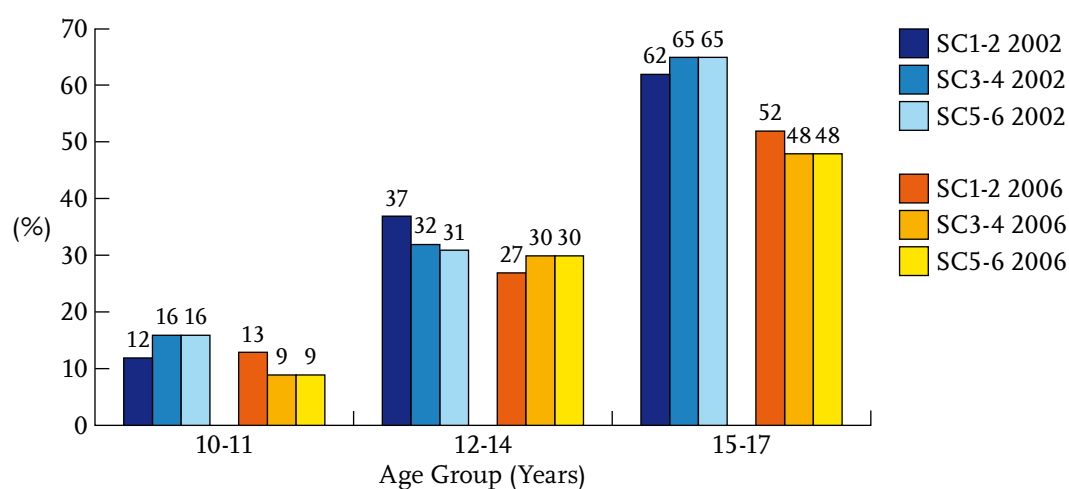
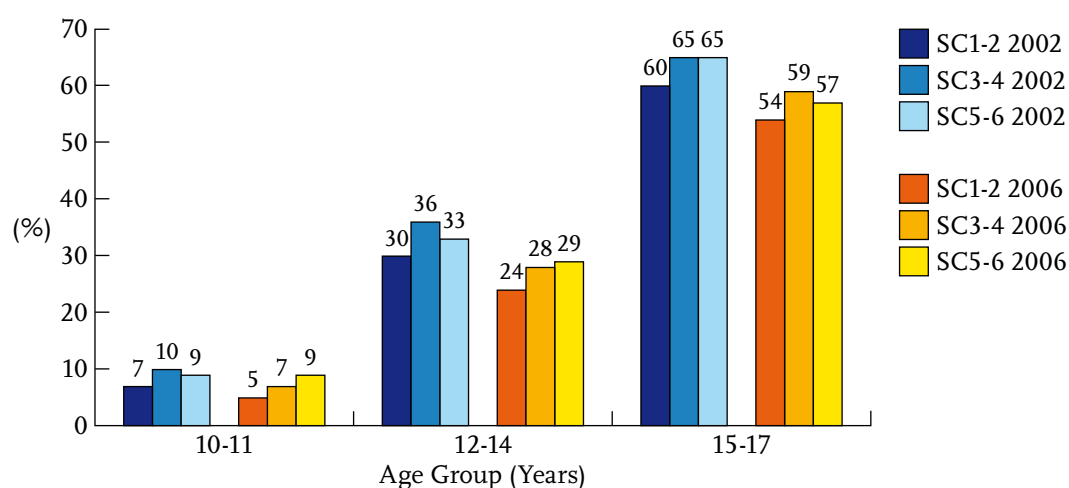


Figure 10: Percentages of girls who report ever smoking tobacco



Gender differences are evident with a higher proportion of 15-17 year old girls reporting initiation of smoking compared to boys of the same age group. Such gender differences are not as evident among the younger age groups.

Smoking

Ever smoked tobacco: Middle Childhood Study

Among the 3rd and 4th class children, 4% of boys and 3% of girls report having ever smoked tobacco.

Current smoking status

Children were also asked to report on their current smoking behaviour. Overall, 15% of the children report that they are current smokers although large age differences exist. The percentage of children reporting that they are current smokers is lower in 2006 compared to 2002. In particular, there is a drop in the percentages of current smokers aged 15-17 years. Once again, a higher number of girls aged 15-17 years report current smoking compared to boys of the same age group. The clear social class gradient that was evident in 2002 is not as clear in 2006.

Figure 11: Percentages of boys who report that they are current smokers

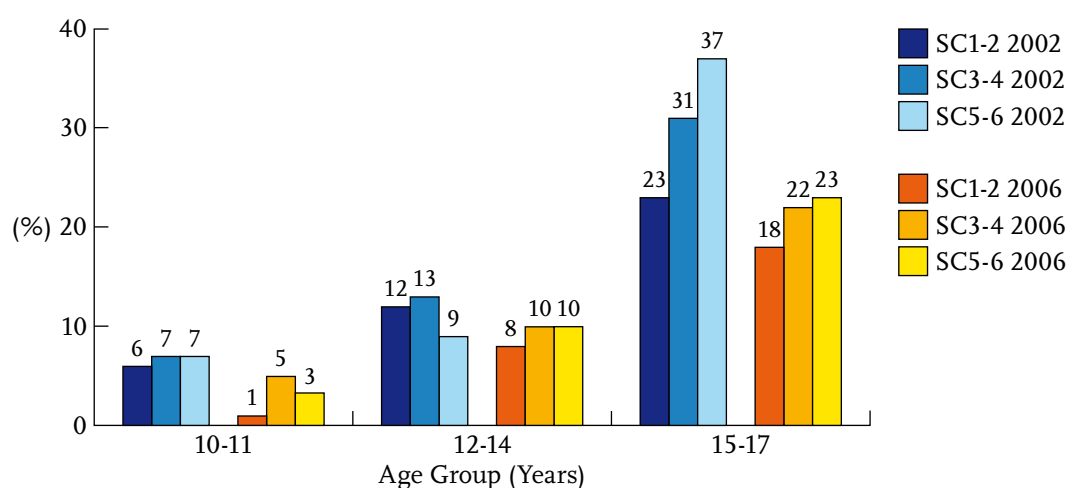
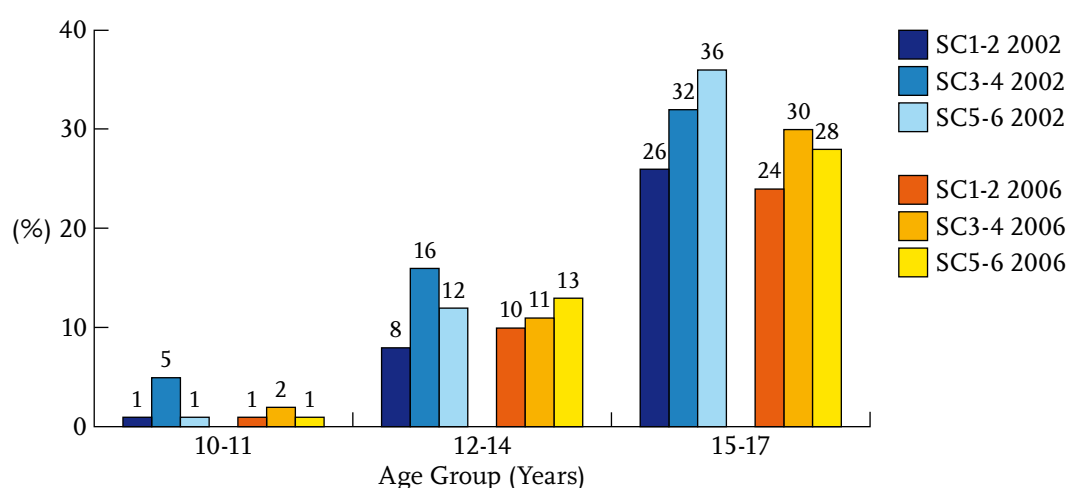


Figure 12: Percentages of girls who report that they are current smokers



Current smoking status: Middle Childhood Study

Among the 3rd and 4th class students less than 1% report that they are current smokers.

Alcohol

Ever drinking

Overall, 47% of children report that they have never had an alcoholic drink but there are substantial difference by age and gender. The rates are higher in 2006 than in 2002 in all age categories. Rates of girls (52%) reporting that they have never had an alcoholic drink are higher than those for boys (43%) and there is little evidence of a social class effect.

Figure 13: Percentages of boys who report never having had an alcoholic drink

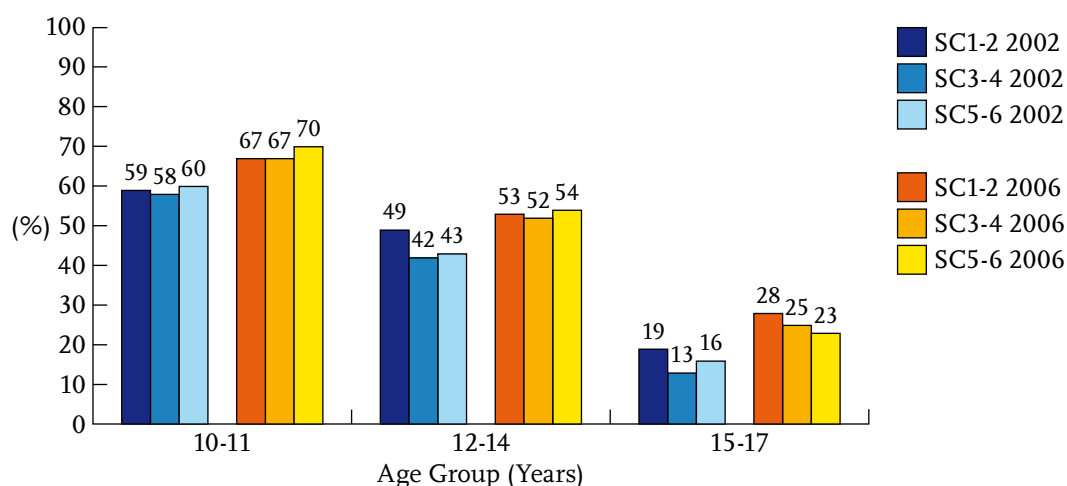
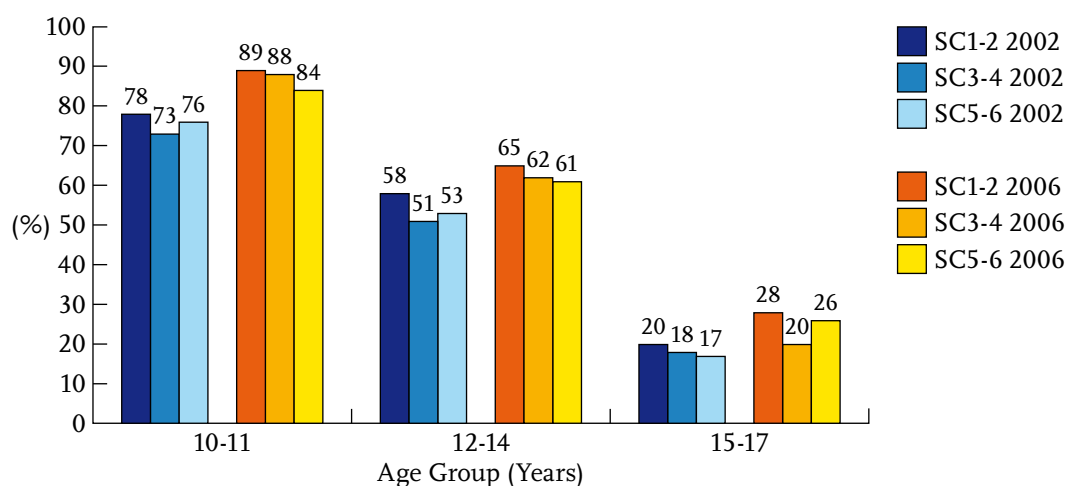


Figure 14: Percentages of girls who report never having had an alcoholic drink



Alcohol

Had an alcoholic drink in the past month

Current drinkers are defined as those who report having had an alcoholic drink in the past month. Overall, 26% of children report having had an alcoholic drink in the last month with a clear age gradient. The data suggest that the rates of children reporting having had an alcoholic drink in the last month were stable between 2002 and 2006, with the exception of 15-17 year old boys, where a small decrease is evident.

Figure 15: Percentages of boys who report having had an alcoholic drink in the last month

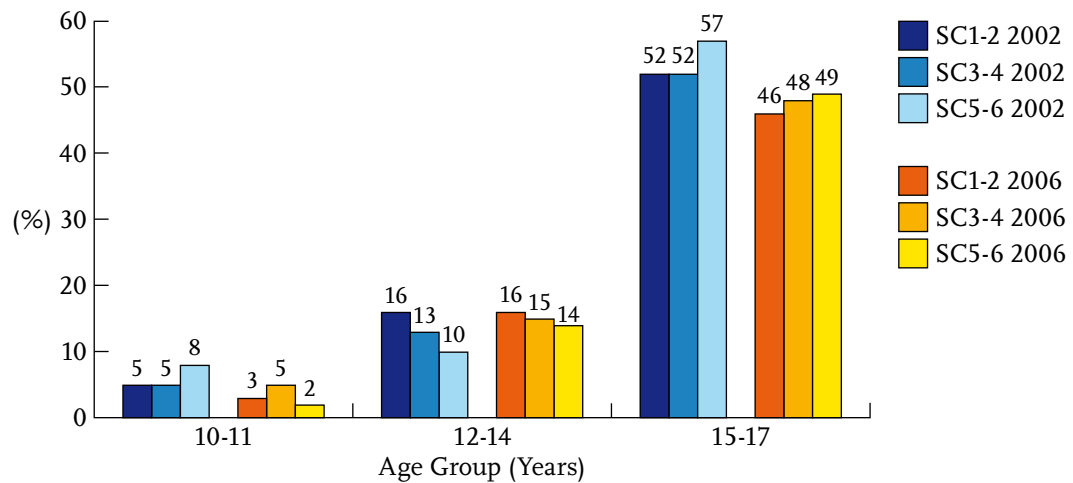
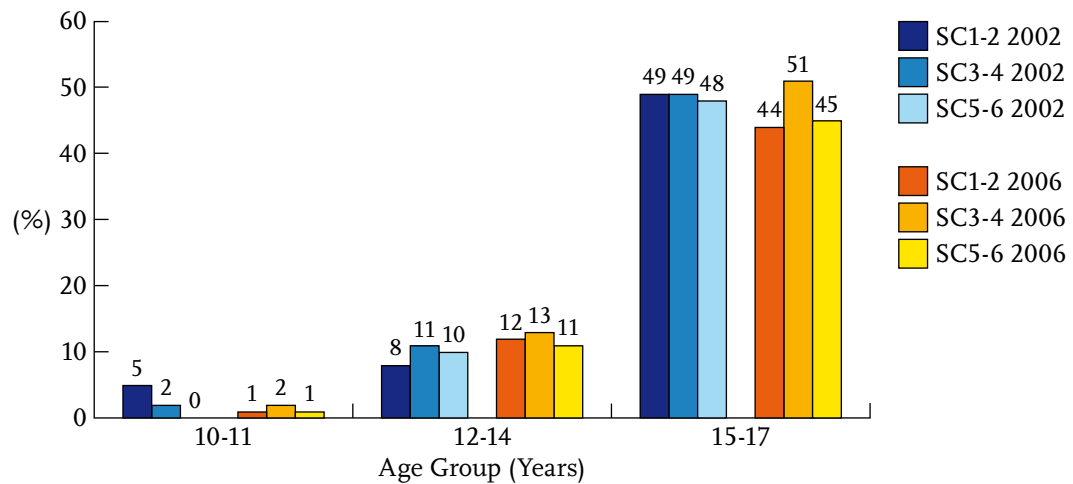


Figure 16: Percentages of girls who report having had an alcoholic drink in the last month



Drunkness

In addition to alcohol consumption, children were asked if they had ever had so much alcohol that they were 'really drunk'. In total, 32% of children report having been drunk, with large age differences but little variation by gender or social class. The figures remained relatively stable between 2002 and 2006.

Figure 17: Percentages of boys who report having been “really drunk”

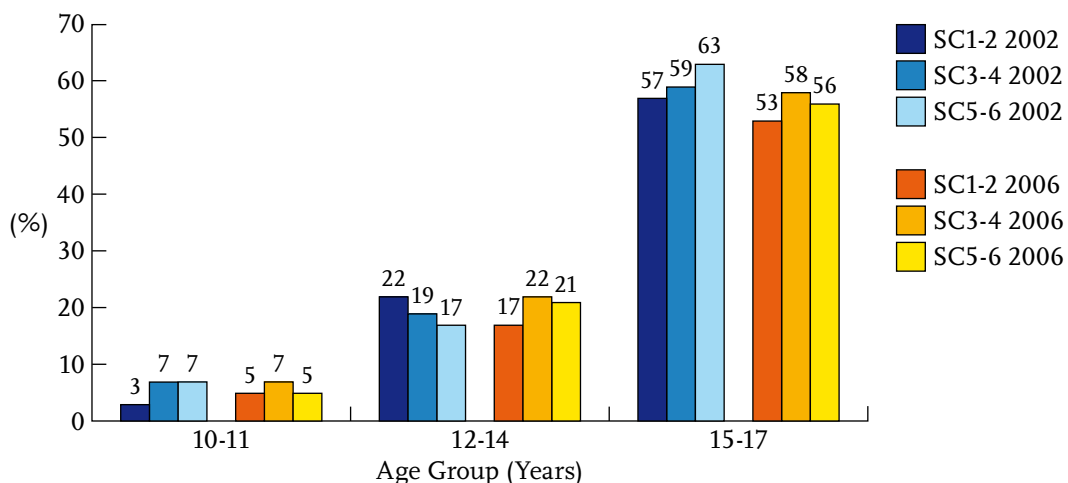
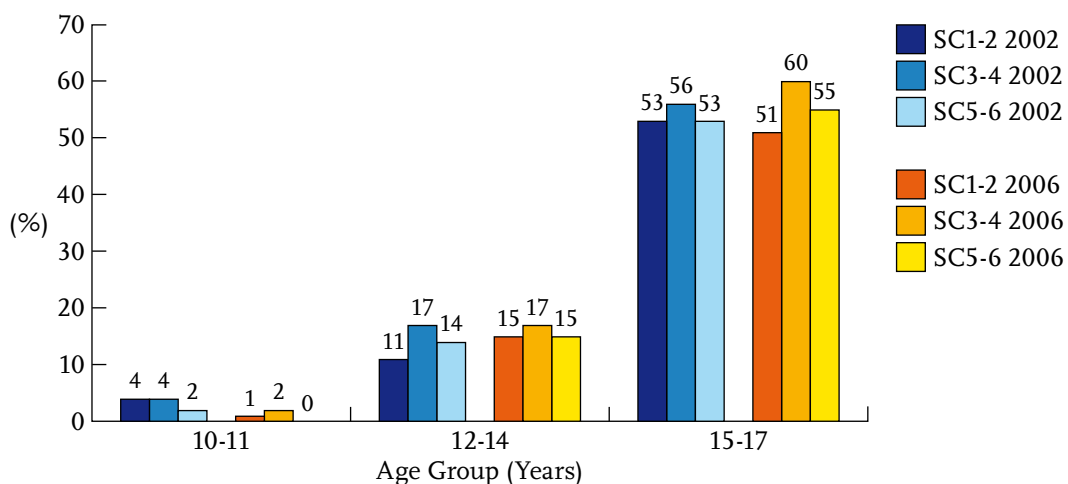


Figure 18: Percentages of girls who report having been “really drunk”



Alcohol

Been drunk in the last 30 days

Children were also asked if they have been drunk in the last 30 days. Overall, 20% of children reported that they have been drunk in the last 30 days, but with large differences between age groups. About a third of boys and girls aged 15-17 years report such behaviour.

Figure 19: Percentages of boys who report having been drunk in the last 30 days

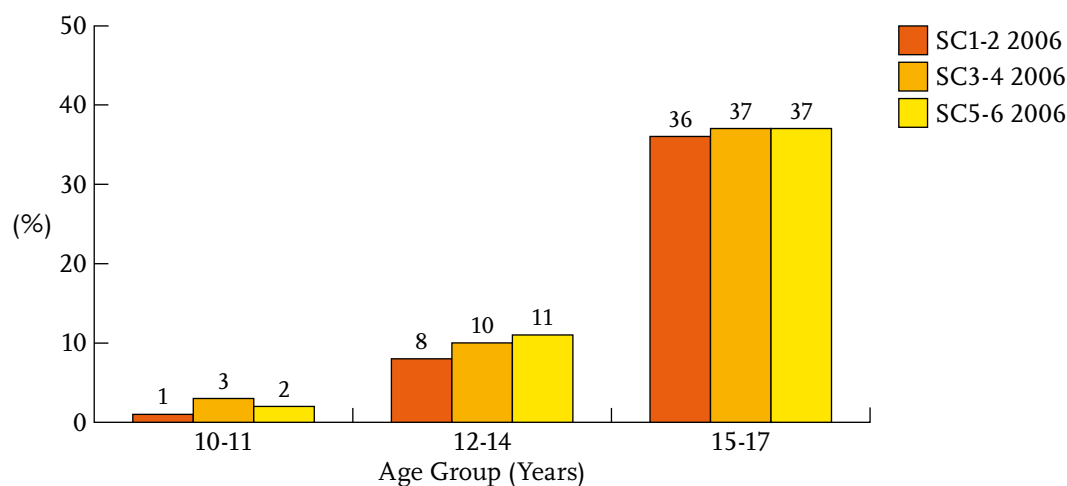
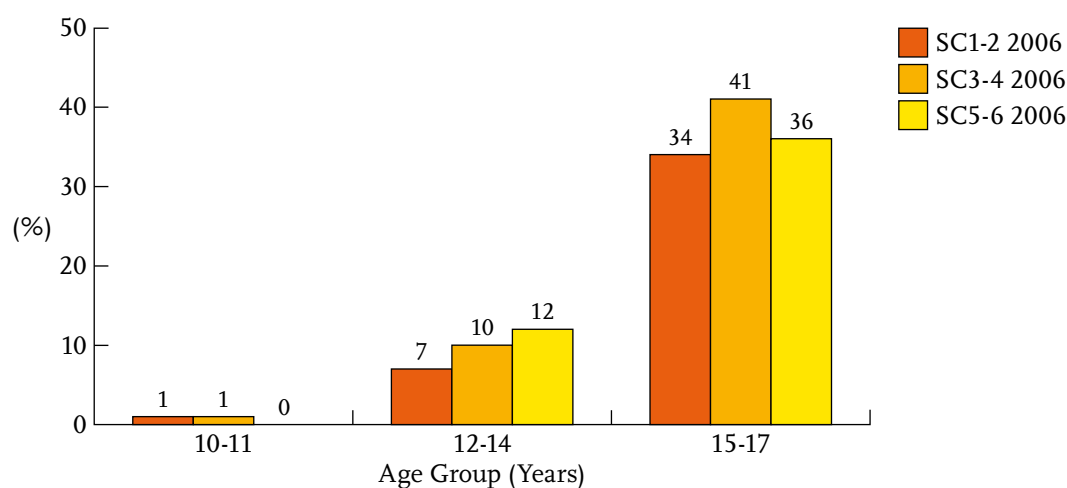


Figure 20: Percentages of girls who report having been drunk in the last 30 days



With the exception of children reporting they have never had an alcoholic drink, no marked changes are evident between 2002 and 2006 for the remaining alcohol-related variables reported here, with few gender and class differences observed.

Drug Use

Cannabis use in the last 12 months

As with alcohol and smoking, there are substantial differences in reported cannabis use by age group. Overall, 16% of children report using cannabis during their lifetime (12% in 2002), with 12% reporting using cannabis in the last 12 months (11% in 2002), but rates are highest for those aged 15-17 years. The rates of reported cannabis use are similar to the 2002 HBSC study, with the exception of 15-17 year old boys where a decrease is evident.

Figure 21: Percentages of boys reporting cannabis use in the last 12 months

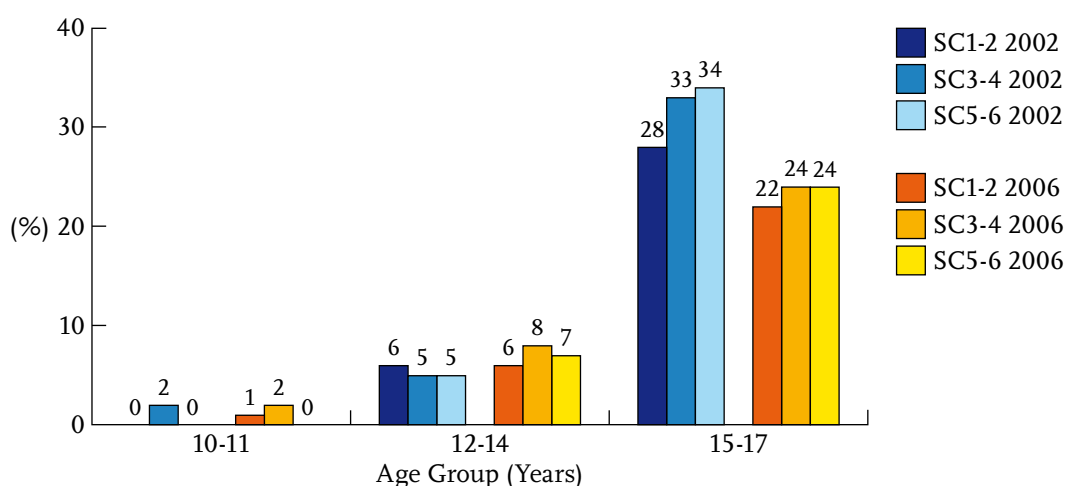
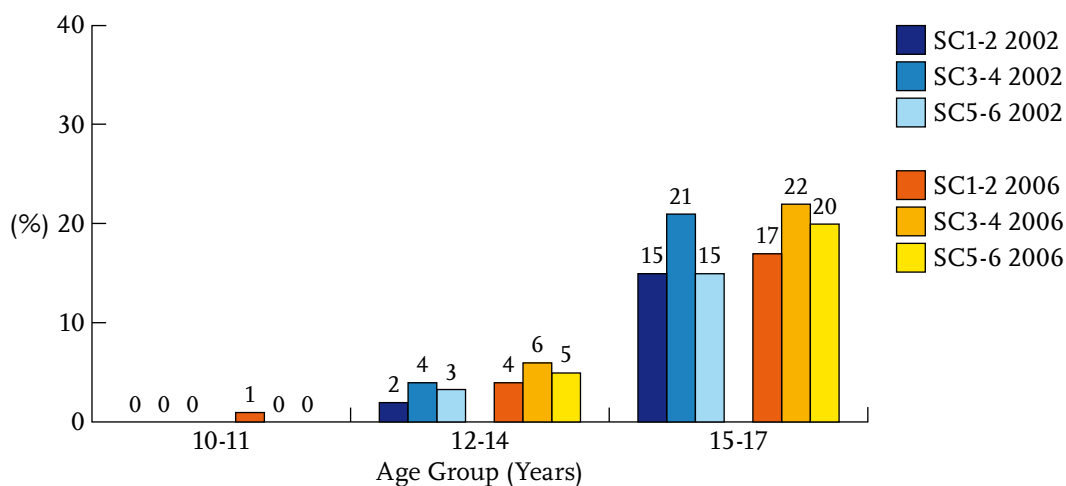


Figure 22: Percentages of girls reporting cannabis use in the last 12 months



Drug Use

Cannabis use in the last 30 days

Children were also asked to report on taking cannabis in the last 30 days. Overall, 7% report using cannabis in this time frame and this is slightly higher for boys (8%) than girls (5%). Higher percentages of those aged 15-17 years report recent cannabis use than younger children.

Figure 23: Percentages of boys reporting cannabis use in the last 30 days

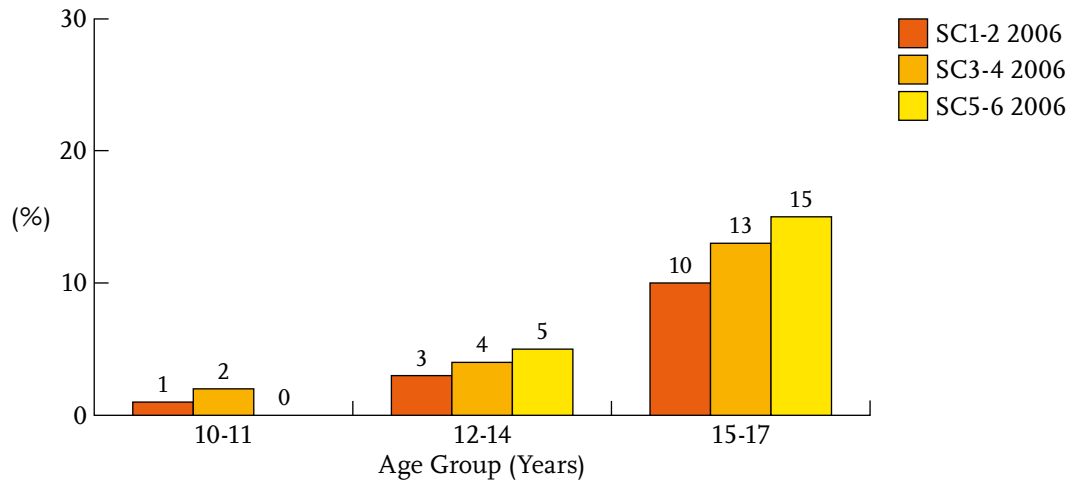
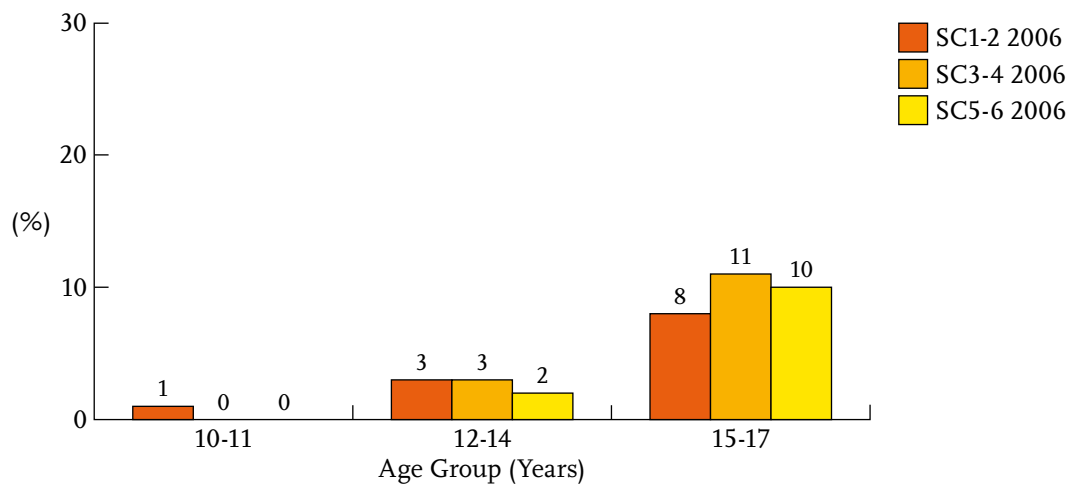


Figure 24: Percentages of girls reporting cannabis use in the last 30 days



Food & Dietary Behaviour

Fruit

Children were asked about the frequency of their consumption of a variety of foodstuffs. In total, 19% report that they consume fruit more than once a day. Across all age groups, the rates in girls (23%) continue to be higher than for boys (16%). No changes were found between 2002 and 2006 in boys, however a slight increase in reported fruit consumption is evident among girls. No age trend is evident in boys, although a greater proportion of younger girls (10-11 years old) report consuming fruit more frequently than daily, compared to older girls. The social class gradient observed is clearest among girls.

Figure 25: Percentages of boys who report eating fruit more than once a day

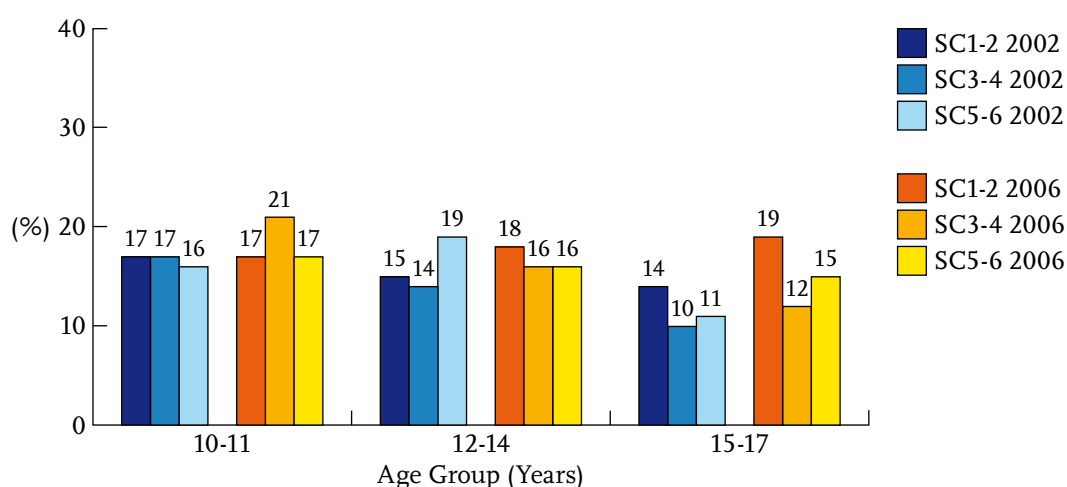
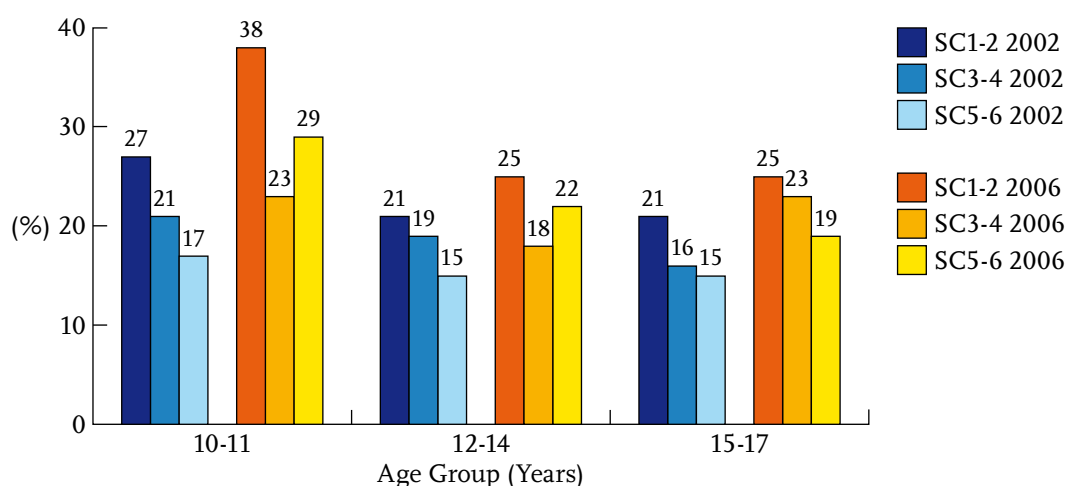


Figure 26: Percentages of girls who report eating fruit more than once a day

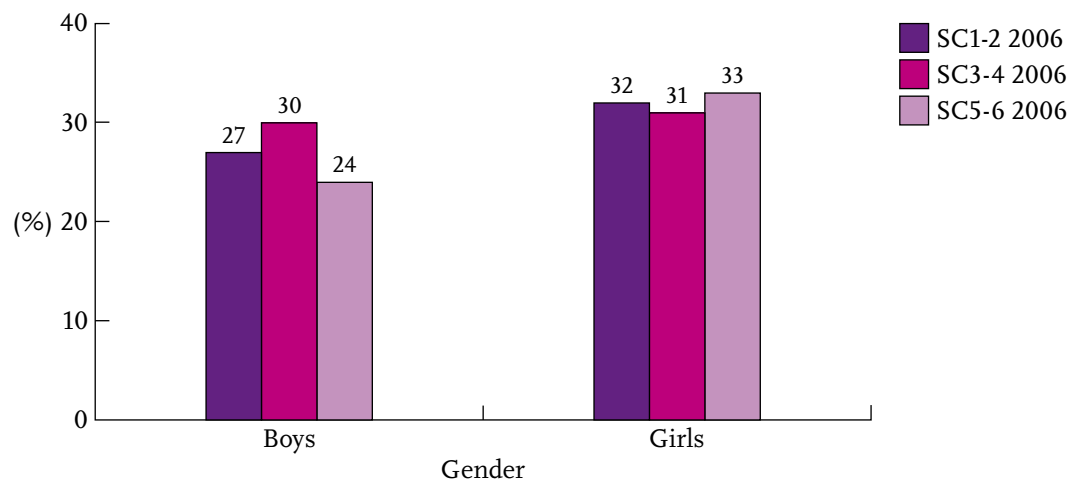


Food & Dietary Behaviour

Fruit: Middle Childhood Study

Among 3rd and 4th class children, 30% report that they consume fruit more than once a day.

Figure 27: Percentages of 9 year old boys and girls who report eating fruit more that once a day



Vegetables

Overall, 18% of children report eating vegetables more than once a day, illustrating a slight increase from 2002. This increase is more pronounced among girls. The percentage of girls reporting vegetable consumption more frequently than daily (20%) is greater than the percentage of boys (16%), and this is the case across each age category. There is some evidence of a social class effect, especially among girls, with children from social classes 1 and 2 most likely to report frequent vegetable consumption.

Figure 28: Percentages of boys who report eating vegetables more than once a day

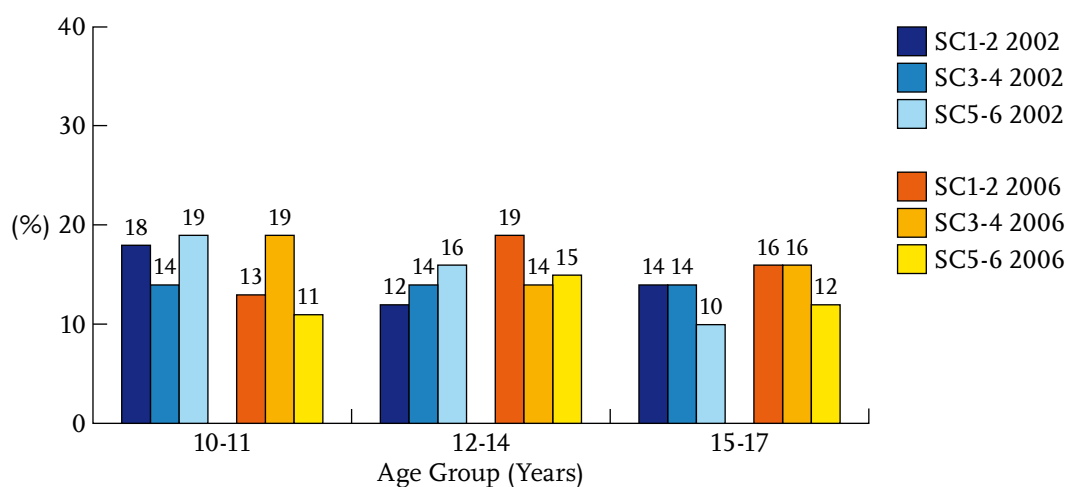
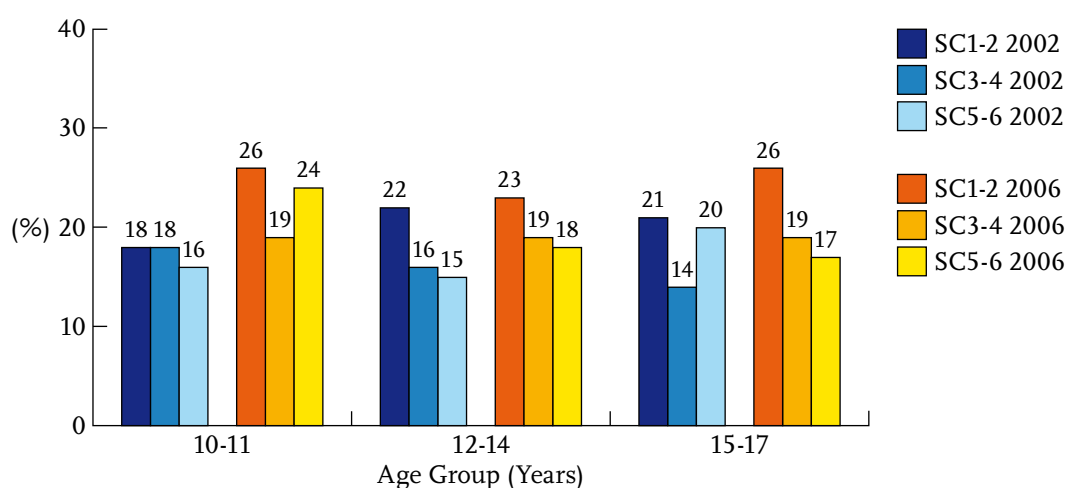


Figure 29: Percentages of girls who report eating vegetables more than once a day

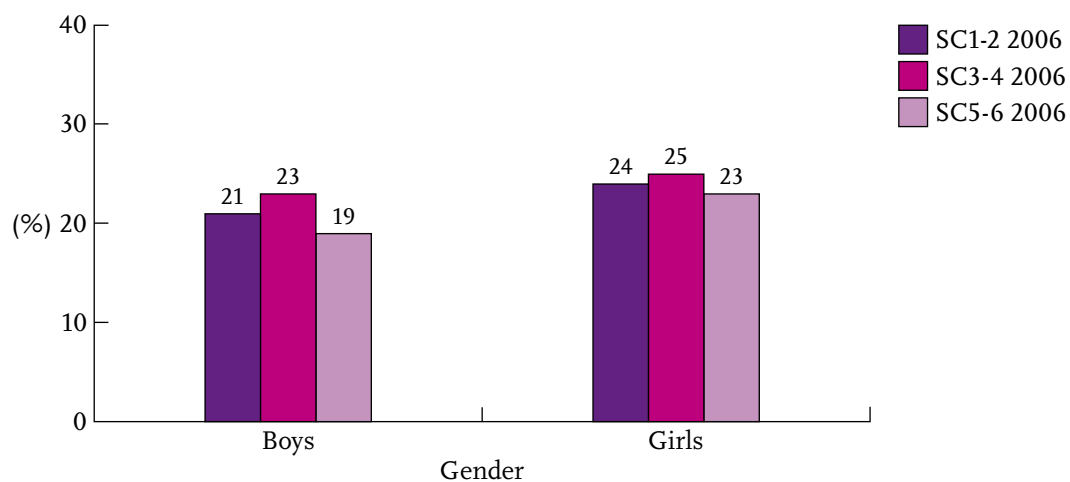


Food & Dietary Behaviour

Vegetables: Middle Childhood Study

Among 3rd and 4th class students the same gender pattern is visible, with a slightly higher proportion of girls than boys reporting vegetable consumption more than once a day.

Figure 30: Percentages of 9 year old boys and girls who report eating vegetables more than once a day



Sweets

Children were asked to report on frequency of consuming sweets. Overall, 39% report eating sweets daily or more frequently. There are no clear gender or social class effects. The proportion of children reporting eating sweets daily or more frequently has decreased since 2002, particularly in the 10-11 year old age group.

Figure 31: Percentages of boys who report eating sweets daily or more

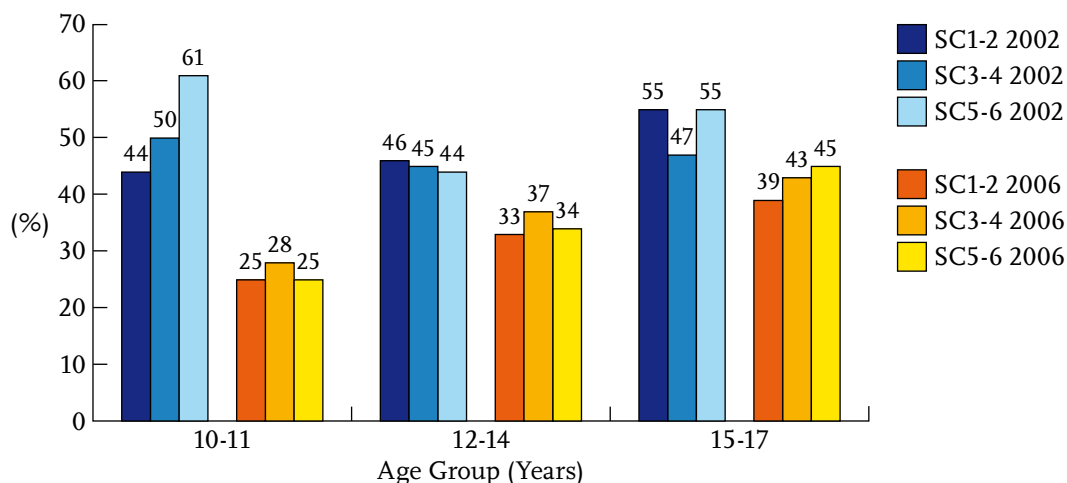
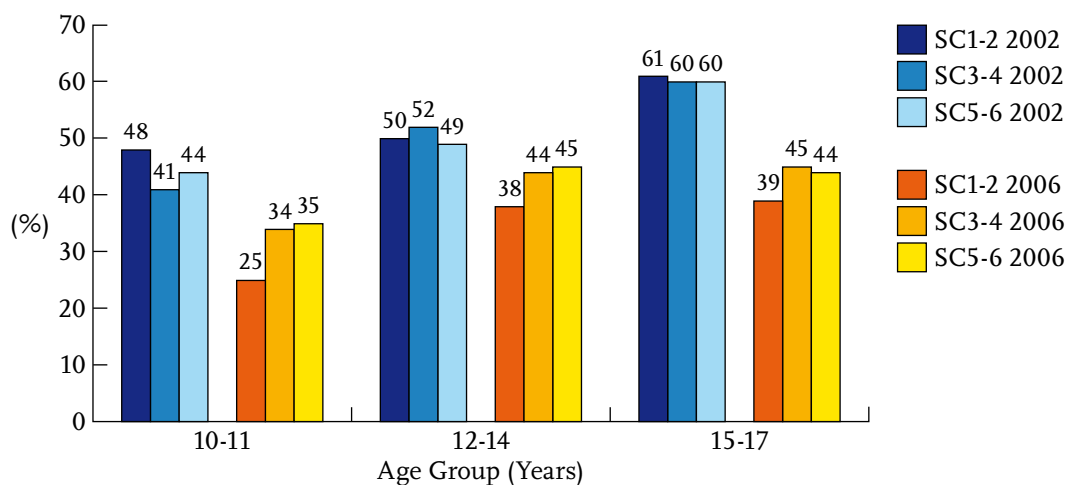


Figure 32: Percentages of girls who report eating sweets daily or more

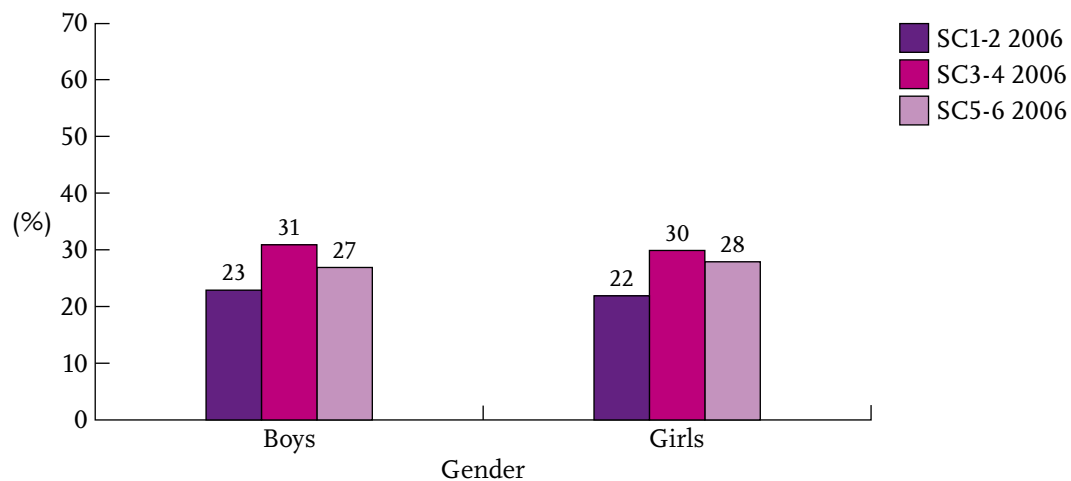


Food & Dietary Behaviour

Sweet consumption: Middle Childhood Study

Overall, 28% of 3rd and 4th class students report eating sweets once a day or more frequently.

Figure 33: Percentages of 9 year old boys and girls who report eating sweets daily or more



Soft drinks

Overall 26% of children report drinking soft drinks daily or more, and the rates are highest among boys and the older age groups. The data presented illustrate a drop in soft drink consumption in all age categories between 2002 and 2006. There is some evidence of social class effects, with children from the highest social classes less likely to report frequent soft drink consumption.

Figure 34: Percentages of boys who report drinking soft drinks daily or more

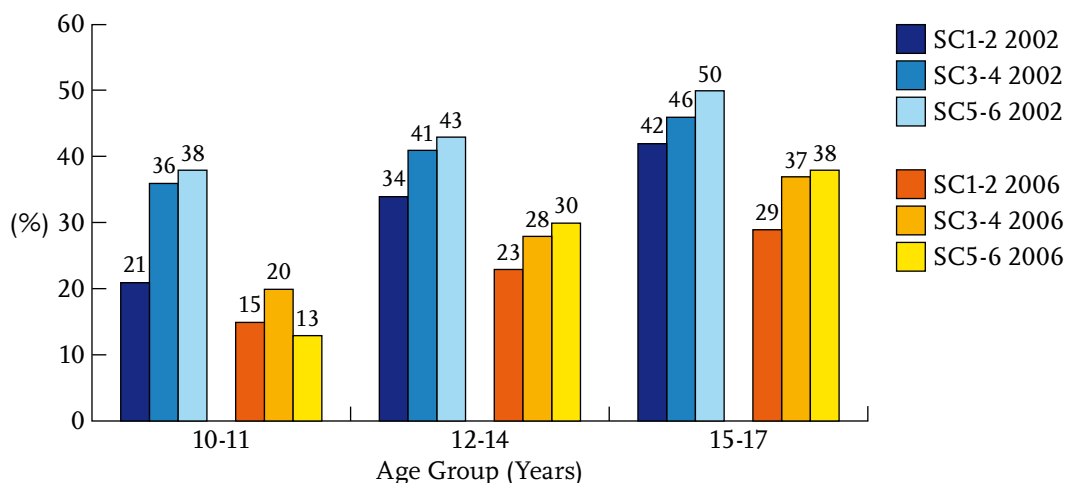
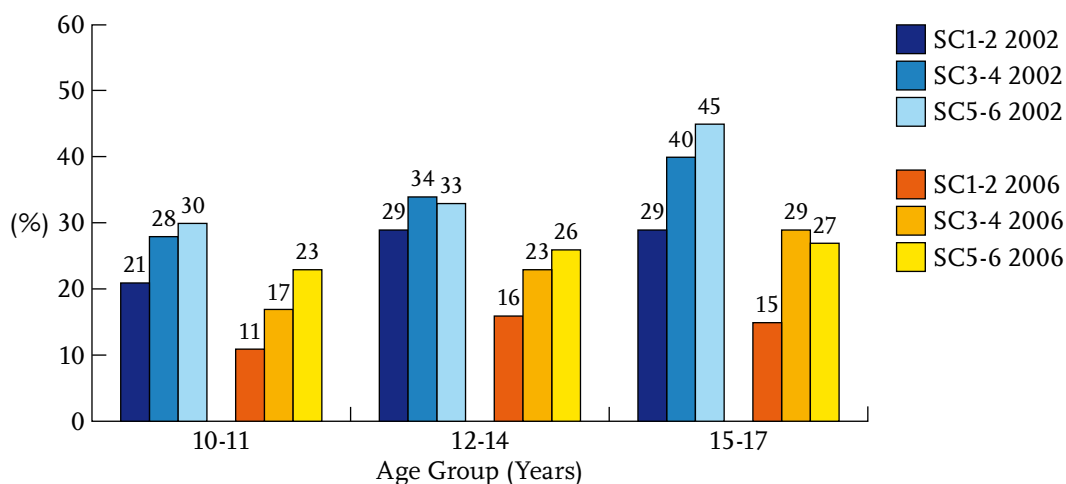


Figure 35: Percentages of girls who report drinking soft drinks daily or more

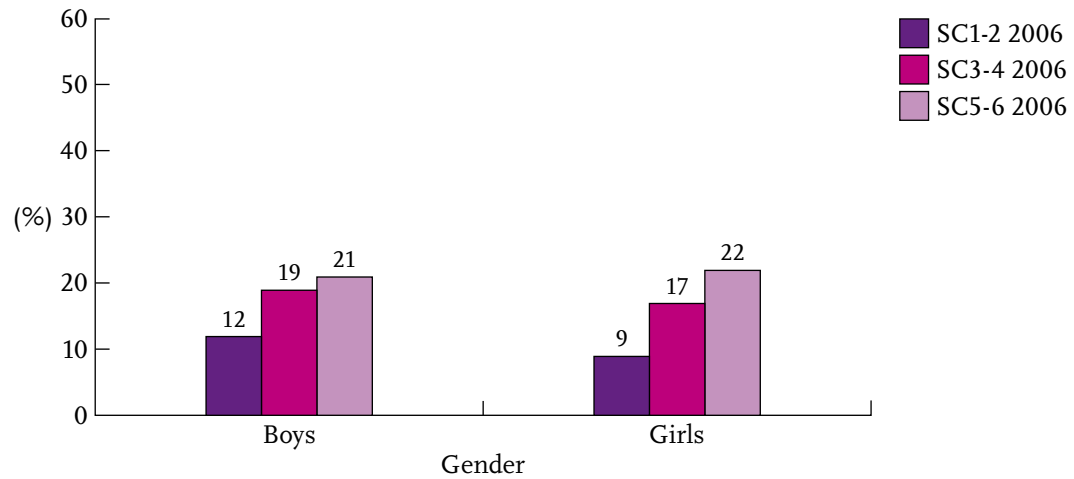


Food & Dietary Behaviour

Soft drinks: Middle Childhood Study

Among 3rd and 4th class children 18% report drinking soft drinks once a day or more with a clear class gradient as illustrated below. Children from the social classes 1 and 2 are less likely to report frequent consumption of soft drinks.

Figure 36: Percentages of 9 year old boys and girls who report drinking soft drinks daily or more



Not having breakfast

Overall, 14% of children report that they never have breakfast during weekdays, with clear age and gender differences. Similar to 2002, the rates increase with age and a greater proportion of girls than boys report not having breakfast on school days. Children from the highest social classes are least likely to report never having breakfast on weekdays.

Figure 37: Percentages of boys who report not having breakfast on weekdays

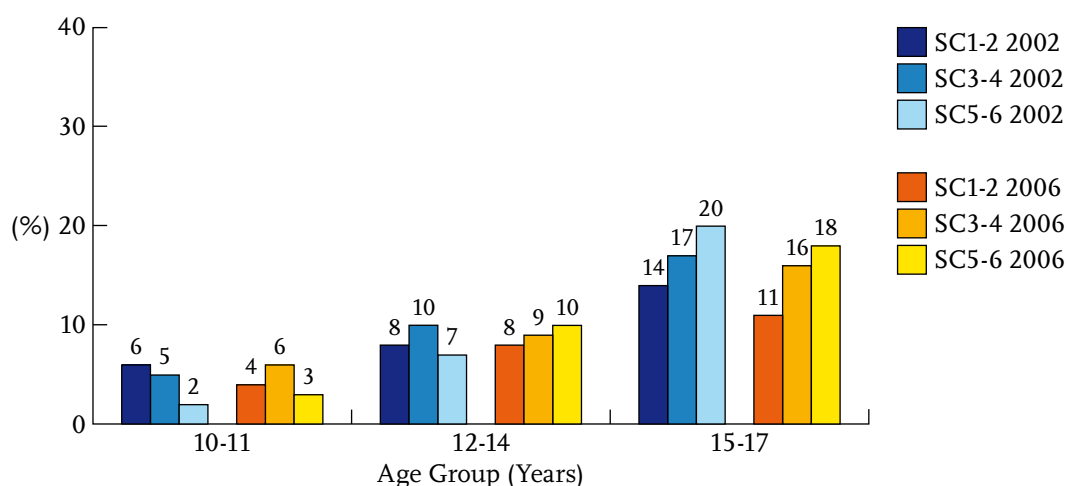
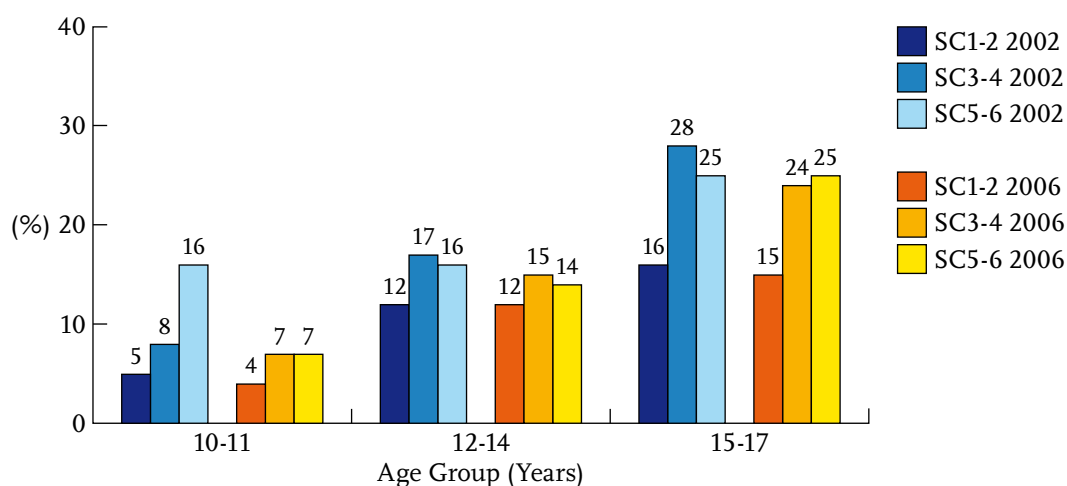


Figure 38: Percentages of girls who report not having breakfast on weekdays



Not having breakfast: Middle Childhood Study

Overall, only 2% of 3rd and 4th class student report not having breakfast on any day of the week.

Food & Dietary Behaviour

Food poverty

Children were asked to report how often they go to school or to bed hungry because there was not enough food at home. Children reporting that they always, often or sometimes go to school or to bed hungry were identified as experiencing food poverty. Overall, 17% of children report ever experiencing food poverty. There is no clear evidence of gender, age or social class effects, except for some elevated rates amongst the youngest boys.

Figure 39: Percentages of boys who report ever experiencing food poverty

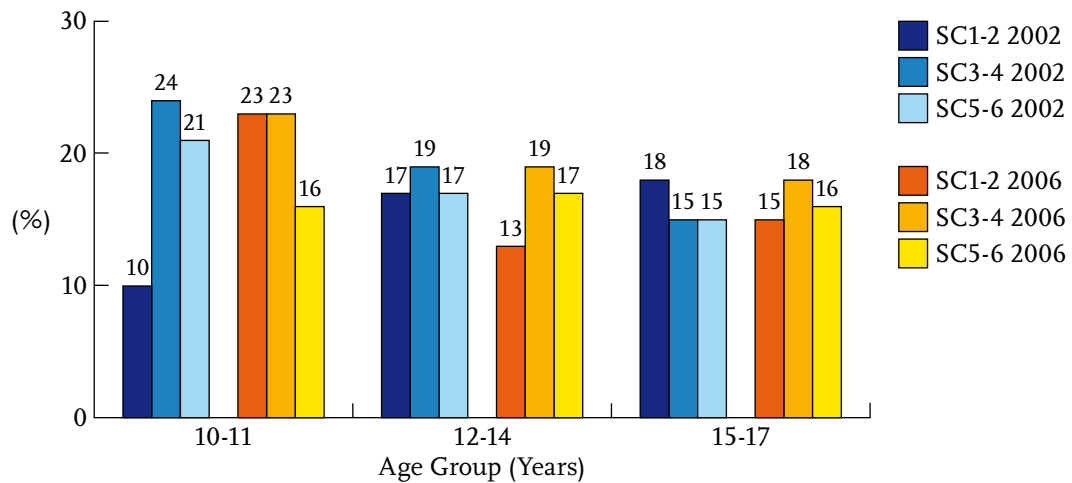
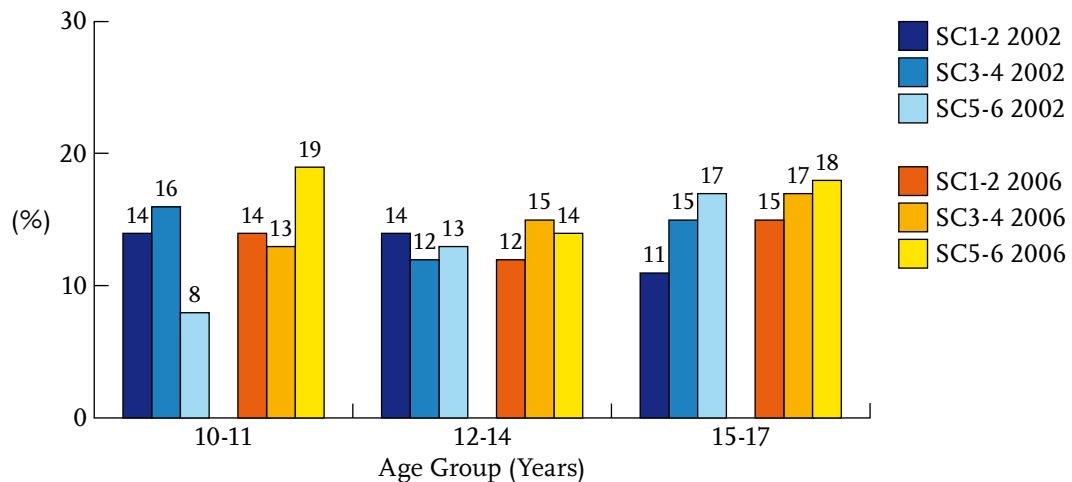


Figure 40: Percentages of girls who report ever experiencing food poverty



Dieting

Children were asked if they were on a diet to reduce weight or if they needed to lose weight (but were not currently on such a diet). Overall, 12% (8% of boys and 15% of girls) report being on a weight reducing diet and an additional 20% (15% of boys and 26% of girls) report that they needed to lose weight. Among girls the percentages increase across age groups but among boys the figures remain rather stable. Gender differences are not evident in the 10-11 year old children, but the differences between boys and girls are apparent in the older age groups; 13% of 12-14 year old girls report being on a diet, in comparison to 8% of boys, and a further 24% of girls in this age group report that they needed to lose weight (17% of boys). In the 15-17 year old age category, 20% of girls report being on a diet (9% of 15-17 year old boys), while a further 32% of girls report the need to lose weight (14% of boys). There is no consistent pattern across the social classes, except among older girls.

Figure 41: Percentages of boys who report being on a weight reducing diet

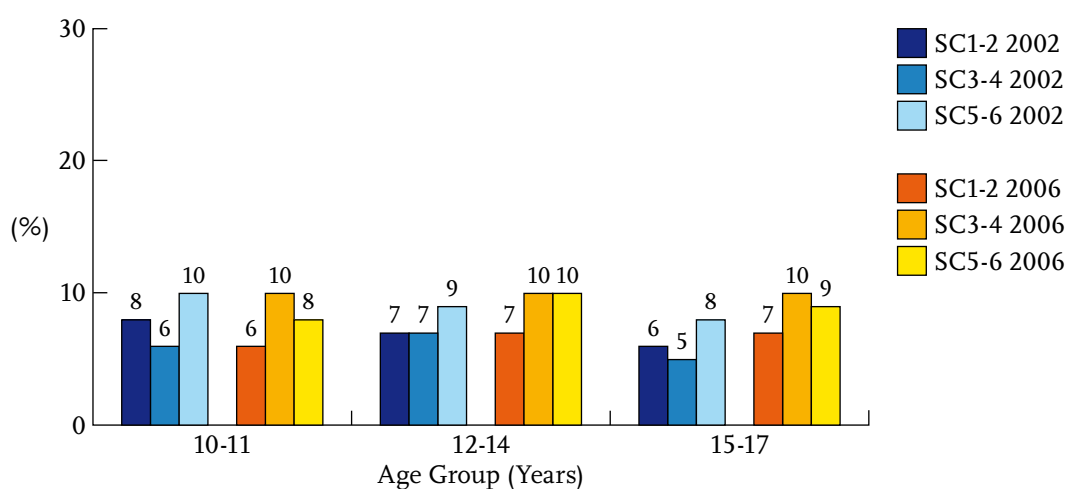
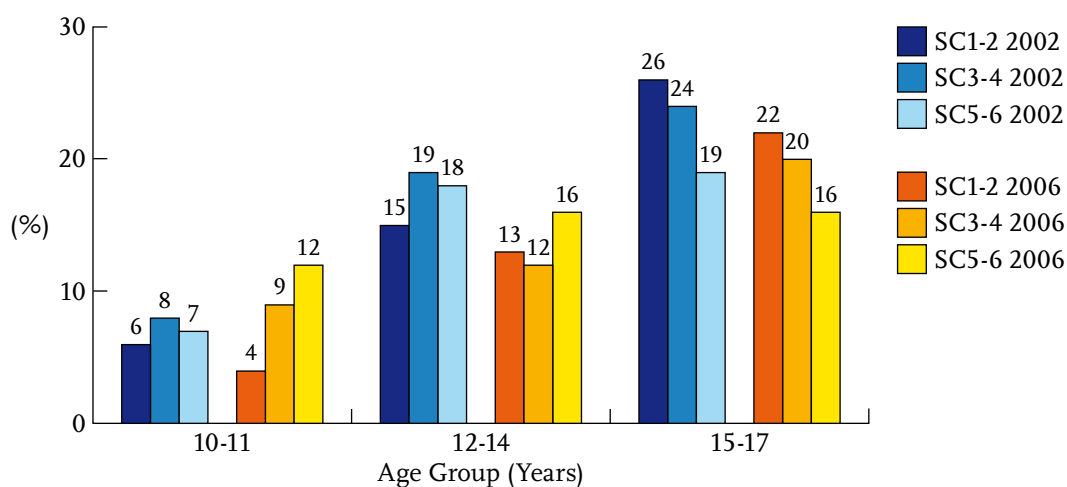


Figure 42: Percentages of girls who report being on a weight reducing diet





Exercise & Physical Activity

Children were asked about their participation in exercise in their free time. They were asked the frequency with which they exercised so much that they get out of breath or sweat. Presented here are data illustrating the percentages reporting that they exercise in such a way four or more times a week and those reporting that they exercise less than weekly. Overall, 53% of children (48% in 2002) report exercising four or more times a week while 11% exercise less than weekly (12% in 2002). However, this masks some substantial age and gender differences. Overall 7% of boys and 14% of girls are exercising less than weekly while 63% of boys and 43% of girls are exercising four or more times per week. Exercise participation decreases with age: exercising four or more times per week decreases from 64% of 10-11 year olds and 59% of 12-14 year olds to 42% of 15-17 year olds. This decrease is apparent among both genders but is particularly noticeable among girls (dropping from 58% of 10-11 year olds, through 51% of 12-14 year olds to 28% of 15-17 year olds).

Vigorous exercise \geq 4 times/week

Figure 43: Percentages of boys who report participating in vigorous exercise four or more times per week

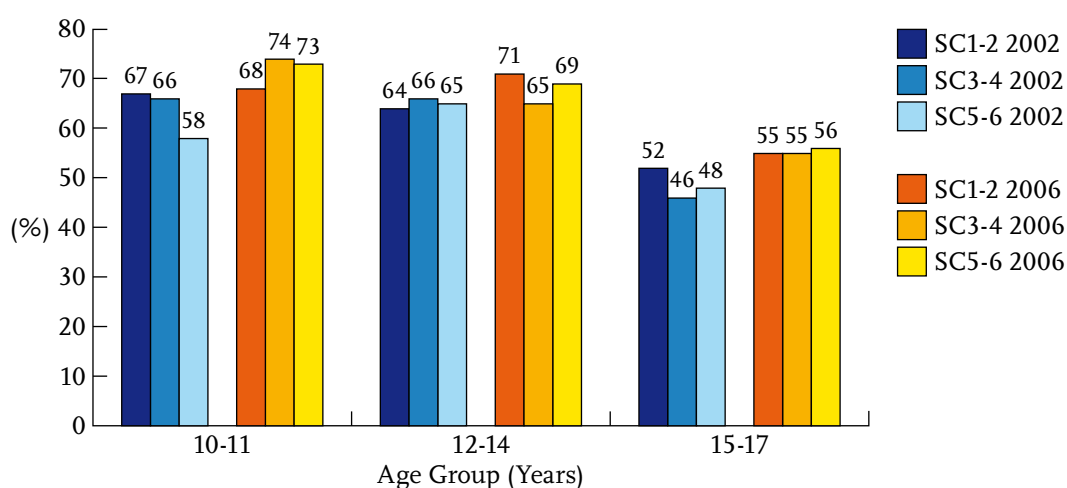
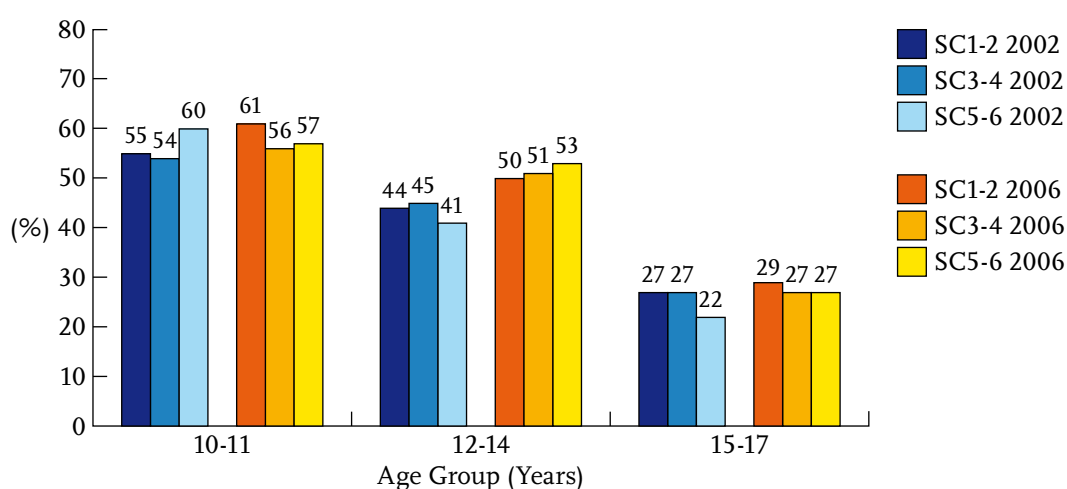


Figure 44: Percentages of girls who report participating in vigorous exercise four or more times per week

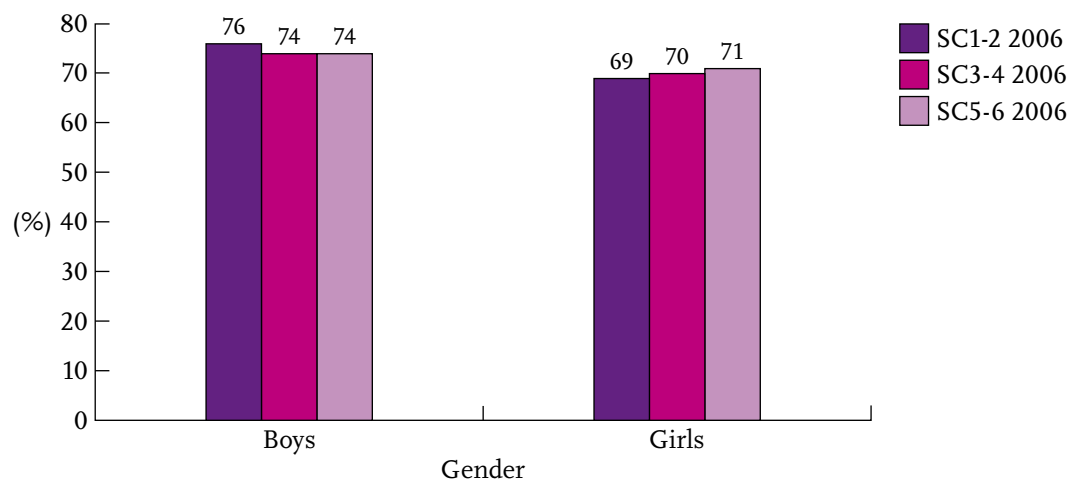


Exercise & Physical Activity

Vigorous exercise ≥ 4 times/week: Middle Childhood Study

The percentages of 3rd and 4th class students who report participating in vigorous exercise four or more times a week are high, with an overall of 72% (74% of boys and 69% of girls).

Figure 45: Percentages of 9 year old boys and girls who report participating in vigorous exercise four or more times per week



Vigorous exercise less than weekly

The rates of children who report participating in vigorous exercise less than weekly are relatively low, with the exception of 15-17 year old girls. The social class pattern is not consistent, but inactivity is positively related to social class in the older age groups.

Figure 46: Percentages of boys who report participating in vigorous exercise less than weekly

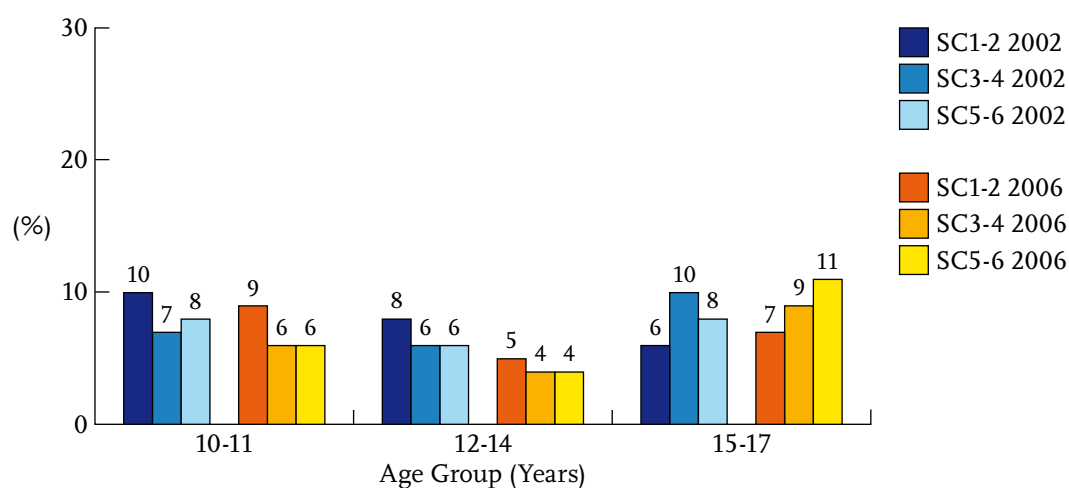
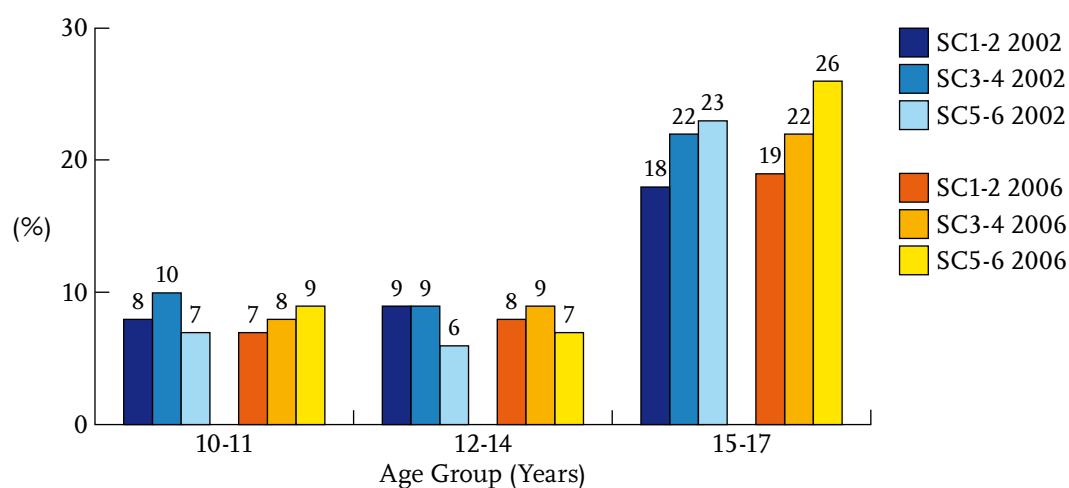


Figure 47: Percentages of girls who report participating in vigorous exercise less than weekly

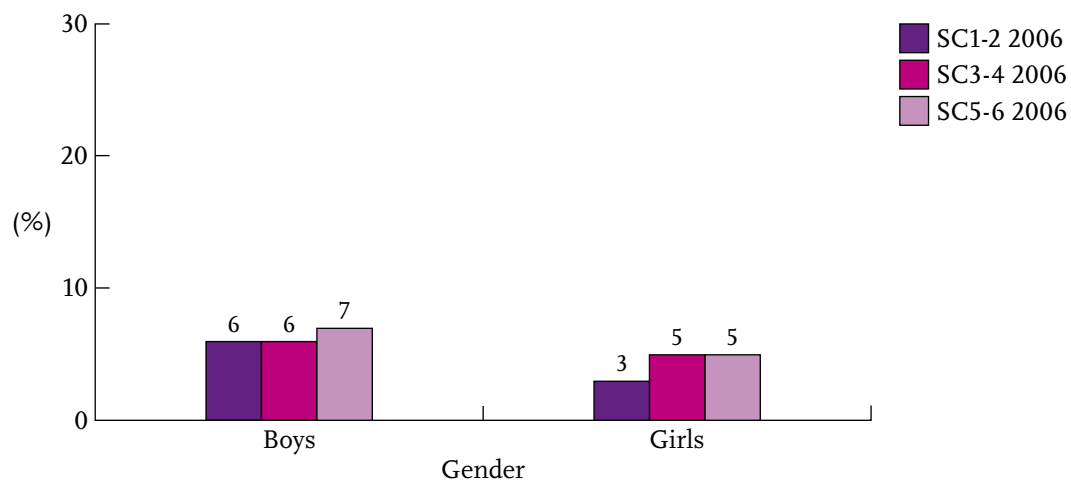


Exercise & Physical Activity

Vigorous exercise less than weekly: Middle Childhood Study

Among 3rd and 4th class students the levels of inactivity are low with no evidence of gender or social class effects.

Figure 48: Percentages of 9 year old boys and girls who report participating in vigorous exercise less than weekly



Physical activity ≥ 5 days

Children were further asked to report on how many days, over the past week, they were physically active for a total of at least 60 minutes per day. Overall, 55% of children report being physically active on five or more days in the last week, but here too substantial age and gender differences emerge. The percentages of boys and younger children reporting being physically active is higher than that of girls and older children. These figures demonstrate a small increase in levels of activity between 2002 and 2006 in most age groups.

Figure 49: Percentages of boys who report being physically active on five or more days in the last week

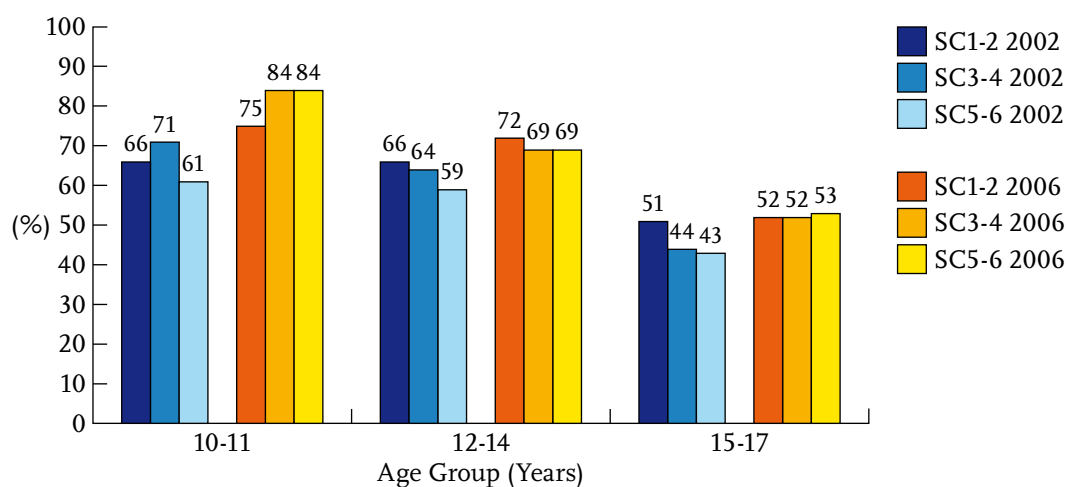
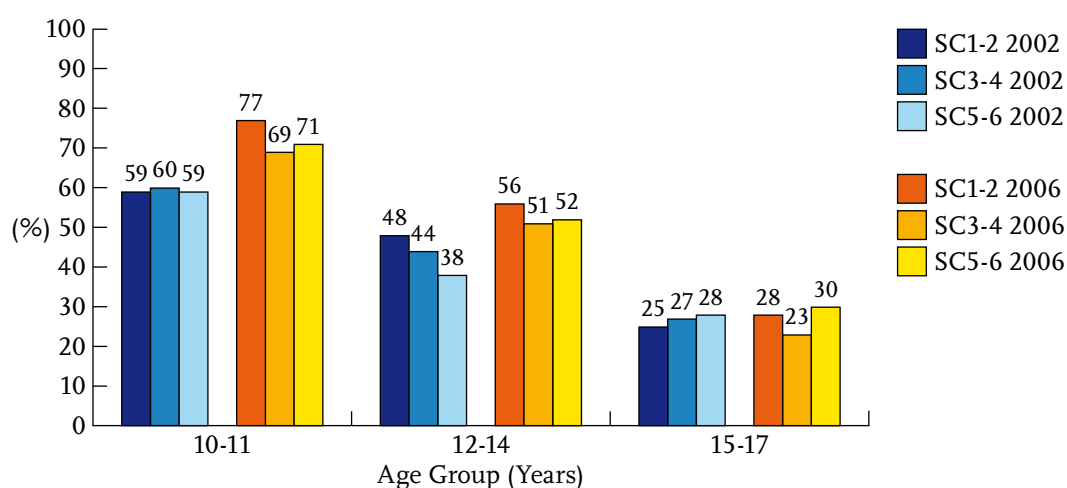


Figure 50: Percentages of girls who report being physically active on five or more days in the last week

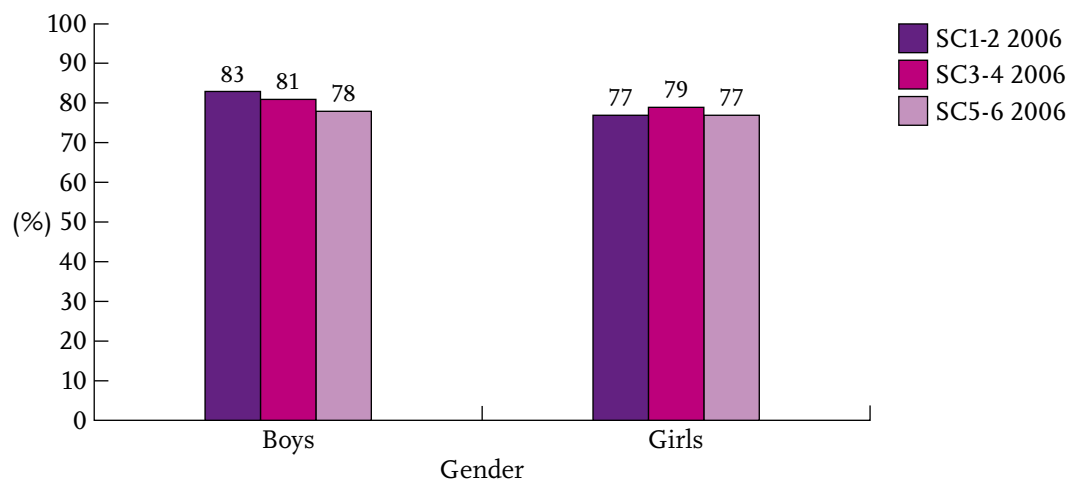


Exercise & Physical Activity

Physical Activity: Middle Childhood Study

Among the 3rd and 4th class children 79% report being physically active for at least 60 minutes on most days of the week, with little gender and no social class effect.

Figure 51: Percentages of 9 year old boys and girls who report being physically active on five or more days in the last year



Self Care

Tooth-brushing

Children were asked to report how often they brush their teeth. Overall, 63% of children report brushing their teeth more than once a day with a further 30% brushing their teeth once a day, but these figures mask substantial gender differences. The percentages of children who report brushing their teeth more than once a day remain stable over time and across age groups. More girls (72%) than boys (54%) report brushing their teeth more than once a day. There is some evidence of a social class effect in a number of groups, with children from higher social classes more likely to report brushing their teeth more than daily.

Figure 52: Percentages of boys who report brushing their teeth more than once a day

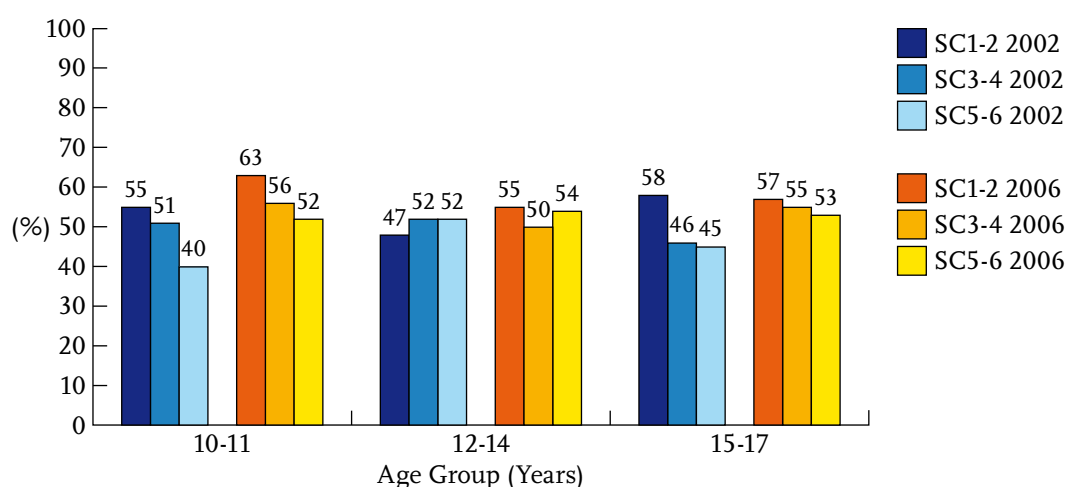
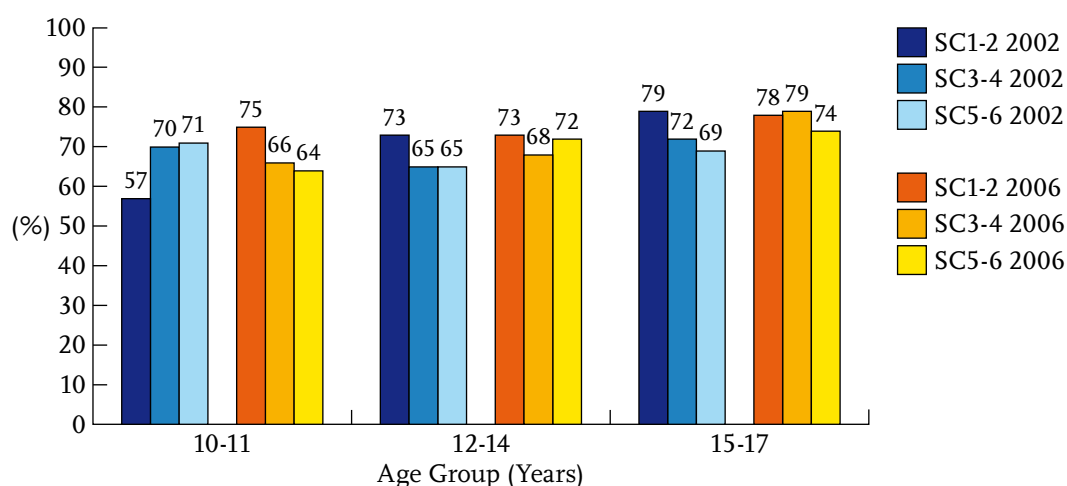


Figure 53: Percentages of girls who report brushing their teeth more than once a day

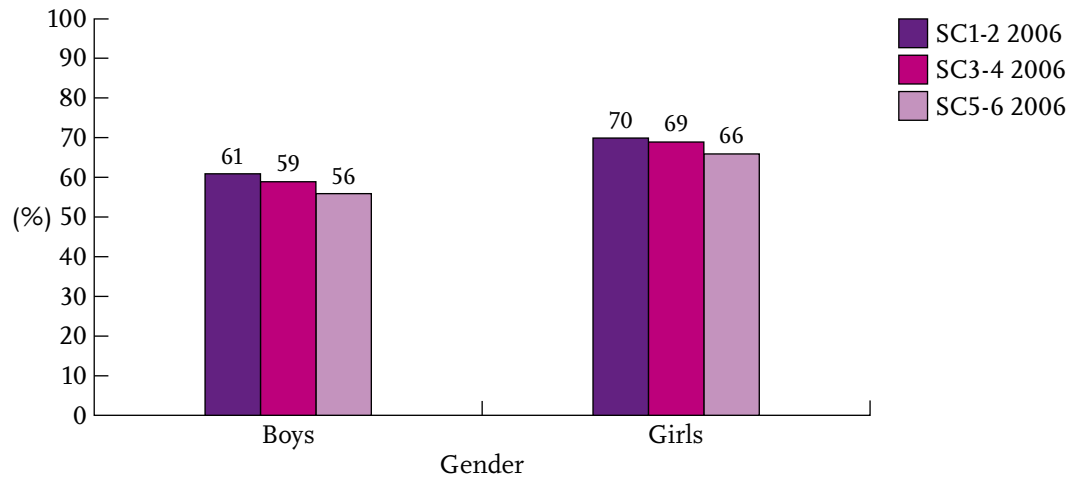


Self Care

Tooth-brushing: Middle Childhood Study

Overall, 64% of 3rd and 4th class students report brushing their teeth more than once a day with a further 29% reporting that they brush their teeth once a day. The same gender differences reported previously are illustrated here, with more girls than boys reporting frequent tooth brushing.

Figure 54: Percentages of 9 year old boys and girls who report brushing their teeth more than once a day



Seatbelt Use

Children were asked to report how often they use a seatbelt when in a car. Overall, 79% of children report always wearing a seatbelt when they sit in a car. The percentage of girls (83%) who report always wearing a seatbelt is higher than boys (76%). These data illustrate an increase in seatbelt use between 2002 (57% of boys and 65% of girls) and 2006.

Figure 55: Percentages of boys who report always wearing a seatbelt

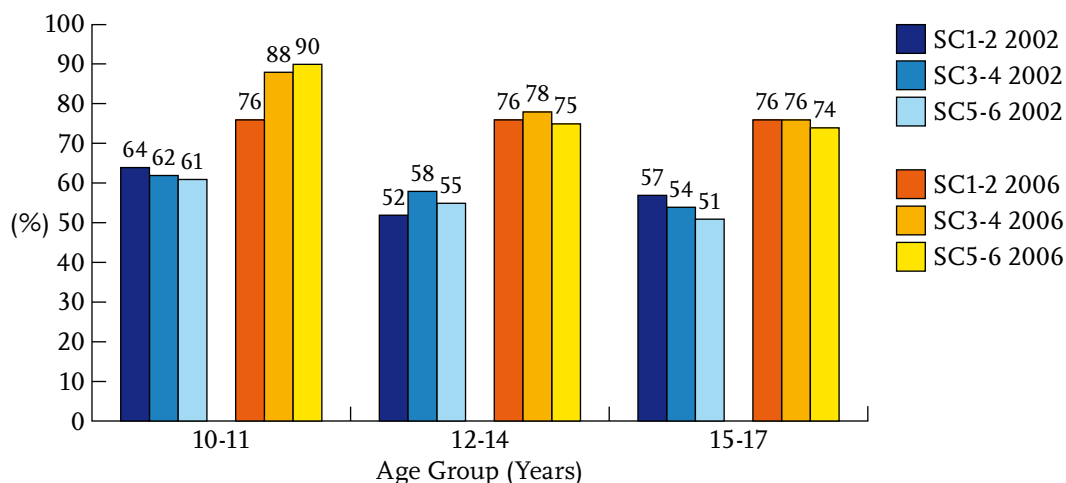
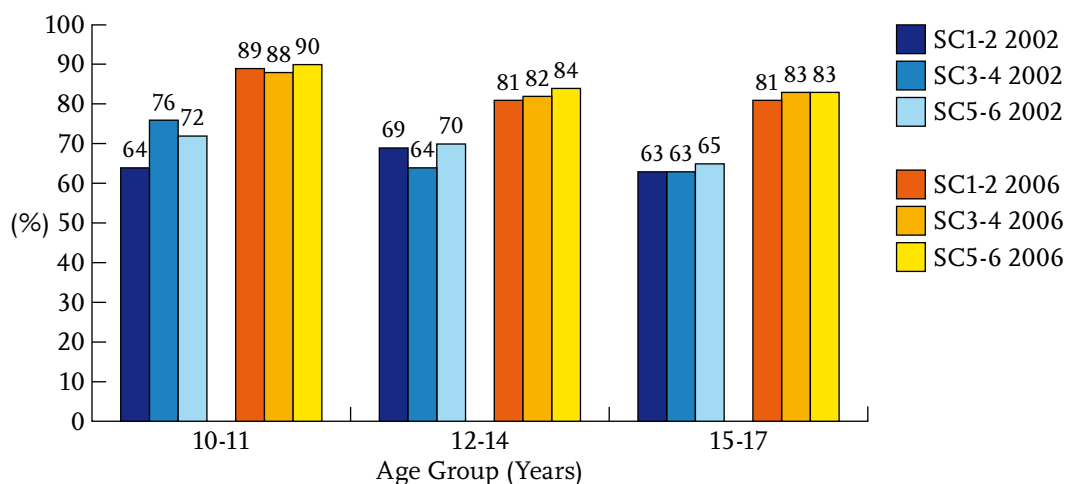


Figure 56: Percentages of girls who report always wearing a seatbelt

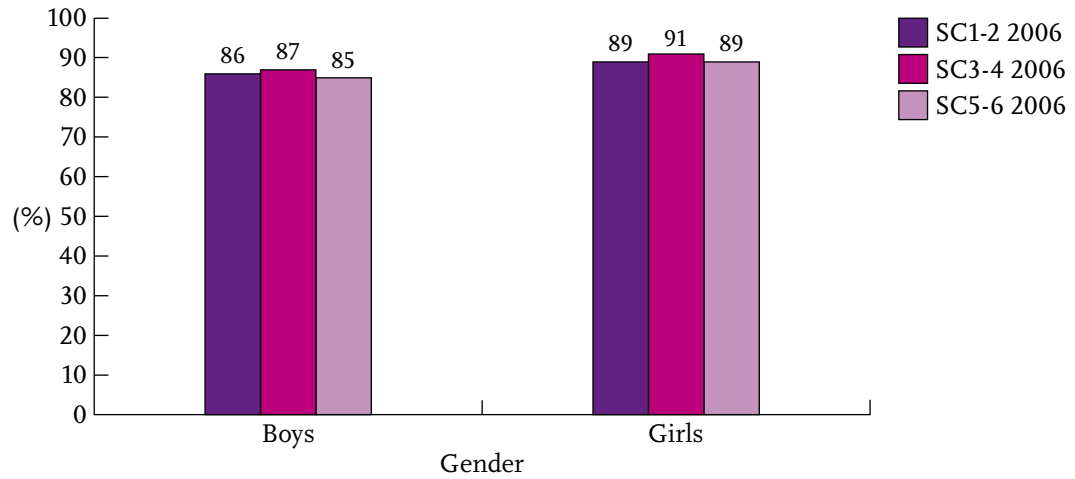


Self Care

Seatbelt use: Middle Childhood Study

Among 3rd and 4th class children 88% report always wearing a seatbelt in a car. In this group, the gender differences noted above are not apparent.

Figure 57: Percentages of 9 year old boys and girls who report always wearing a seatbelt



Injuries

Ever injured

Overall, 43% of children report being injured once or more in the last 12 months, and requiring medical attention. The percentage who report such an injury is higher among boys (51%) than girls (34%). Among boys the number of children reporting an injury is slightly higher among 12-14 and 15-17 year olds compared with 10-11 year olds. This pattern is not evident among girls. Across age groups and gender, the percentage of children reporting an injury decreased between 2002 and 2006.

Figure 58: Percentages of boys who report ever being injured in the last 12 months

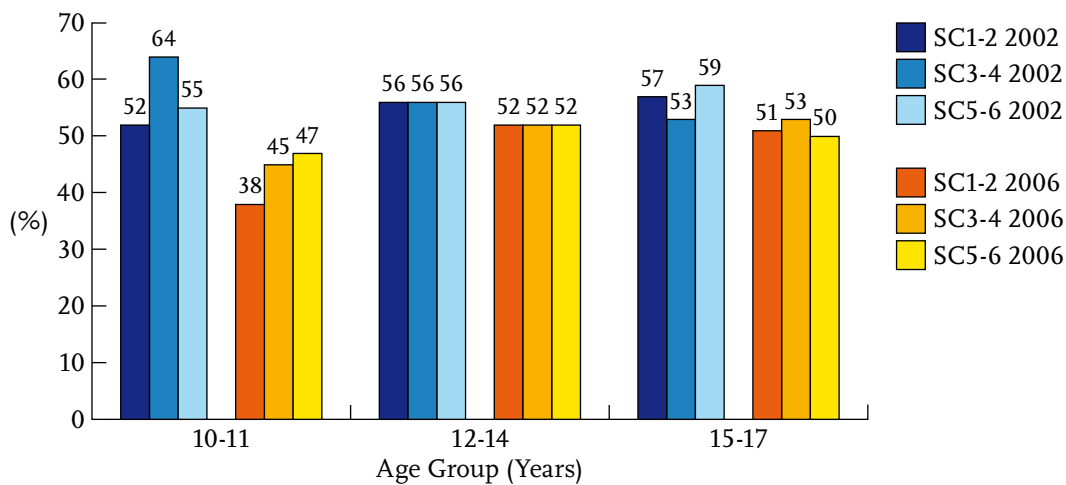
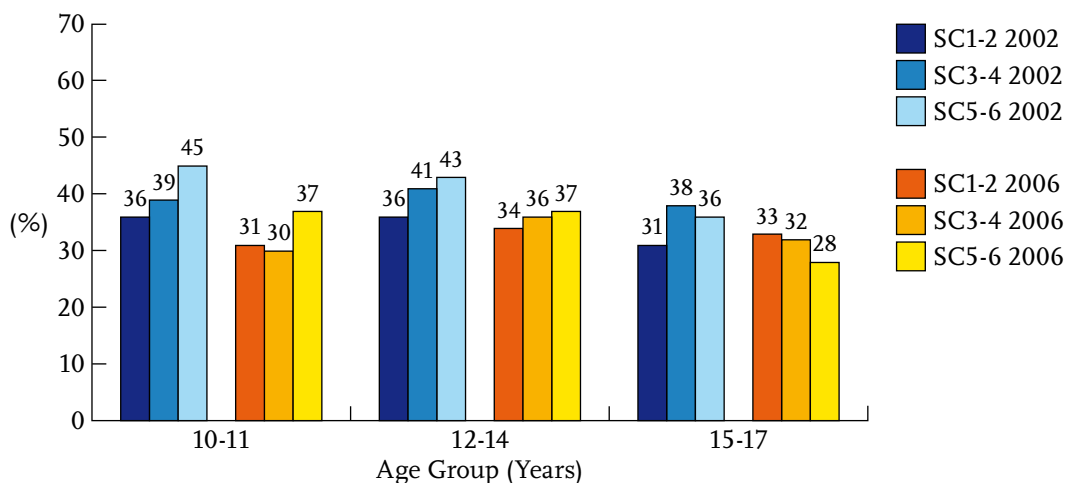


Figure 59: Percentages of girls who report ever being injured in the last 12 months



Injuries

Loss of activity due to injury

Children were further asked to report on how many days of activity they lost, as a consequence of their most severe injury, in the past year. Overall, 15% of children report that they have missed 3 or more days of usual activity due to injury, with a higher percentage of boys (19%) than girls (11%) reporting such loss of activity. Among boys, the percentage of children who have missed days of activity is higher in 12-14 and 15-17 year olds compared to 10-11 year old children. This pattern is not evident among girls.

Figure 6o: Percentages of boys who report that they have missed 3 or more days of usual activities due to injury in the last year

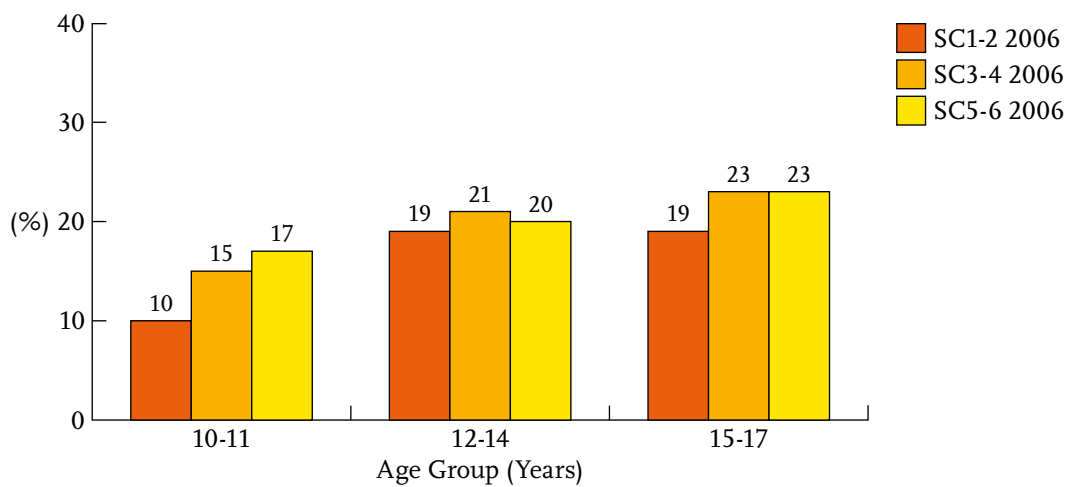
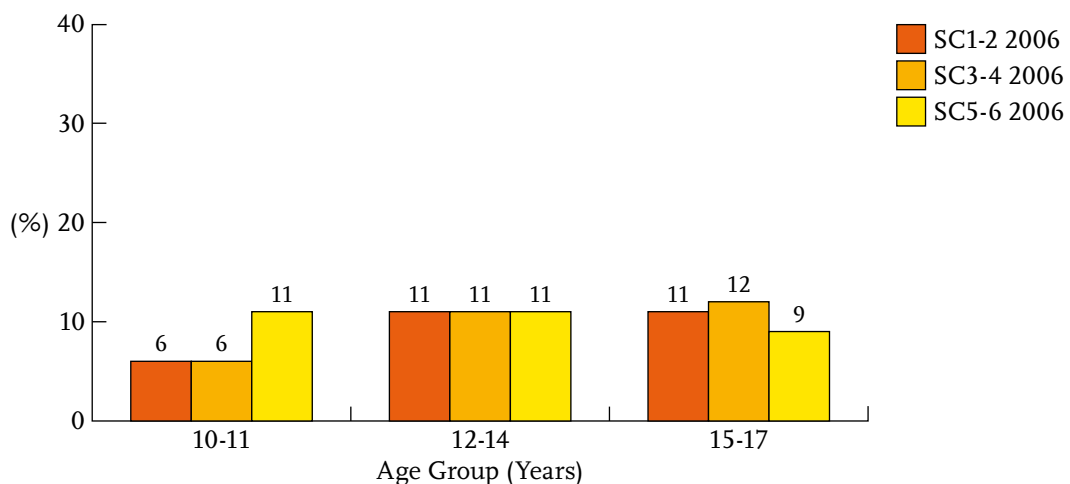


Figure 6r: Percentages of girls who report that they have missed 3 or more days of usual activities due to injury in the last year



Among the children reporting an injury, a sports facility was the leading location for injuries (43% of boys and 34% of girls) followed by the home or yard (19% of boys and 23% of girls) and school (15% of boys and 18% of girls). The leading activity during which an injury occurred was a sports' activity (55% of boys and 44% of girls) followed by biking (7% of boys and 5% of girls).

Bullying

Being bullied

Children were asked to report how often they have been bullied in school in the past couple of months. Overall, 24% report ever being bullied, and 8% report having been bullied more than two or three times a month. The percentages of boys (26%) reporting they have been bullied are slightly higher than that of girls (23%). Bullying is also more frequent among 10-11 year olds in comparison to older children.

Figure 62: Percentages of boys who report ever being bullied in the past couple of months

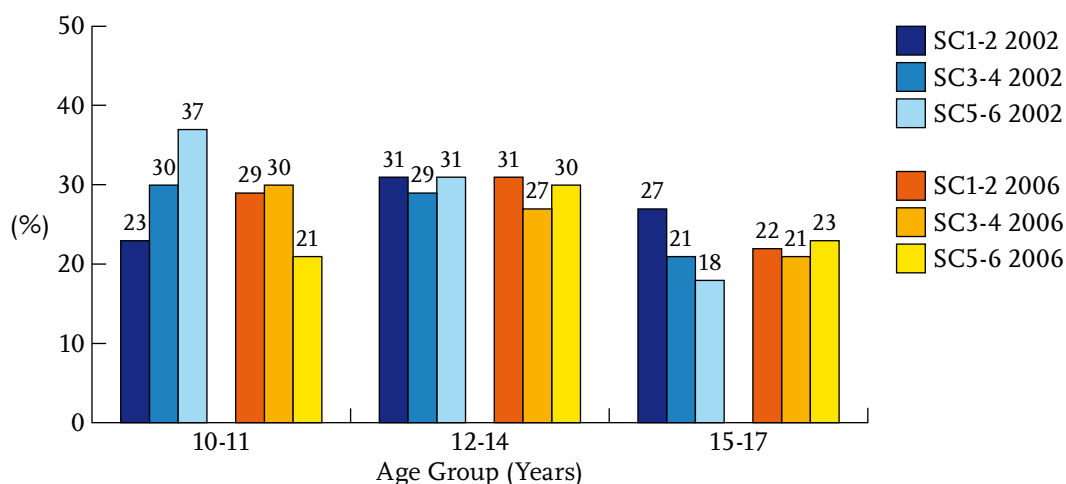
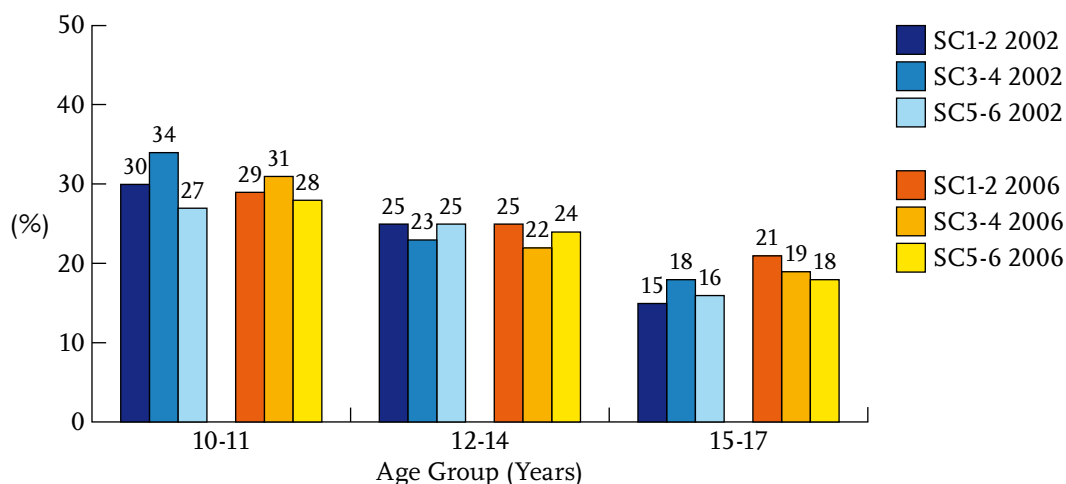


Figure 63: Percentages of girls who report ever being bullied in the past couple of months

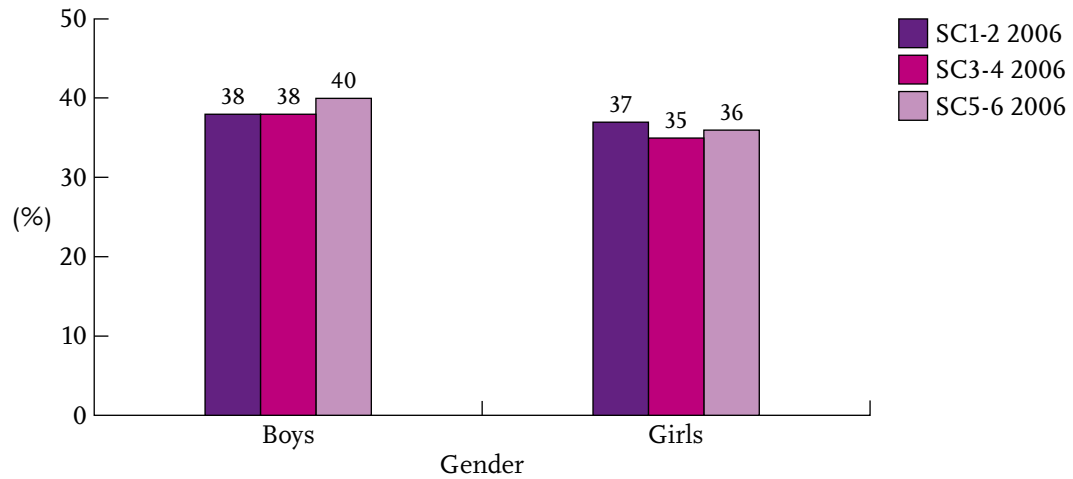


Bullying

Being bullied: Middle Childhood Study

The overall percentage of 3rd and 4th class children who report ever being bullied is 37% with no gender or social class effects.

Figure 64: Percentages of 9 year old boys and girls who report ever being bullied in the past couple of months



Bullying others

Children were also asked to report how often they took part in bullying another student at school in the past couple of months. Overall, 22% report ever bullying others, and 5% report bullying others more than two or three times a month. The percentage of boys (29%) taking part in bullying others is substantially higher than girls (14%). Higher percentages of boys in the 12-14 and 15-17 year old age groups report ever bullying others compared to the 10-11 year old boys. This pattern was not evident among girls.

Figure 65: Percentages of boys who report ever bullying others in the past couple of months

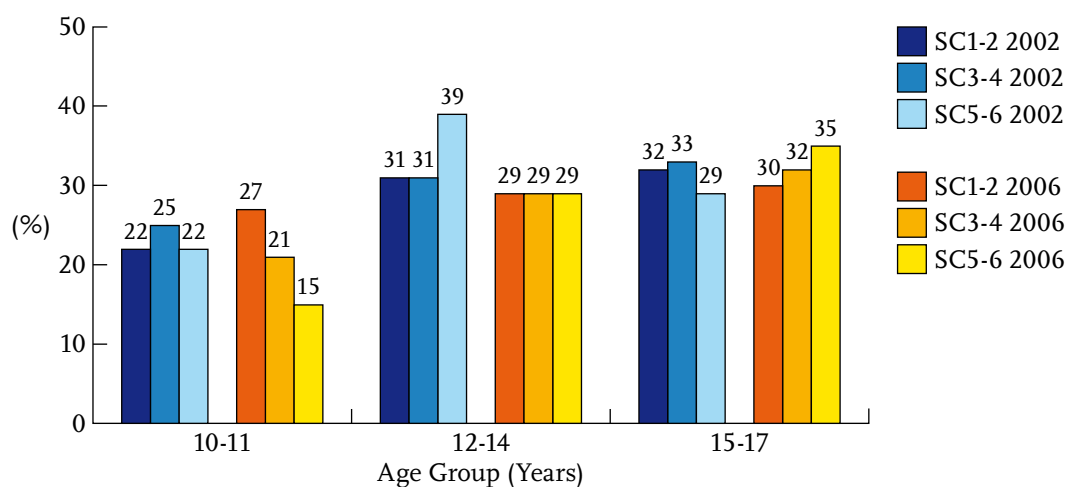
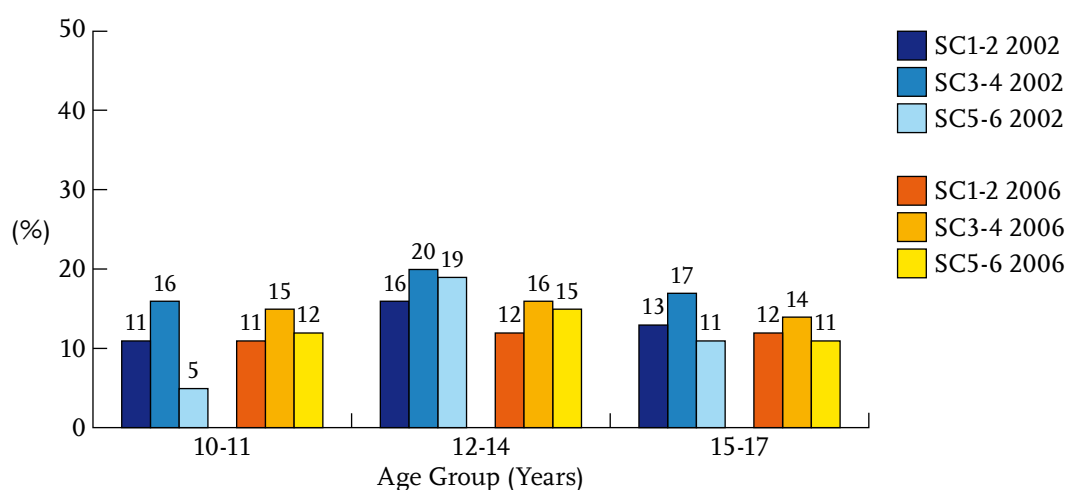


Figure 66: Percentages of girls who report ever bullying others in the past couple of months





Appendix I

Demographic Representativeness Of Respondents HBSC 2006 survey

The gender breakdown of the HBSC 2006 participants revealed that 51% were male and 49% were female. Those who participated were compared to data from the 2002 census for region and social class. Table 2 presents the final numbers from each geographical region and the percentage of the total sample that this represents. The sixth column presents the percentages of 7-11 years olds recorded in the regions during the 2002 census. The data are representative of the population distribution across regions with slight variations from the 2002 census.

Table 2: Comparison of the location of 2002 and 2006 HBSC respondents to the 2002 census

Health Board	N		%		%
	HBSC 2002	HBSC 2006	HBSC 2002	HBSC 2006	Census 2002
East	1765	3055	31	30	33
North East	377	633	7	6	10
South East	565	1646	10	16	11
North West	586	704	10	7	6
South	826	1450	15	14	15
Mid West	573	914	10	9	9
West	544	1427	10	14	10
Midlands	412	395	7	4	6

In addition, social class was compared with those presented in the 2002 census, as shown in Table 3. It should be noted that slight variations would be expected here because the census reports all persons by social class, not all of whom would be parents or guardians of children in these age groups.

Table 3: Comparison of the social class of 2002 and 2006 HBSC respondents to the 2002 census

Social Class	HBSC 2002 (%)	HBSC 2006 (%)	Census 2002 (%) *
Professional	4	4	6
Managerial	25	23	26
Non-manual	11	8	16
Skilled manual	28	29	17
Semi-skilled	10	11	11
Unskilled	4	5	6
Unknown	17	20	18

* All persons classified by social class

Appendix

Table 4 below presents the percentages of HBSC respondents across gender, age group and social class.

Table 4: Distribution of 2002 and 2006 HBSC respondents by gender, age group and social class

	SC1-2 (%)		SC3-4 (%)		SC5-6 (%)		n	
	HBSC 2002	HBSC 2006	HBSC 2002	HBSC 2006	HBSC 2002	HBSC 2006	HBSC 2002	HBSC 2006
BOYS								
10-11 years	31	26	51	53	18	21	353	498
12-14 years	32	33	50	47	18	20	1039	2184
15-17 years	42	36	43	43	15	20	668	1801
GIRLS								
10-11 years	30	24	47	51	23	26	379	713
12-14 years	36	31	47	47	16	23	1219	2064
15-17 years	36	37	47	43	17	21	1028	1665

Middle Childhood Survey

The gender breakdown of the participants in the middle childhood survey revealed that 52% were male and 48% were female. Those who participated were compared to data from the 2002 census for region and social class. Table 5 below presents the final numbers from each geographical region and the percentage of the total sample that this represents. The fourth column presents the percentages of 5-6 year olds recorded in these regions during the 2002 census. The data are representative of the population distribution across regions with only slight variations from the 2002 census.

Table 5: Comparison of the location of the middle childhood survey respondents to the 2002 census

	n	%	%
Health Board	Middle Childhood Survey 2006	Middle Childhood Survey 2006	Census 2002
East	1313	39	34
North East	189	6	9
South East	542	16	11
North West	136	4	6
South	470	14	15
Mid West	225	7	9
West	363	11	10
Midlands	116	4	6

In addition, the social class distribution was compared with those presented in the 2002 census. As noted earlier slight variations would be expected because the census reports all persons by social class, not all of whom would be parents/guardians of children in these age groups.

Table 6: Comparison of the social class of middle childhood survey respondents to the 2002 census

Social Class	3rd and 4th class 2006 (%)	Census 2002 (%)
Professional	6	6
Managerial	20	26
Non-manual	14	16
Skilled manual	21	17
Semi-skilled	21	11
Unskilled	4	6
Unknown	14	18

Table 7: Distribution of the middle childhood survey respondents by class group, gender and social class

	SC1-2	SC3-4	SC5-6	Total sample
	n (%)	n (%)	n (%)	n
BOYS				
3rd class	216 (30)	282 (39)	228 (31)	726
4th class	257 (34)	294 (38)	213 (28)	764
GIRLS				
3rd class	189 (28)	294 (43)	195 (29)	678
4th class	207 (27)	319 (42)	231 (30)	757

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