



# The Irish Health Behaviour in School-aged Children (HBSC) Study 2010







NUI Galway  
OÉ Gaillimh

# The Irish Health Behaviour in School-aged Children (HBSC) Study 2010

February 2012

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# Foreword



Once again, we have been given a window into the health behaviours of school-going children – an insight that is invaluable for how we approach policy in various domains. This adds to the body of research already available on the lifestyles and health behaviours of Irish people; and we use this information with one aim in mind: To improve and protect the health of the Irish population.

The Health Behaviour in School-aged Children (HBSC) survey provides us with a roadmap for the future direction of policy to improve and protect the health of the nation: It tells us the areas where policy needs to adjust and focus; the future trends in relevant behaviours; so as to assist Government in addressing the behavioural trends that are a source of concern, or indeed to prevail with existing policy where encouraging positive behaviour trends have been reported.

The context of this research study is the World Health Organization: HBSC is a cross-national research study conducted in collaboration with the WHO Regional Office for Europe that has 43 participating countries and regions; and this is the fourth time that my Department has funded the Irish phase of the study. This gives us the opportunity to continue monitoring and identifying health behaviour trends in a way that is comparable with other participating countries.

The survey describes health behaviours in children aged between 9 to 18 years. While some responses from children indicate little change from those reported in 2006, other data are encouraging: I am heartened that the proportion of children who have smoked tobacco has decreased, similar to the trend in alcohol consumption and use of cannabis; nutrition and dietary trends also appear to be – on balance – positive with more children eating vegetables and a decrease in the consumption of sweets and soft drinks; but I am disheartened to note that an overall increase has been reported in the proportion of children who report experiencing hunger. Finally, for the first time, the study includes the sexual health behaviours of children aged between 15 and 17 years. Overall the survey provides us with essential lifestyle information that my Department will use in promoting healthy lifestyles in health and other sectors.

I wish to acknowledge the work of the Health Promotion Research Centre 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, their parents and the staff from the participating schools for their support.

A handwritten signature in blue ink, which appears to read 'James Reilly'. The signature is stylized and fluid.

Dr James Reilly  
Minister for Health

# Introduction

This report presents data from the HBSC Ireland 2010, the Irish Health Behaviour in School-aged Children survey. The 2010 HBSC survey is the fourth time that data of this kind have been collected from young people across the Republic of Ireland; previous surveys were conducted in 2006, 2002 and 1998 ([www.nuigalway.ie/hbsc](http://www.nuigalway.ie/hbsc)).

HBSC is a cross-sectional research study conducted in collaboration with the World Health Organization (WHO) Regional Office for Europe. The HBSC international survey runs on an academic 4-year cycle and in 2009/2010 there were 43 participating countries and regions ([www.hbsc.org](http://www.hbsc.org)). The overall study aims 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 2010 Irish survey mirror the 2006 national HBSC report and were identified by the Advisory Board and within key national Strategy documents. These include general health, smoking, use of alcohol and other substances, food and dietary behaviour, exercise and physical activity, self-care, injuries and bullying. In addition, children aged 15 and over were also asked, for the first time in the Irish HBSC survey, to report their sexual health behaviours and these data are presented here. Statistically significant differences by gender, age and social class are presented in this report.

The HBSC study was funded by the Department of Health and the Department of Children and Youth Affairs. The survey and analyses were carried out at the Health Promotion Research Centre, National University of Ireland, Galway (NUI Galway).

# Executive Summary

A summary of the main findings from HBSC Ireland 2010 is provided below:

## General Health

Overall, the proportion of children who report excellent health (33%), feeling very happy (50%) and high life satisfaction (76%) remains stable from HBSC 2006. In general, younger children and boys are more likely to report positive health. Children from lower social class groups are less likely to report excellent health and high life satisfaction.

The proportion of 3<sup>rd</sup> and 4<sup>th</sup> class children who report excellent health (39%) and feeling very happy (70%) remains stable from 2006. There are no significant differences across gender or social class groups.

## Substance use

Overall, there is a decrease from 2006 in reports of tobacco, alcohol and cannabis use among school children in Ireland.

### *Smoking*

Reports of current smoking (12%) and having ever smoked (27%) have declined since 2006 (15% and 36% respectively). Differences by age and social class are evident for both measures of smoking, with older children and those from lower social classes more likely to report both behaviours. Boys are more likely to report having ever smoked than girls, with a notable drop in ever smoking among older girls (47% in 2010 vs. 57% in 2006).

The proportion of 3<sup>rd</sup> and 4<sup>th</sup> class children who report that they have ever smoked (3%) has decreased from 2006 and reports of current smoking status remains the same (1%) as in 2006. Boys are more likely than girls to report such behaviours. There are no significant differences across social class groups.

### *Alcohol*

Reports of alcohol consumption have decreased among school children in Ireland since 2006 with 46% of children reporting ever drinking (53% in 2006) and 21% reporting being current drinkers (26% in 2006). Rates of drunkenness (28% in 2010 vs. 32% in 2006) and reports of been drunk in the last 30 days (18% in 2010 vs. 20% in 2006) have also decreased. Age and gender differences are observed for all four measures of alcohol consumption, with older children and boys more likely to report drinking and drunkenness. Children from lower social classes are more likely to report having been 'really drunk'.

### *Drug Use*

Reported cannabis use, both in the past 12 months (8% in 2010 vs. 16% in 2006) and in the past 30 days (5% in 2010 vs. 7% in 2006), has decreased. Boys and older children are more likely to report use of cannabis. No social class differences are evident.



## Food and Dietary Behaviour

Food (e.g., vegetable) and dietary behaviours (e.g., dieting to lose weight) among school children in Ireland have improved or remain stable since HBSC 2006.

### *Food consumption*

Overall, 20% of children report that they consume fruit more than once a day (19% in 2006) and 20% report eating vegetables more than once a day (18% in 2006). Girls, younger children and those from higher social classes are more likely to report regular fruit and vegetable consumption.

Overall the proportion of children who report eating sweets daily or more often (37% in 2010 vs. 39% in 2006), and who report soft drink consumption daily or more often (21% in 2010 vs. 26% in 2006) have decreased from 2006. Older children and children from lower social class groups are more likely to report regular consumption of sweets and soft drinks. Gender differences are also observed, with girls more likely to report frequent sweet consumption (39% girls vs. 34% boys) and boys more likely to report frequent intake of soft drinks (23% boys vs. 19% girls).

Similar patterns are evident among 3rd and 4th class children, with an increase in vegetable consumption (26% in 2010 vs. 21% in 2006), no change in fruit intake (30%) or sweets consumption (28%), and a decrease in soft drink consumption (15% in 2010 vs. 18% in 2006).

### *Food behaviours*

Reports of never having breakfast on weekdays have not changed from 2006 (13% in 2010 vs. 14% in 2006). Girls, older children and those from lower social class groups are more likely to report that they never have breakfast on weekdays. The proportion of 3rd and 4th class children who report never having breakfast on weekdays also remains stable from 2006 (2%).

Children were asked to report how often they go to school or to bed hungry because there was not enough food at home. Overall, 21% of children report ever going to school or to bed hungry, an increase from 2006 (17%). Boys, younger children and those from lower social classes are all more likely to report going to school or to bed hungry.

Reports of dieting (or doing something else) to lose weight in 2010 (13%) remain stable from 2006 (12%). Girls and older children are more likely to report dieting (or trying) to lose weight.

## Exercise and physical activity

There has been little change in reported frequency of exercise, physical activity and inactivity in HBSC 2010. Overall 51% of children report exercising four or more times a week (53% in 2006), 9% of children report participating in vigorous exercise less than weekly (10% in 2006) and 25% of children report being physically active on 7 days in the last week (27% in 2006). With each of these three measures, gender and age group differences are evident. In general, boys and younger children are more likely to be active. Children from lower social classes are

more likely to report inactivity and those from middle social classes are more likely to report being physically active on 7 days in the last week.

Among 3rd and 4th class children 70% report exercising four or more times a week (72% in 2006) and 7% report participating in vigorous exercise less than weekly (8% in 2006).

### **Self-care**

Self-reported tooth brushing, at a frequency of more than once a day (67%), remains stable from 2006 (63%), with the same pattern evident among 3rd and 4th class children (66% in 2010 vs. 64% in 2006). Girls and children in higher social class groups are more likely to report brushing their teeth more than once a day. There are no significant differences across age groups.

Children were asked how often they use a seatbelt when in a car. Overall, 81% of children report always wearing a seatbelt, which remains stable from 2006 (79%). Girls and younger children are more likely to report always using a seatbelt.

### **Injuries**

There is an overall decrease in the number of children who report being injured and needing medical attention once or more in the last 12 months (37% in 2010 vs. 43% in 2006). Boys and older children are more likely to report ever being injured. Of those reporting an injury, 57% report that they missed 3 or more days of usual activity in the past year due to injury (56% in 2006). Gender and age differences are similar to those reported for injury prevalence, with no social class effect observed.

### **Bullying**

The rates of children reporting ever being bullied remain unchanged since 2006 at 24%. However, the proportion of children reporting bullying others in the past couple of months has decreased (17% in 2010 vs. 22% in 2006). Boys are more likely to report both ever being bullied and that they have bullied others. Younger children are more likely to report having been bullied, while older children are more likely to report bullying others. There are no differences across social class groups.

The percentage of 3rd and 4th class children who report ever being bullied (37%) remains unchanged from 2006. There are no significant differences across gender or social class groups.

### **Sexual Behaviour**

Overall, 27% of 15-17 year olds report that they have ever had sex. Boys and those from lower social class groups are more likely to report ever having sex.

Of those who report ever having had sex, 93% report using a condom the last time they had sex and 59% report that they had used the birth control pill. Girls are more likely to report using the birth control pill as a form of contraceptive with no gender differences in reports of condom use as a form of contraceptive. There are no differences across social class groups.

# Methodology

## HBSC 2010 & Middle Childhood Survey

The HBSC survey 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 the 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, 2002 and 2006 HBSC Ireland surveys. Data from the 2006 census was 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 classes from 3<sup>rd</sup> to 6<sup>th</sup> 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.

Data were collected from children in 3<sup>rd</sup> and 4<sup>th</sup> class, using an abbreviated version of the main HBSC questionnaire. Data on sexual health behaviours were only collected from the older age group.

**Table 1: Summary of methodology for the HBSC Survey**

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	67% of invited schools / 85% of students
Obtained Sample	256 schools / 16,060 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 can be found in the Appendix.

The results section outlines children's perceptions and behaviours relating to health. Data are presented for HBSC and Middle Childhood studies separately. Data are illustrated by gender, age and social class (SC). Social class is represented by SC 1-2, SC 3-4 and SC 5-6 corresponding to high, middle 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., sales person, 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).

### Statistical analysis

Statistical analyses were carried out to determine if differences by gender, age group and social class were statistically significant. Differences at  $p < 0.05$  are described in the report.

# Results





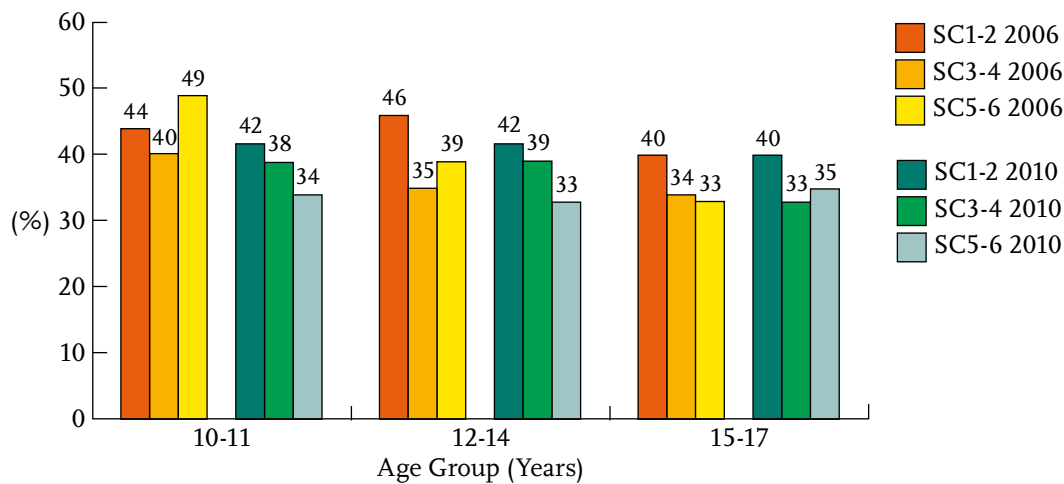
# General Health

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

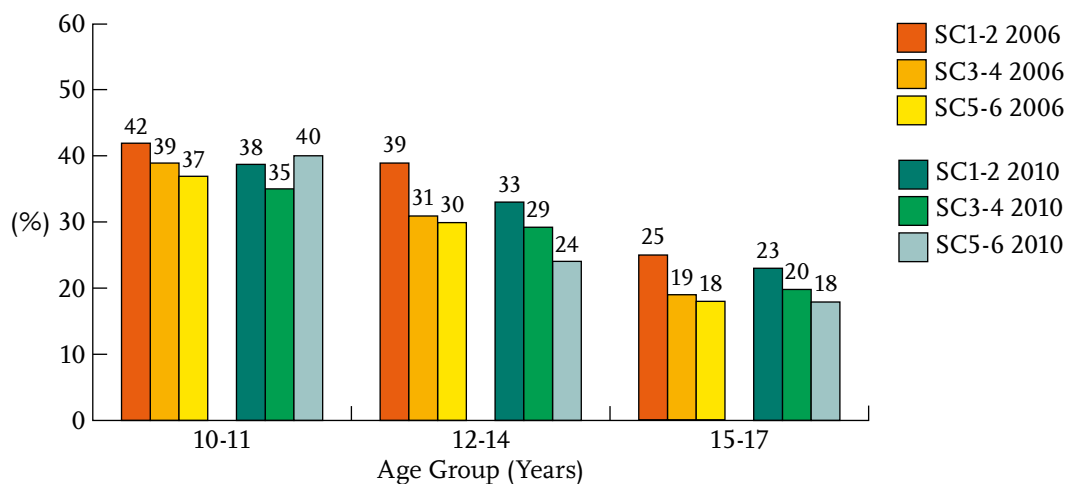
## Excellent Health

Children were asked to rate their health as excellent, good, fair or poor. Overall, 33% of children aged 10-17 report that they would say their health is excellent with a further 55% that it is good.

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



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



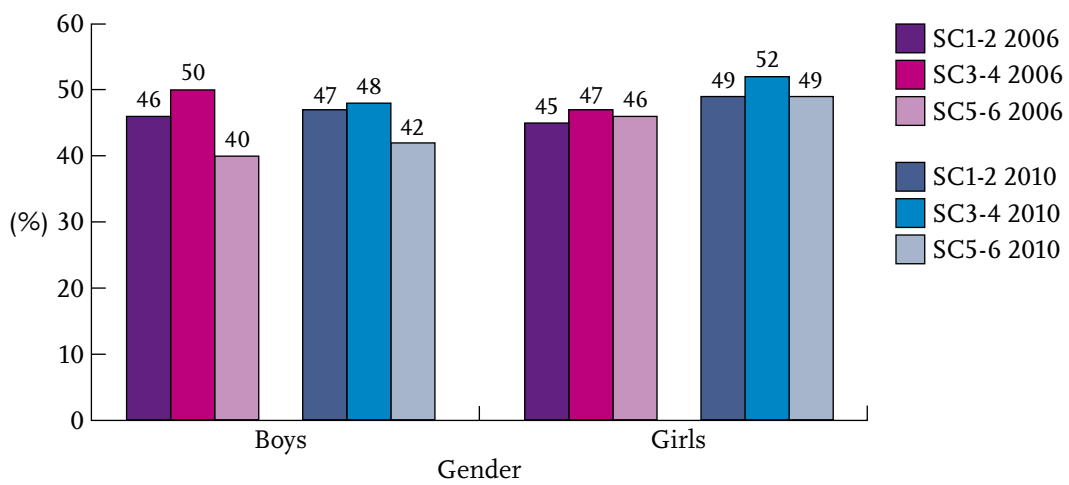
There are statistically significant differences by gender, age group and social class. Overall, 38% of boys report excellent health compared to 27% of girls. Younger children are significantly more likely to report excellent health compared to older children and children from higher social class groups are more likely to report excellent health than those from

other social class groups. The proportion of children who report that their health is excellent remains unchanged from 2006 (33% in 2006).

### Excellent Health – Middle Childhood Study

Overall, 49% of 3<sup>rd</sup> and 4<sup>th</sup> class children report that they would say their health is excellent. There are no statistically significant gender or social class differences. The proportion of children that report excellent health remains stable from 2006 (47% in 2006).

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

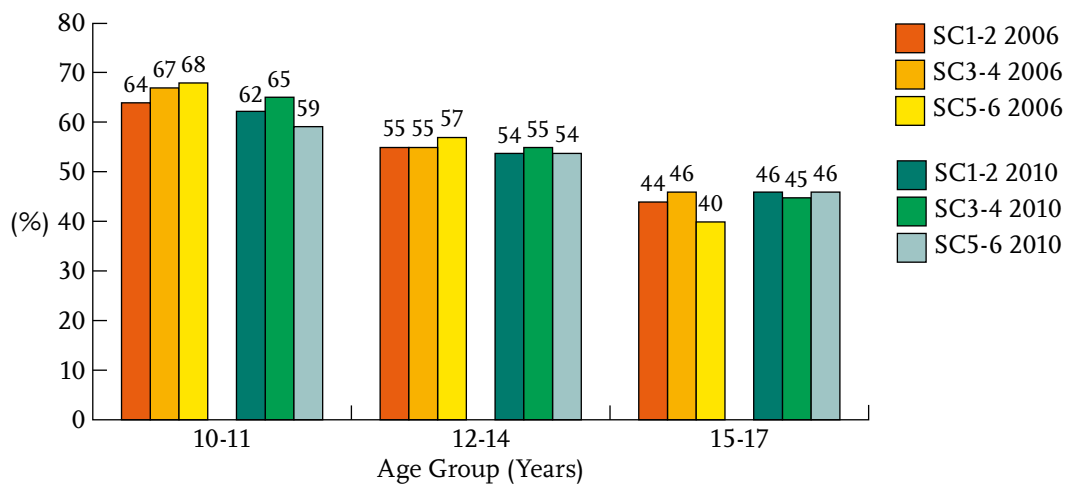




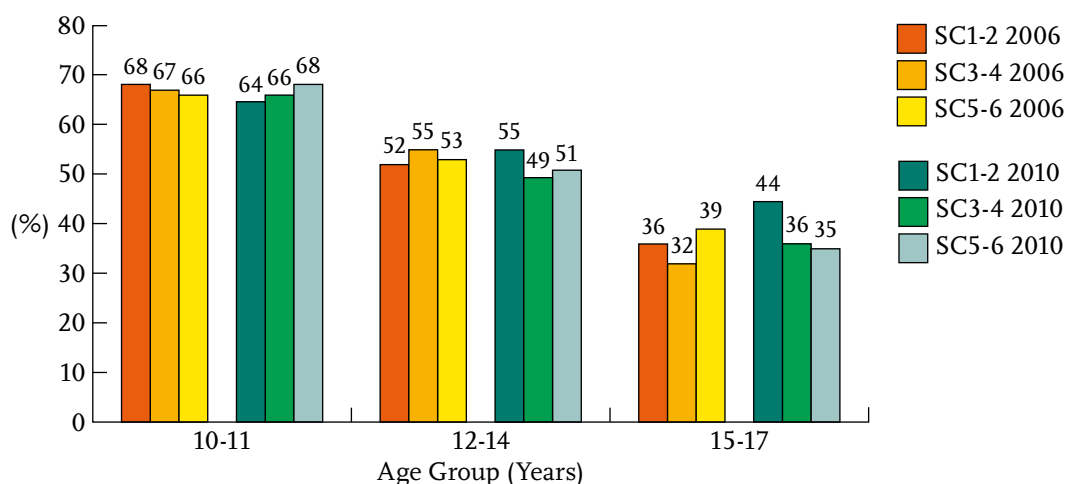
## Life at present (happiness)

Children were asked to report how they feel about their life at present. Overall, 50% of children report feeling very happy with their lives at present with a further 41% reporting feeling quite happy.

**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**

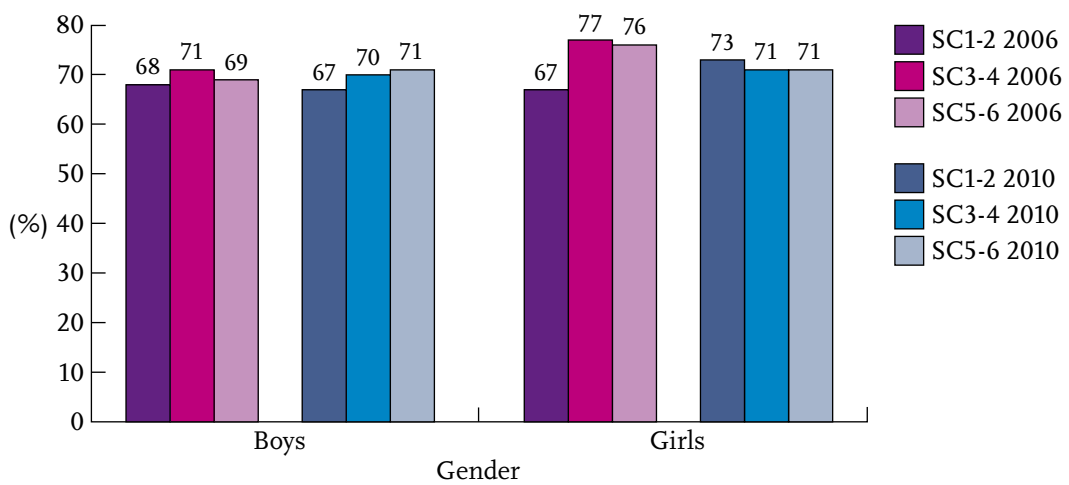


There are statistically significant differences by gender and age group. Overall, 52% of boys compared to 49% of girls report feeling very happy with their lives and younger children are more likely to report feeling very happy with their lives than older children. There are no statistically significant differences across social class groups. The proportion of children who report feeling very happy with their lives remains unchanged from 2006 (50% in 2006).

## Life at present (happiness) – Middle Childhood Study

Overall, 70% of 3<sup>rd</sup> and 4<sup>th</sup> class children report feeling very happy with their lives at present. There are no statistically significant differences by gender or social class. The proportion of children who report feeling very happy with their lives remains stable from 2006 (72% in 2006).

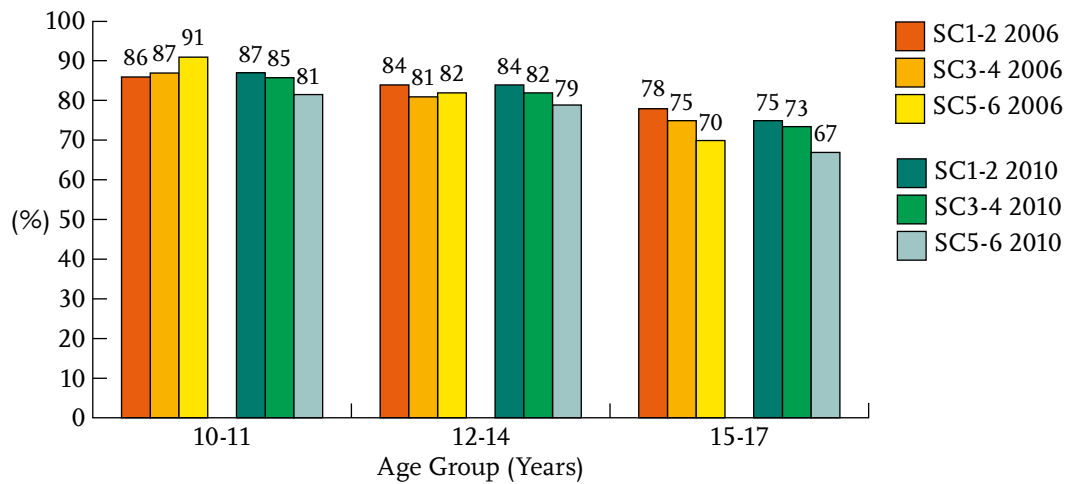
**Figure 6: Percentages of 9 year old boys and girls who report feeling very happy about their lives at present**



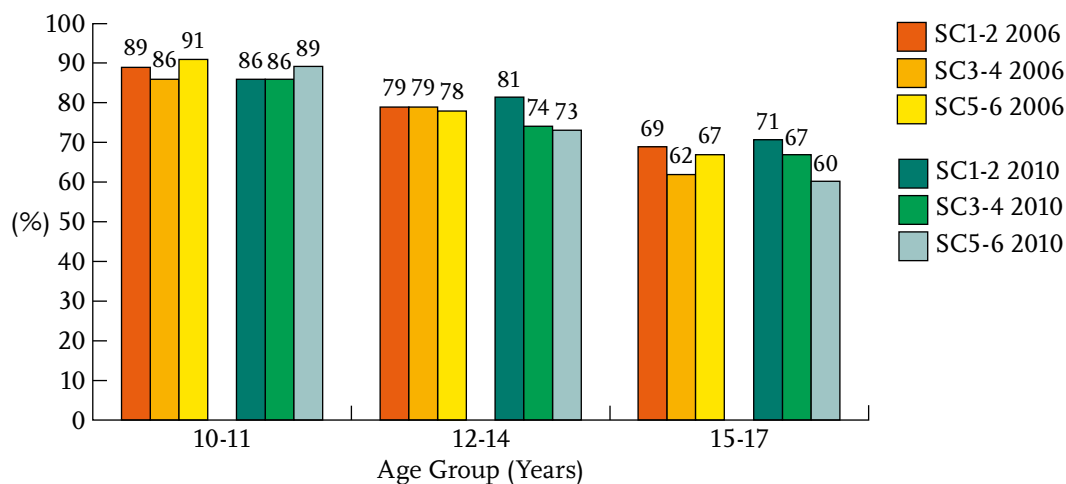
## Life satisfaction

Children were asked to report where they feel they stand at the moment on a scale from 0 to 10. Overall, 76% of children report high life satisfaction (rank 7 or higher on the scale).

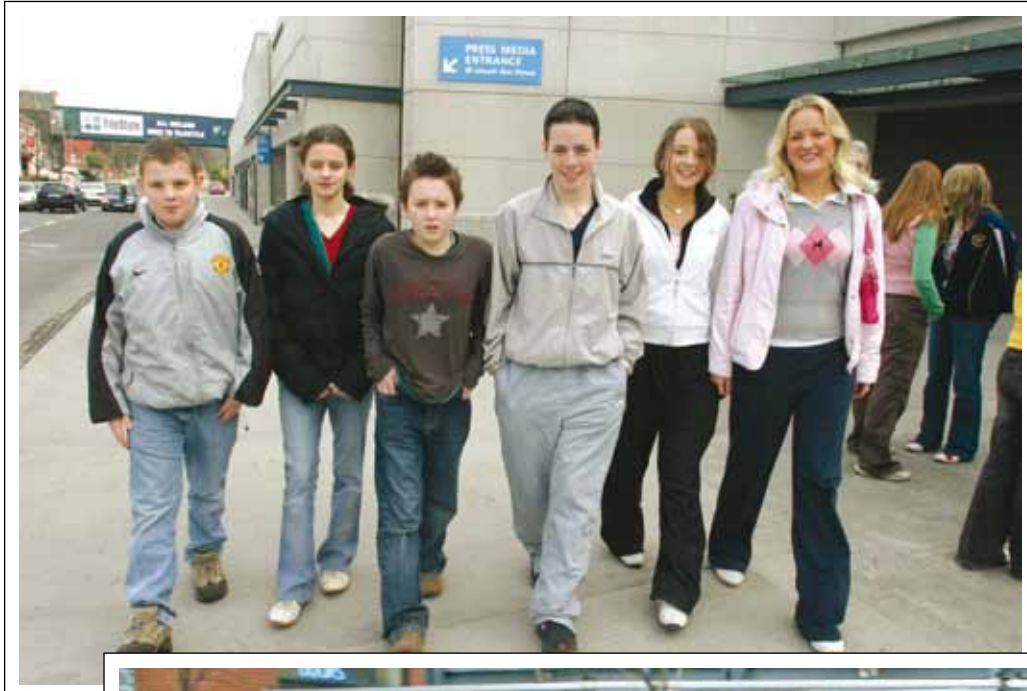
**Figure 7: Percentages of boys who report high life satisfaction**



**Figure 8: Percentages of girls who report high life satisfaction**



Statistically significant gender differences are apparent with fewer girls (74%) than boys (79%) reporting high life satisfaction. There are also statistically significant differences across age groups with younger children more likely to report high life satisfaction than older children, and across social class groups, with those from lower social class groups less likely to report high life satisfaction than those from other social class groups. The proportion of children who report high life satisfaction remains stable from 2006 (77% in 2006).





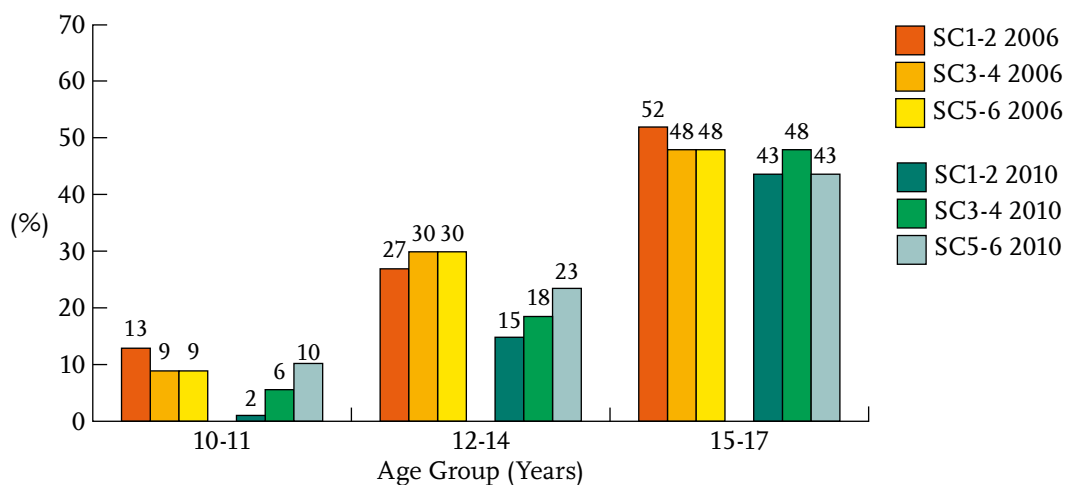
# Smoking

Children were asked about two aspects of smoking tobacco: having ever smoked and current smoking behaviour, which was defined as smoking tobacco monthly or more frequently.

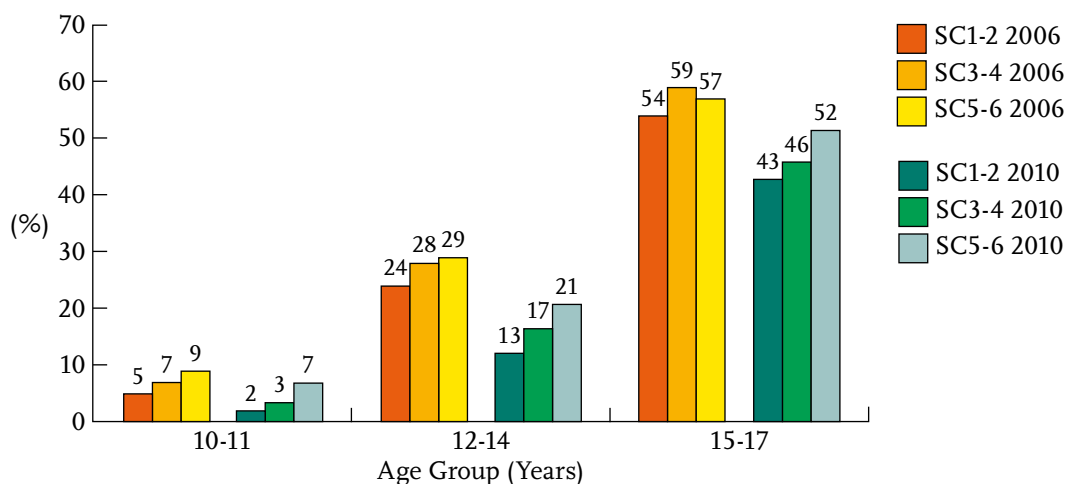
## Ever smoked tobacco

Overall, 27% of children report that they have ever smoked tobacco, with statistically significant differences across age groups. There are statistically significant gender differences, with more boys (27%) than girls (26%) reporting having ever smoked tobacco. There are also statistically significant differences across social class groups; those from the lower social class groups are more likely to report having ever smoked tobacco compared to other social class groups. There is an overall decrease in the proportion of children who report that they have ever smoked tobacco from 2006 (36% in 2006).

**Figure 9: Percentages of boys who report ever smoking tobacco**



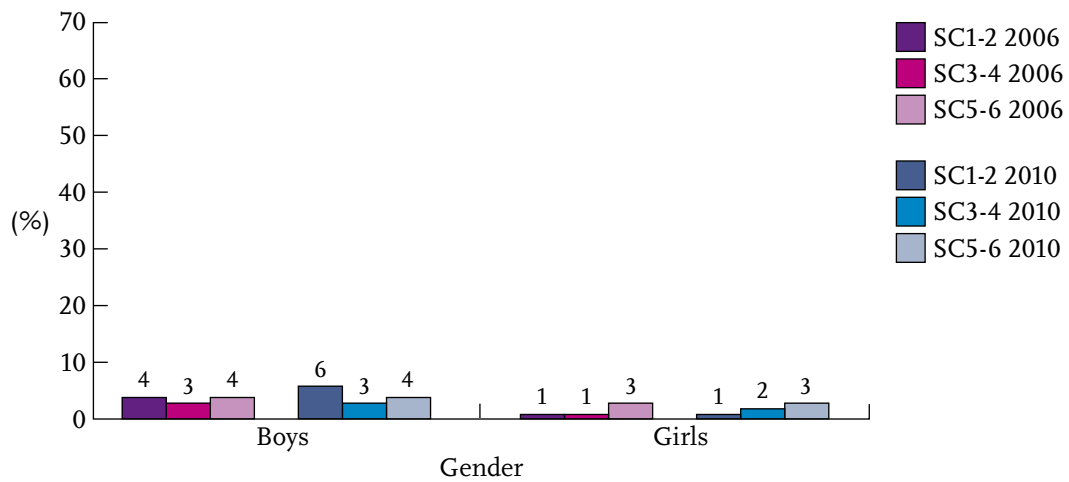
**Figure 10: Percentages of girls who report ever smoking tobacco**



## Ever smoked tobacco – Middle Childhood Study

Overall, 3% of 3<sup>rd</sup> and 4<sup>th</sup> class children report that they have ever smoked tobacco. There are statistically significant gender differences with 5% of boys compared to 2% of girls reporting that they have ever smoked tobacco. The proportion of 3<sup>rd</sup> and 4<sup>th</sup> class children who report that they have ever smoked tobacco is similar to 2006 (4% in 2006).

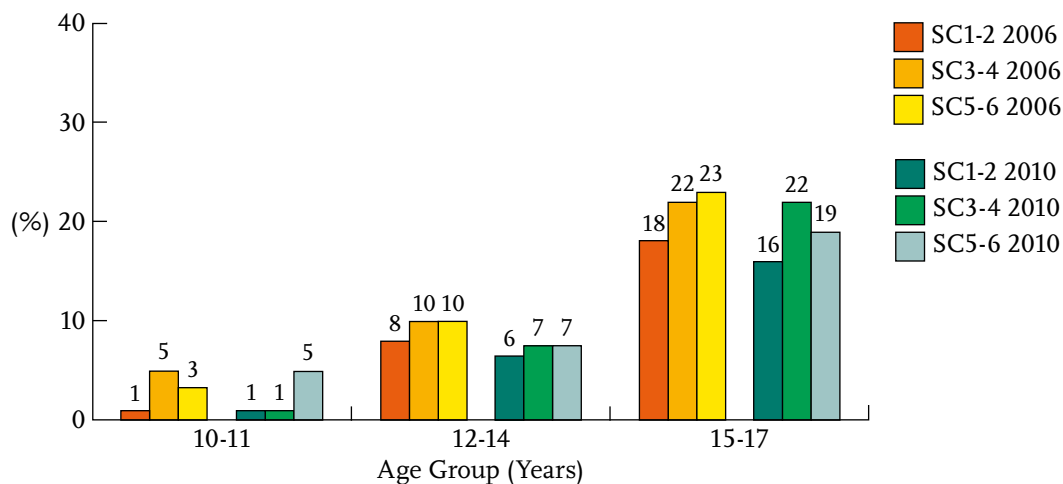
**Figure 11: Percentages of 9 year old boys and girls who report ever smoking tobacco**



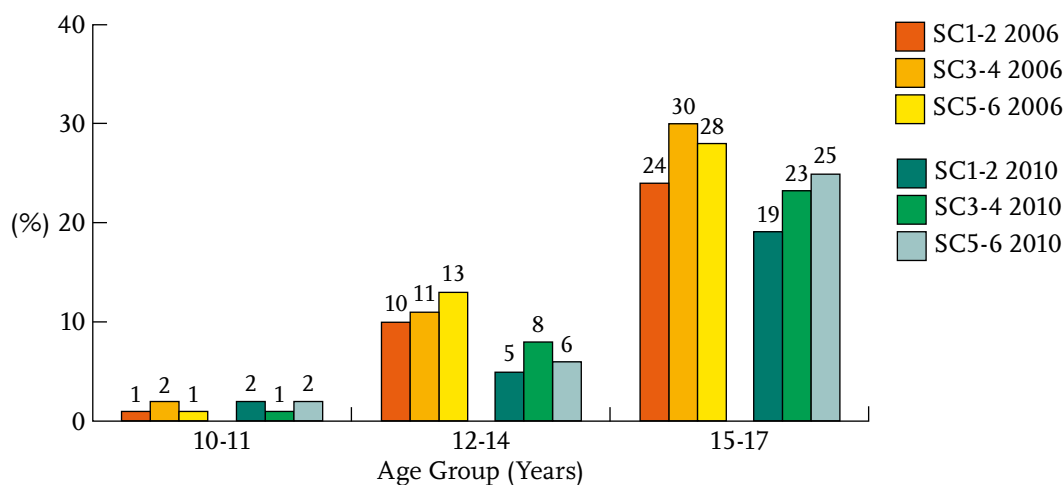
## Current smoking status

Overall, 12% of children report that they are current smokers. Smoking is more prevalent among older than younger children and this difference is statistically significant. Overall, there are statistically significant differences across social class groups in current smoking status, with children from higher social class groups less likely to report current smoking behaviour. There are no statistically significant differences by gender. There is an overall decrease in the proportion of children who report that they are current smokers from 2006 (15% in 2006).

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



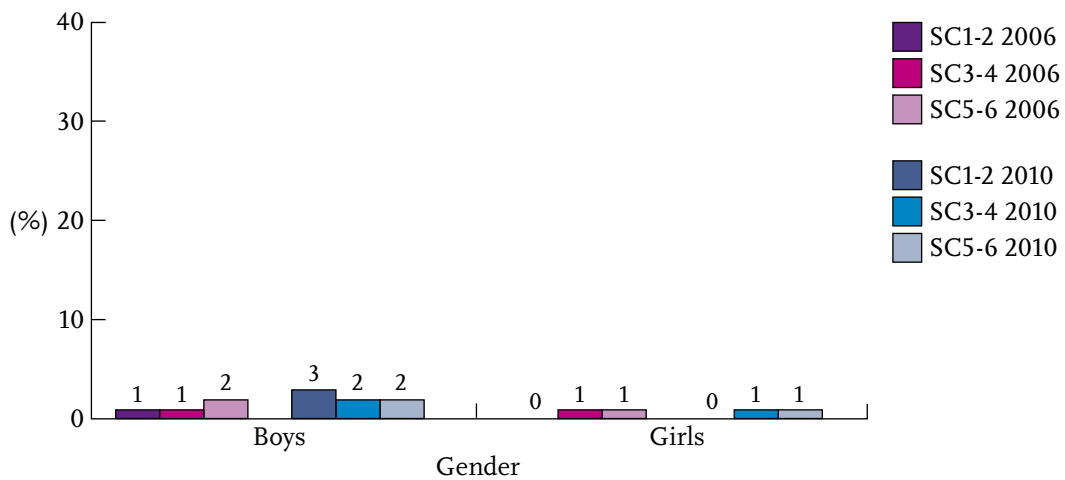
**Figure 13: Percentages of girls who report that they are current smokers**



## Current smoking status – Middle Childhood Study

Overall, 1% of 3<sup>rd</sup> and 4<sup>th</sup> class children report that they are current smokers. There are statistically significant gender differences with 2% of boys and 1% of girls reporting that they are current smokers. There are no statistically significant social class differences. Overall, the proportion of 3<sup>rd</sup> and 4<sup>th</sup> class students who report that they are current smokers remains stable from 2006 (1% in 2006).

**Figure 14: Percentages of 9 year old boys and girls who report that they are current smokers**





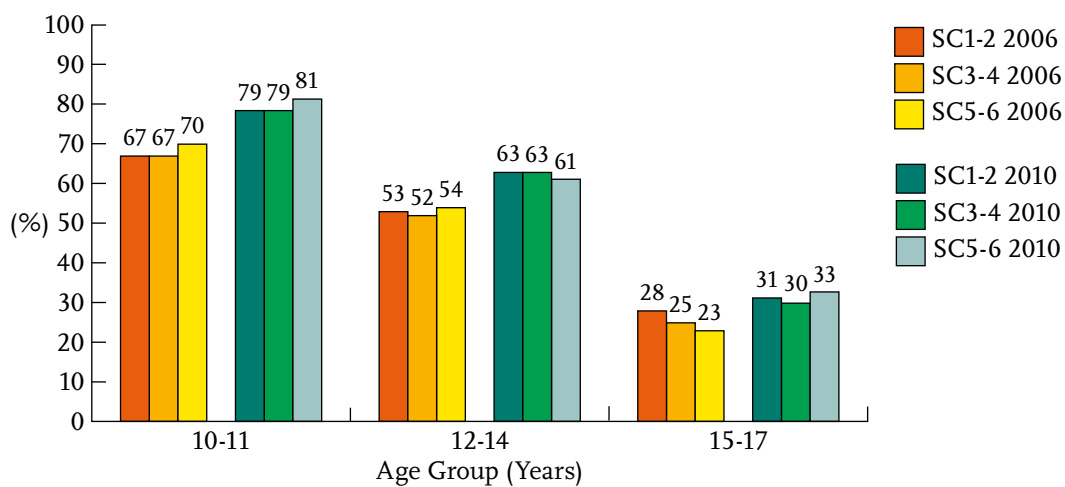


# Alcohol

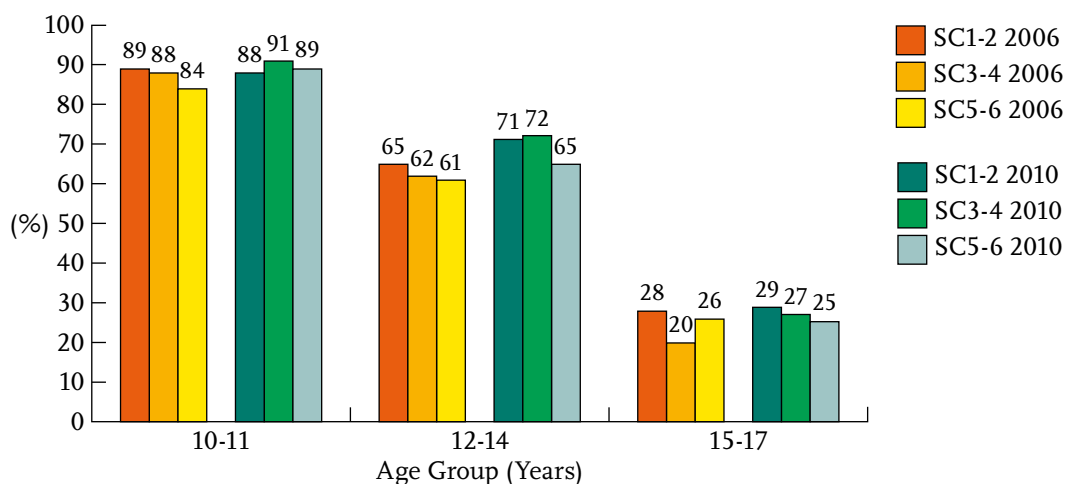
## Never drinking

Overall, 54% of children report that they have never had an alcoholic drink. There are statistically significant differences by gender and age group. Girls are more likely than boys to report never drinking (57% and 52% respectively), and younger children are more likely to report never drinking than older children. Social class differences are not evident. There is an overall increase in the proportion of children who report that they have never had an alcoholic drink from 2006 (47% in 2006).

**Figure 15: Percentages of boys who report never having had an alcoholic drink**



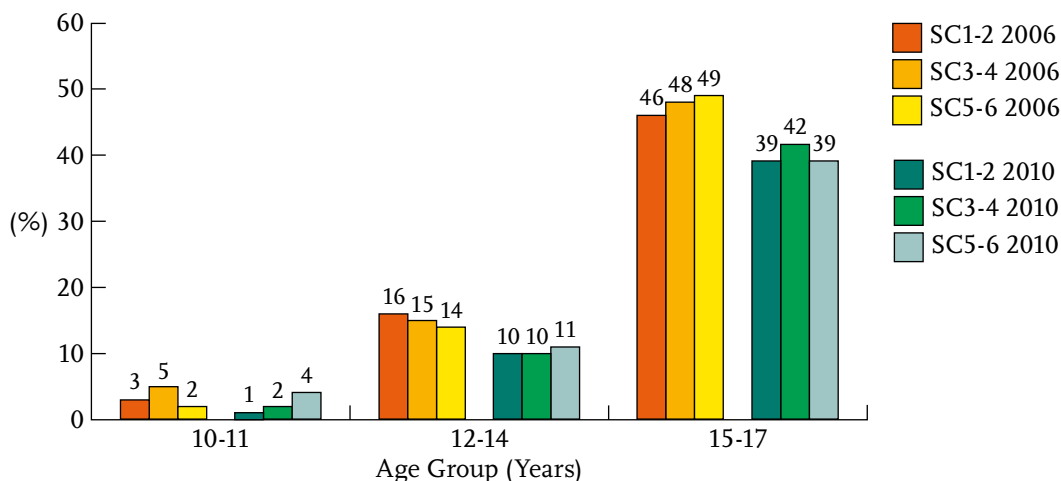
**Figure 16: Percentages of girls who report never having had an alcoholic drink**



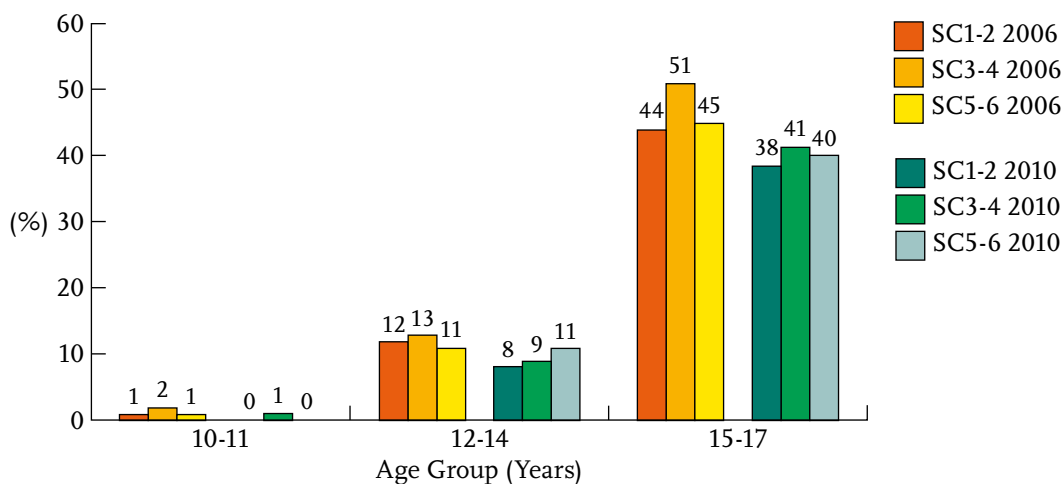
## Had an alcoholic drink in the past month

Current drinkers are defined as those who report having had an alcoholic drink in the past month. Overall, 21% of children report having had an alcoholic drink in the past month.

**Figure 17: Percentages of boys who report having had an alcoholic drink in the last month**



**Figure 18: Percentages of girls who report having had an alcoholic drink in the last month**

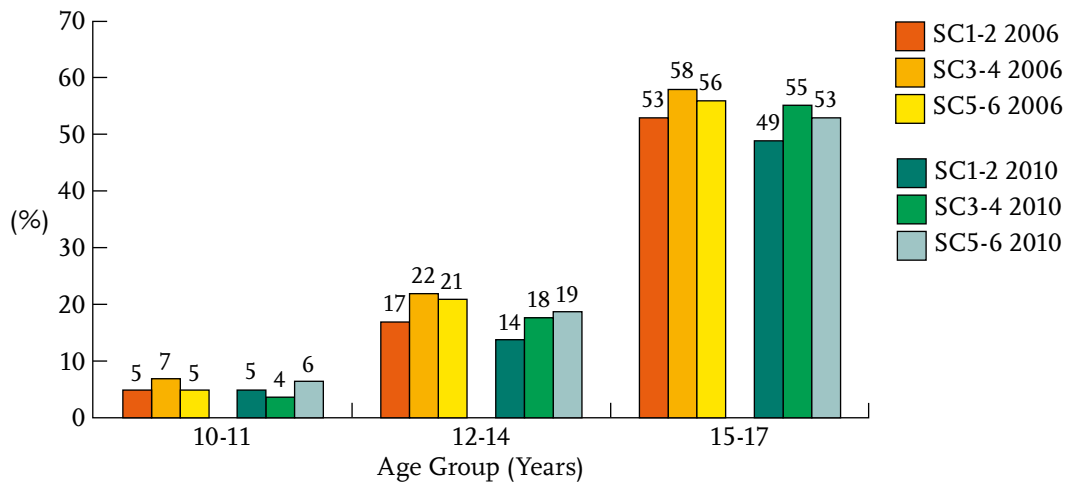


There are statistically significant gender differences with 22% of boys and 19% of girls who report they are current drinkers. Older children are significantly more likely to report having had an alcoholic drink in the past month, with 2% of 10-11 years olds and 40% of 15-17 year olds reporting this behaviour. There are no statistically significant differences across social class groups. Overall, there is a decrease in the proportion of children who report having had an alcoholic drink in the past month from 2006 (26% in 2006).

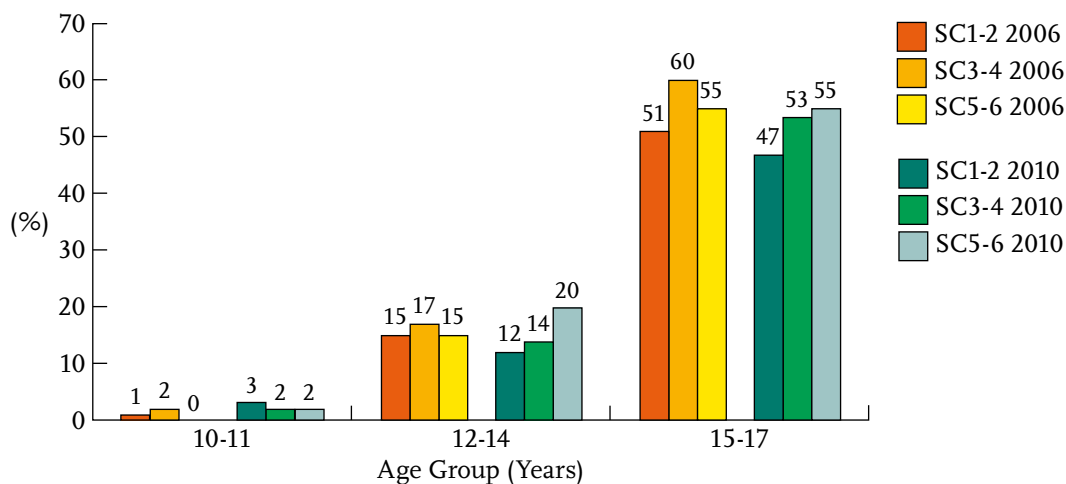
## Drunkenness

In addition to alcohol consumption, children were asked if they had ever had so much alcohol that they were 'really drunk'. Overall, 28% of children report having been 'really drunk'.

**Figure 19: Percentages of boys who report having been 'really drunk'**



**Figure 20: Percentages of girls who report having been 'really drunk'**

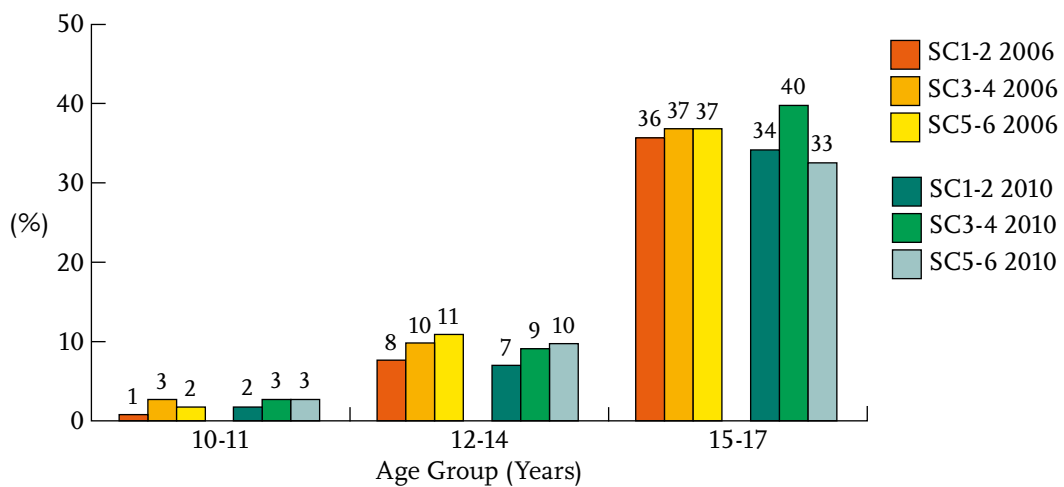


There are statistically significant gender, age group and social class differences. More boys (29%) than girls (26%) report having been 'really drunk' and reports of drunkenness are higher among older children: 4% of 10-11 year olds, 16% of 12-14 year olds and 52% of 15-17 year olds. Children from lower social class groups are more likely to report having been 'really drunk' than those from other social class groups. There is an overall decrease in the proportion of children who report having been 'really drunk' from 2006 (32% in 2006).

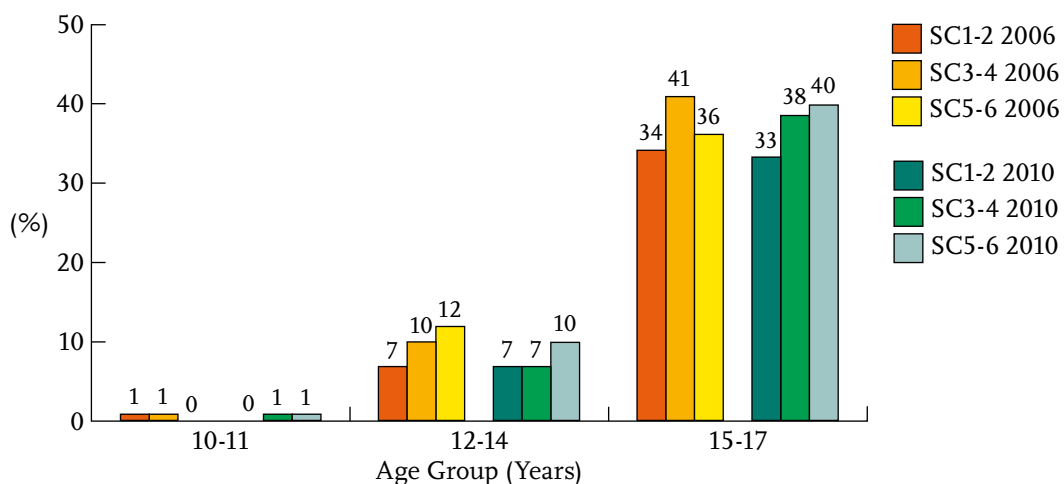
## Been drunk in the last 30 days

Children were also asked if they have been drunk in the last 30 days. Overall, 18% of children report that they have been drunk in the last 30 days with statistically significant gender differences: 19% of boys and 17% of girls overall reporting this behaviour. There are also statistically significant differences across age groups but not across social class groups. Overall, the proportion of children who report having been drunk in the last 30 days remains stable from 2006 (20% in 2006).

**Figure 21: Percentages of boys who report having been drunk in the last 30 days**



**Figure 22: Percentages of girls who report having been drunk in the last 30 days**



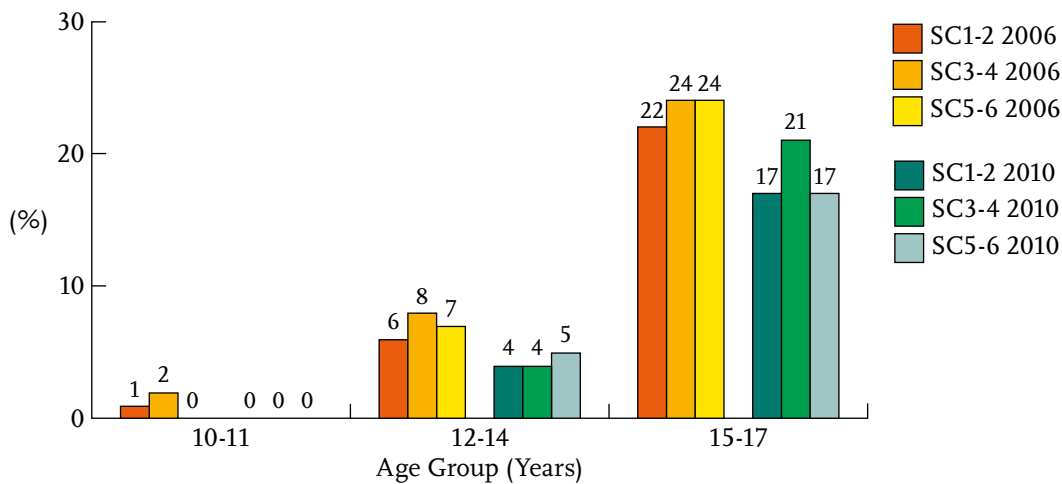


# Drug Use

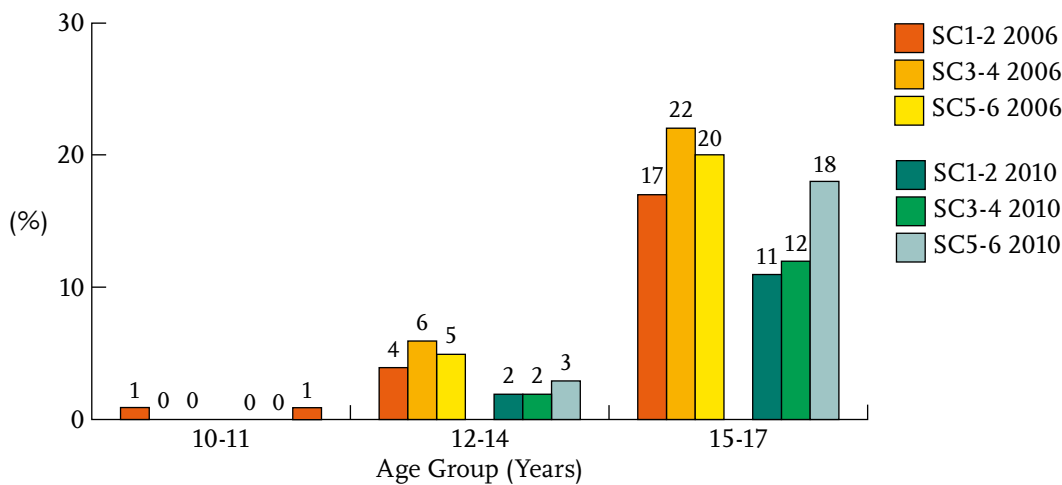
## Cannabis in the last 12 months

Overall, 8% of children report using cannabis in the last 12 months, with statistically significant gender and age group differences. More boys than girls report using cannabis in the last 12 months (10% vs. 6%). Additionally, older children are more likely to report cannabis use in the last 12 months: 1% of 10-11 year olds vs. 17% of 15-17 year olds. There are no statistically significant differences across social class groups. Overall, there is a decrease in the proportion of children who report using cannabis in the last 12 months from 2006 (16% in 2006).

**Figure 23: Percentages of boys reporting cannabis use in the last 12 months**



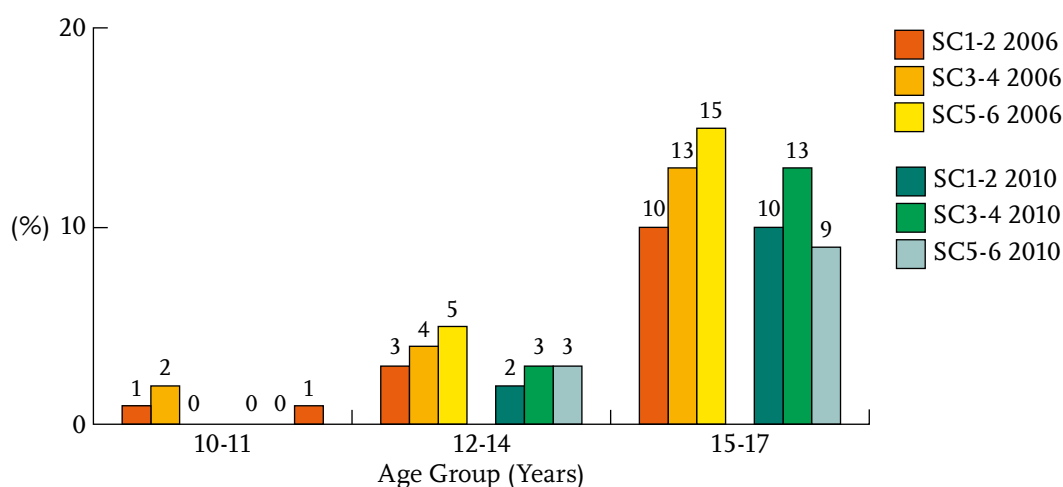
**Figure 24: Percentages of girls reporting cannabis use in the last 12 months**



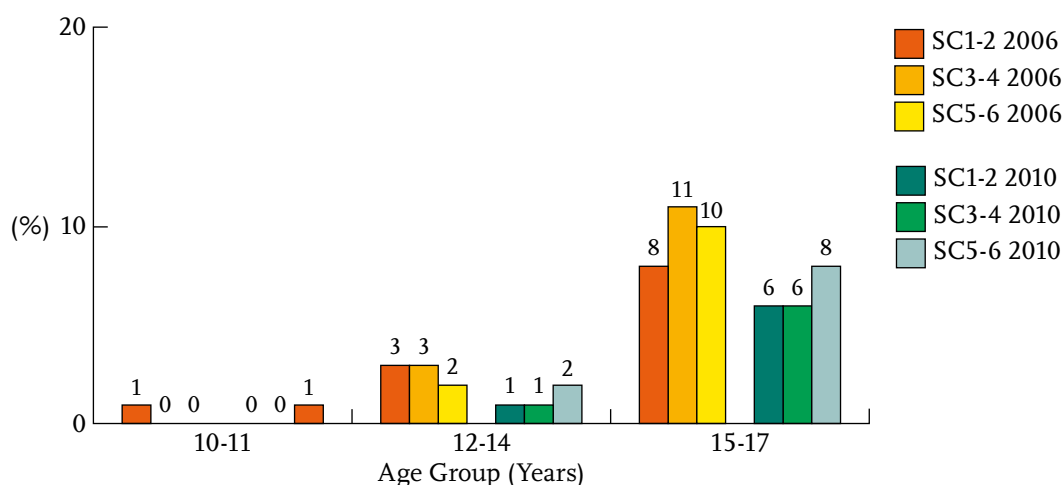
### Cannabis use in the last 30 days

Children were asked to report on using cannabis in the last 30 days. Overall, 5% of children aged 10-17 report using cannabis in the last 30 days. There are statistically significant gender and age group differences. More boys (7%) than girls (3%) and older children compared to younger children are more likely to report using cannabis in the last 30 days. There are no statistically significant differences across social class groups. Overall, there is a decrease in the proportion of children who report cannabis use in the last 30 days from 2006 (7% in 2006).

**Figure 25: Percentages of boys reporting cannabis use in the last 30 days**



**Figure 26: Percentages of girls reporting cannabis use in the last 30 days**



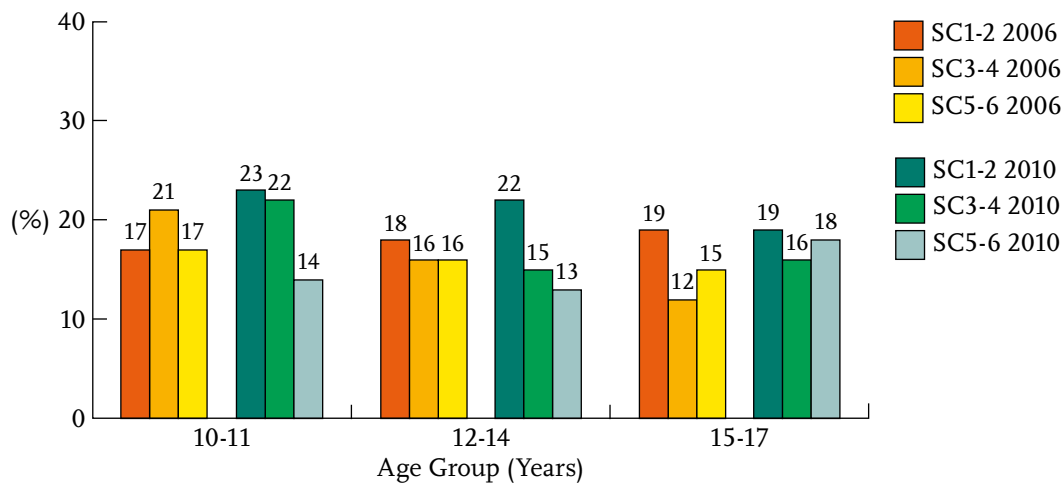


# Food and Dietary Behaviour

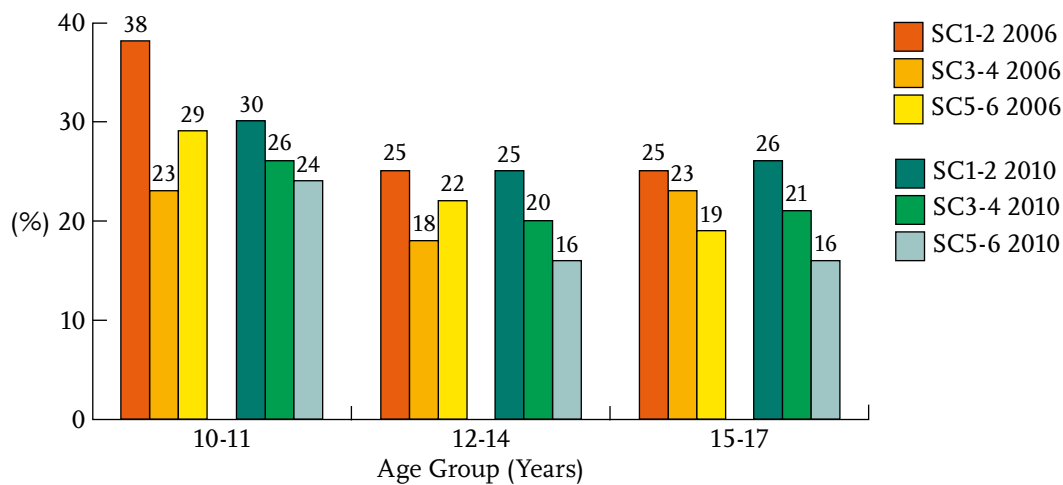
## Fruit

Overall, 20% of children report that they consume fruit more than once a day. There are statistically significant differences by gender, age group and social class. A higher proportion of girls report eating fruit more than once a day compared to boys (22% and 18% respectively). Younger children (24% of 10-11; 20% of 12-14; 19% of 15-17) and those from higher social classes are more likely to report eating fruit more than once a day compared to older children and those from other social classes, respectively. The proportion of children who report eating fruit more than once a day remains stable from 2006 (19% in 2006).

**Figure 27: Percentages of boys who report eating fruit more than once a day**



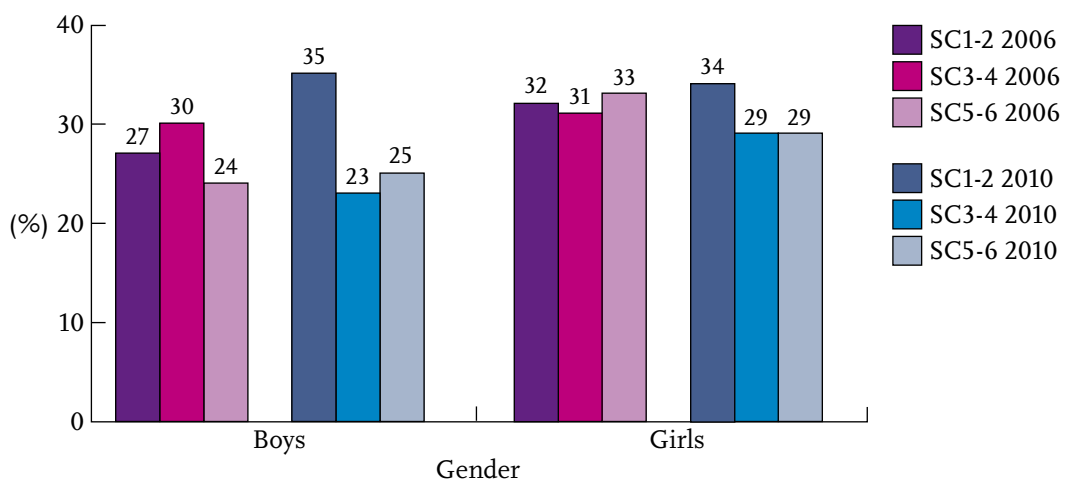
**Figure 28: Percentages of girls who report eating fruit more than once a day**



## Fruit – Middle Childhood Study

Overall, 30% of 3<sup>rd</sup> and 4<sup>th</sup> class children report that they eat fruit more than once a day. There are no gender differences but there are statistically significant differences across social class groups. The proportion of children that report eating fruit more than once a day remains unchanged from 2006 (30% in 2006).

**Figure 29: Percentages of 9 year old boys and girls who report eating fruit more than once a day**



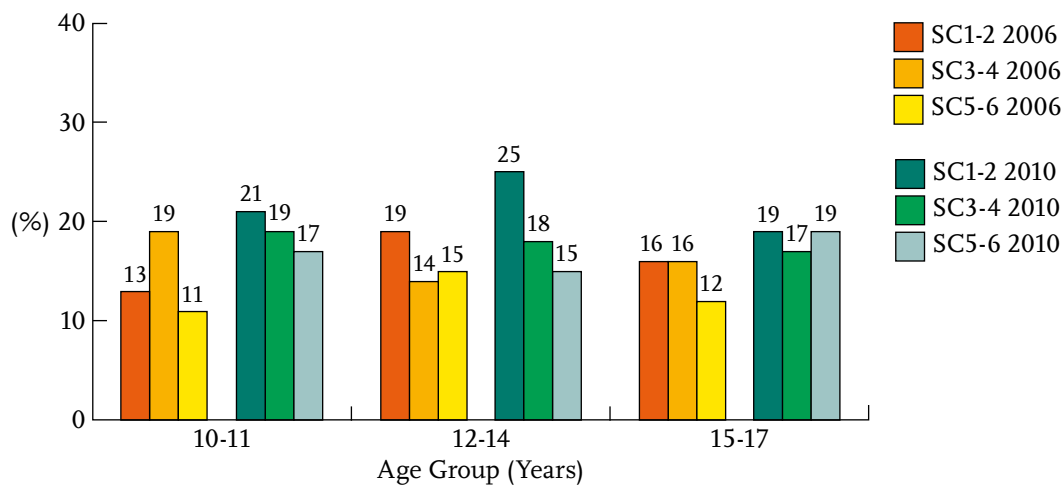


# Food and Dietary Behaviour

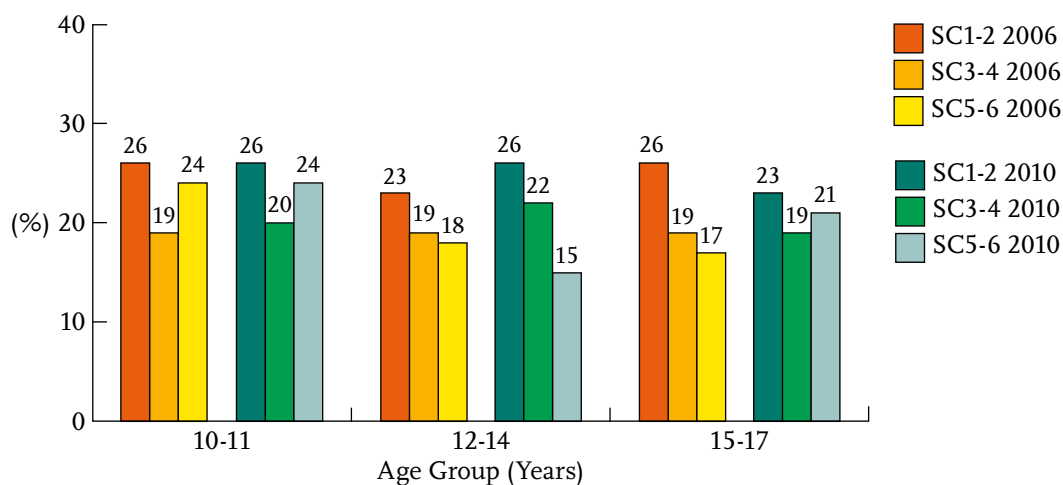
## Vegetables

Overall, 20% of children report eating vegetables more than once a day. Statistically significant gender differences are evident with fewer boys (19%) than girls (22%) reporting eating vegetables more than once a day. There are also statistically significant differences across age and social class groups with younger children and those from higher social classes more likely to report eating vegetables more than once a day than older children and those from other social class groups, respectively. There is an increase in the proportion of children that report eating vegetables more than once a day from 2006 (18% in 2006).

**Figure 30: Percentages of boys who report eating vegetables more than once a day**



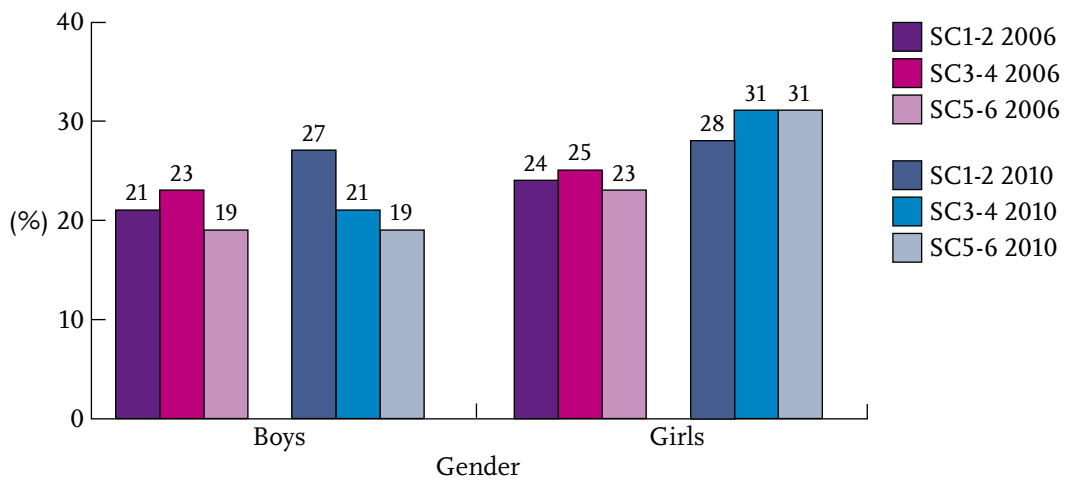
**Figure 31: Percentages of girls who report eating vegetables more than once a day**



## Vegetables – Middle Childhood Study

Overall, 26% of children in 3<sup>rd</sup> and 4<sup>th</sup> class report eating vegetables more than once a day. Gender differences are statistically significant, with girls more likely to report eating vegetables more than once a day than boys (29% and 23% respectively). There are no significant social class differences. There is an increase in the proportion of children who report eating vegetables more than once a day from 2006 (21% in 2006).

**Figure 32: Percentages of 9 year old boys and girls who report eating vegetables more than once a day**

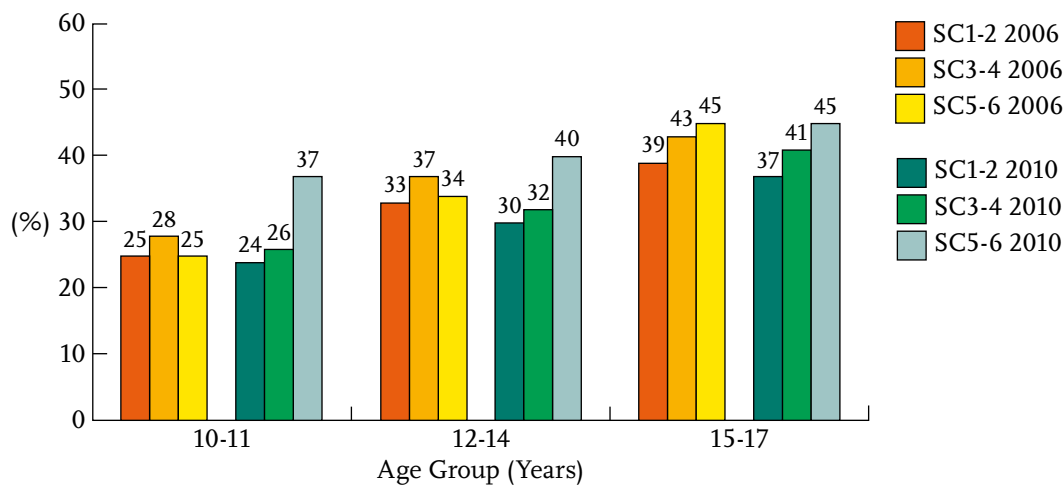


# Food and Dietary Behaviour

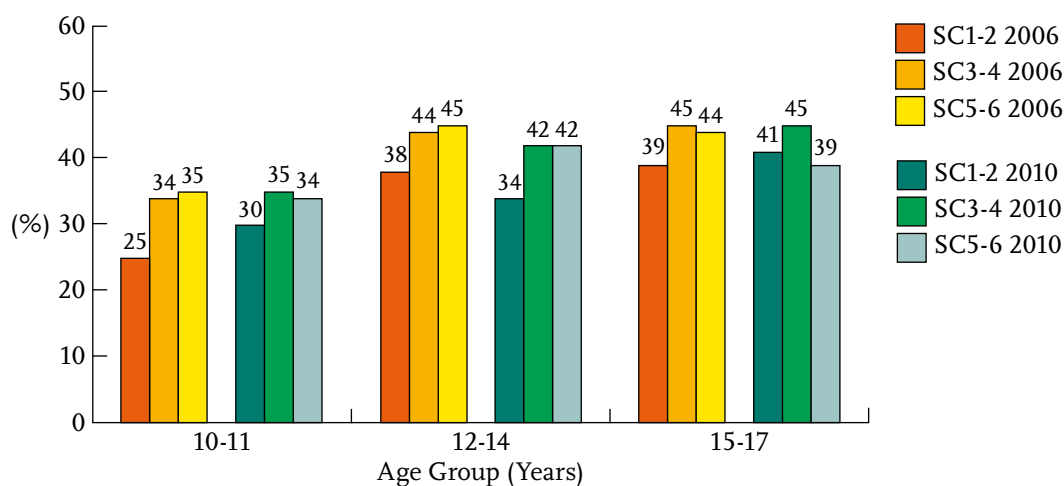
## Sweets

Children were asked to report on frequency of consuming sweets. Overall, 37% of children report eating sweets once a day or more. There are statistically significant differences by gender, age group and social class. Overall, 39% of girls report eating sweets once a day or more compared to 34% of boys. Older children and children from lower social class groups are significantly more likely to report eating sweets once a day or more compared to younger children and those from other social class groups, respectively. There is an overall decrease in the proportion of children who report eating sweets once a day or more from 2006 (39% in 2006).

**Figure 33: Percentages of boys who report eating sweets daily or more**



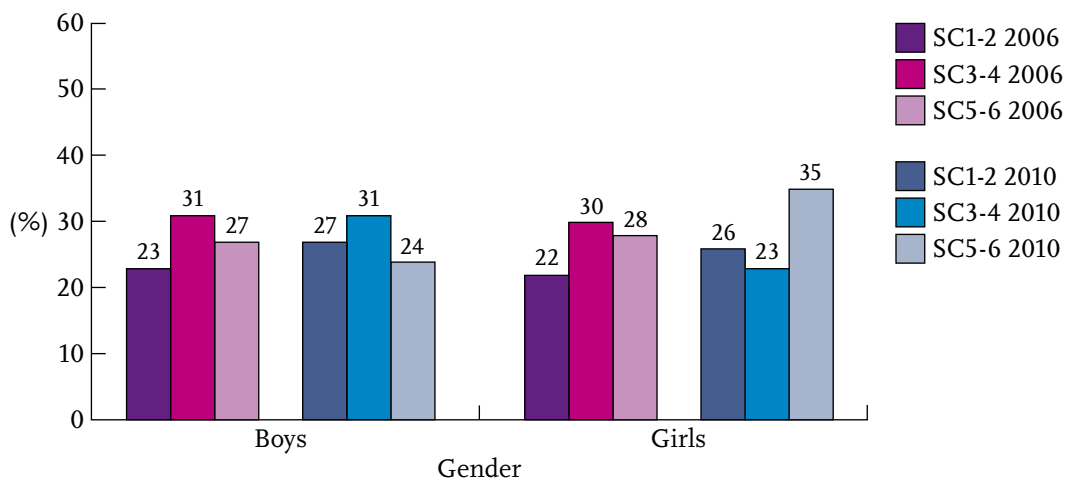
**Figure 34: Percentages of girls who report eating sweets daily or more**



## Sweets – Middle Childhood Study

Overall, 28% of 3<sup>rd</sup> and 4<sup>th</sup> class children report eating sweets once a day or more. There are no statistically significant differences by gender or social class. The proportion that report eating sweets once a day or more remains unchanged from 2006 (28% in 2006).

**Figure 35: Percentages of 9 year old boys and girls who report eating sweets daily or more**

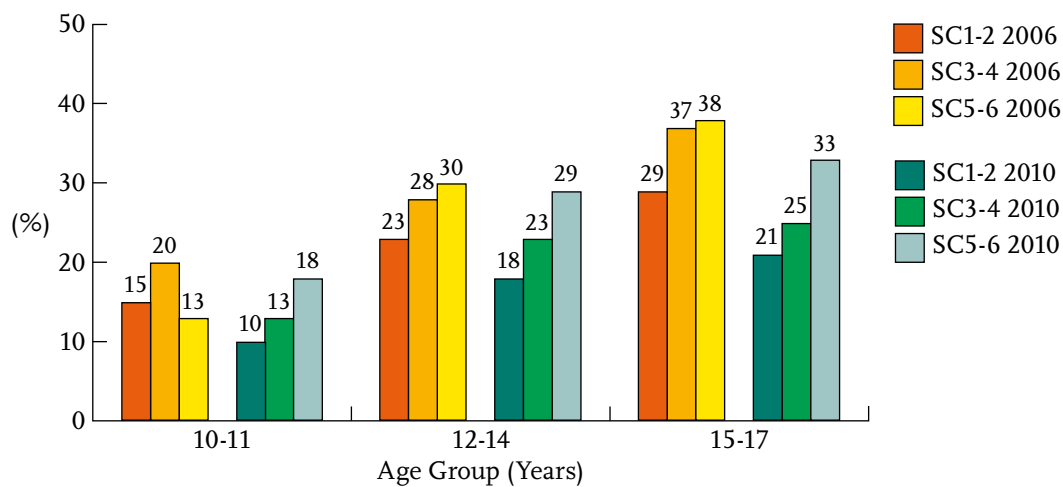


# Food and Dietary Behaviour

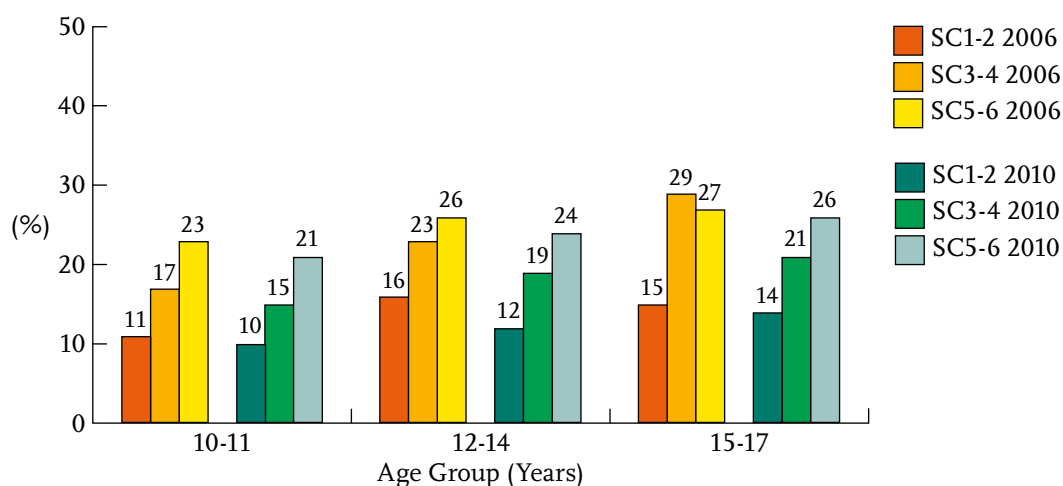
## Soft Drinks

Overall, 21% of children report drinking soft drinks daily or more. There are statistically significant differences by gender, age group and social class. Overall, 23% of boys report drinking soft drinks daily or more compared to 19% of girls. Older children and those from lower social class groups are also significantly more likely to report drinking soft drinks daily or more. There is an overall decrease in the proportion of children who report drinking soft drinks daily or more from 2006 (26% in 2006).

**Figure 36: Percentages of boys who report drinking soft drinks daily or more**



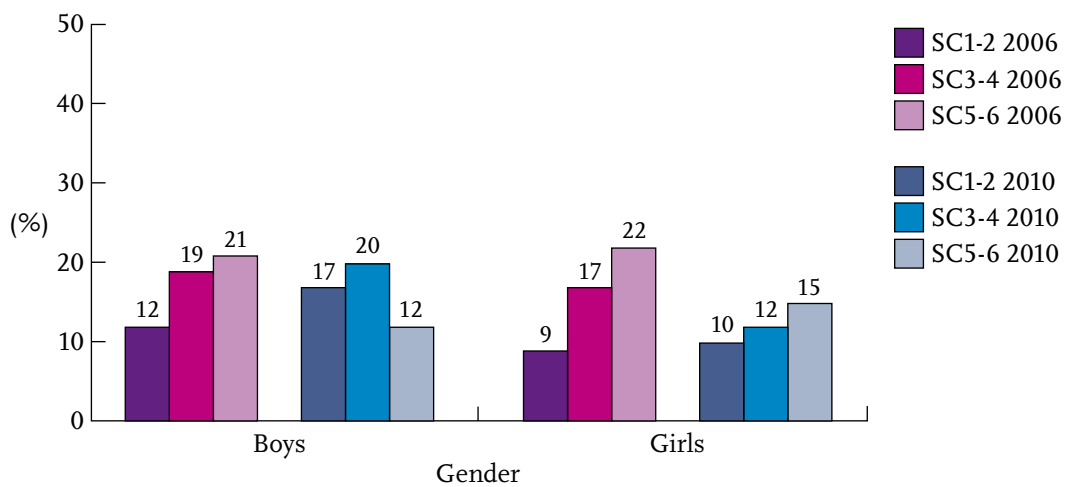
**Figure 37: Percentages of girls who report drinking soft drinks daily or more**



## Soft drinks – Middle Childhood Study

Overall, 15% of 3<sup>rd</sup> and 4<sup>th</sup> class children report drinking soft drinks daily or more. Boys (18%) are significantly more likely than girls (13%) to report drinking soft drinks daily or more. There are no statistically significant differences across social class groups. Overall, there is a decrease in the proportion of 3<sup>rd</sup> and 4<sup>th</sup> class children who report drinking soft drinks daily or more from 2006 (18% in 2006).

**Figure 38: Percentages of 9 year old boys and girls who report drinking soft drinks daily or more**

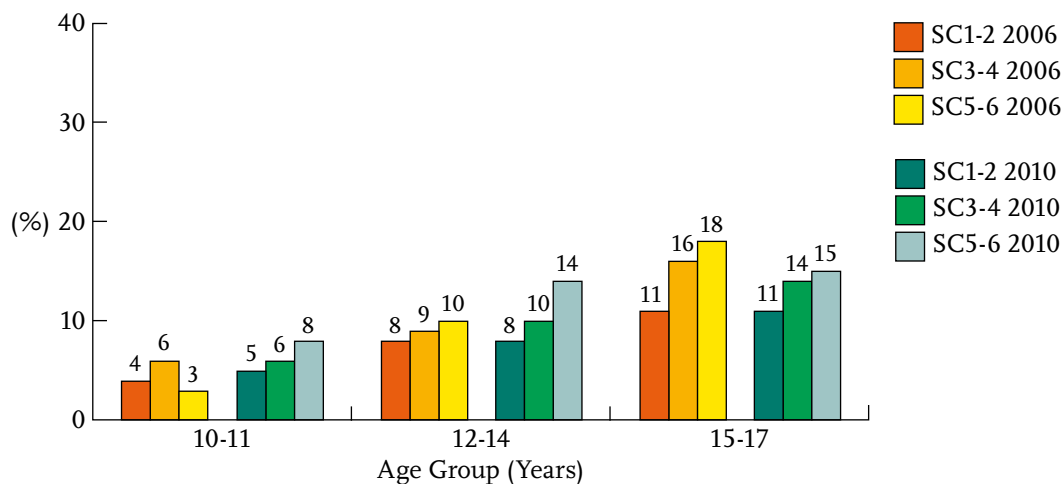


# Food and Dietary Behaviour

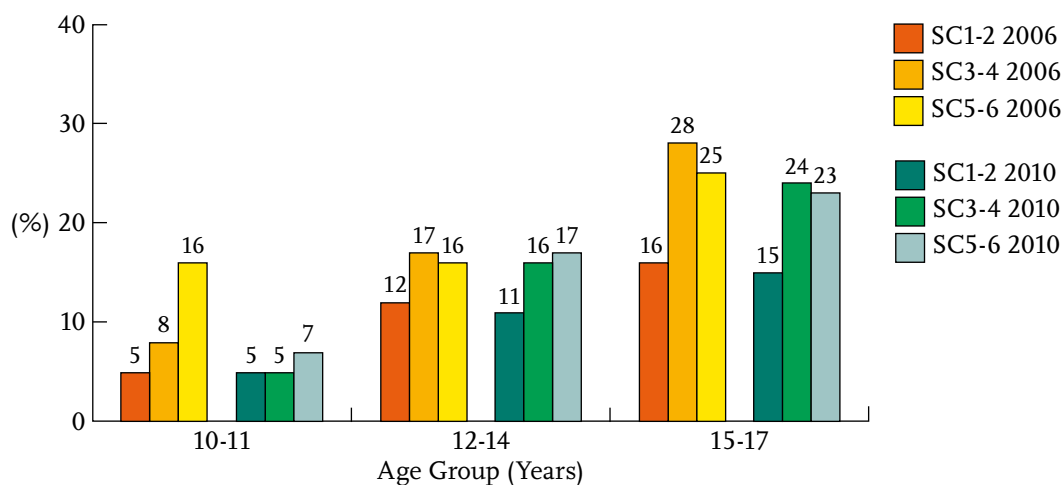
## Not having breakfast

Overall, 13% of children aged 10-17 report that they never have breakfast during weekdays. There are statistically significant differences by gender, age group and social class. Overall, 15% of girls report that they never have breakfast during weekdays compared to 11% of boys. Older children and those from lower social class groups are significantly more likely to report that they never have breakfast during weekdays compared to younger children and children from other social class groups, respectively. Overall, the proportion of children who report that they never have breakfast during weekdays remains stable from 2006 (14% in 2006).

**Figure 39: Percentages of boys who report not having breakfast on weekdays**



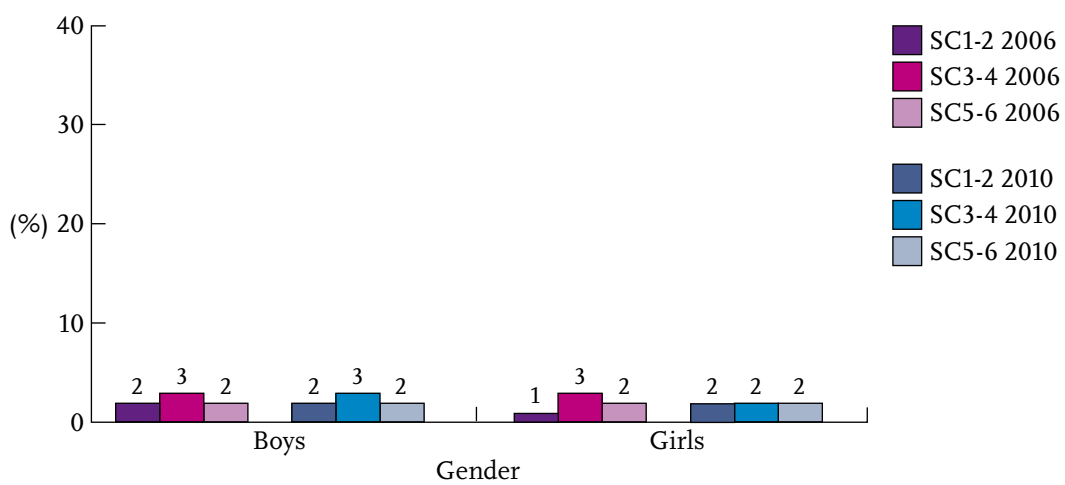
**Figure 40: Percentages of girls who report not having breakfast on weekdays**



## Not having breakfast – Middle Childhood Study

Overall, 2% of 3rd and 4th class children report not having breakfast on any day of the week. There are no statistically significant differences by gender or social class. The proportion of children who report not having breakfast on any day of the week remains unchanged from 2006 (2% in 2006).

**Figure 41: Percentages of 9 year old boys and girls who report not having breakfast during the week or the weekend**



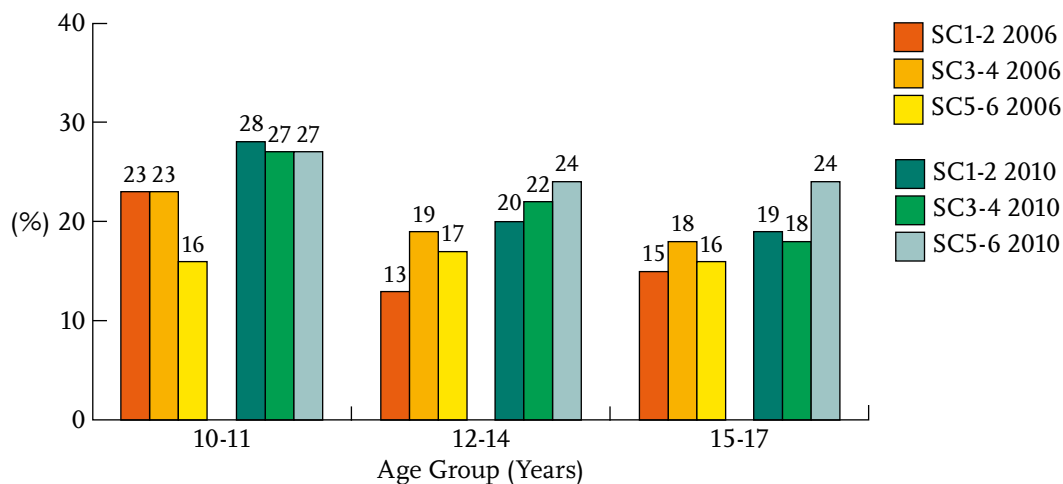


# Food and Dietary Behaviour

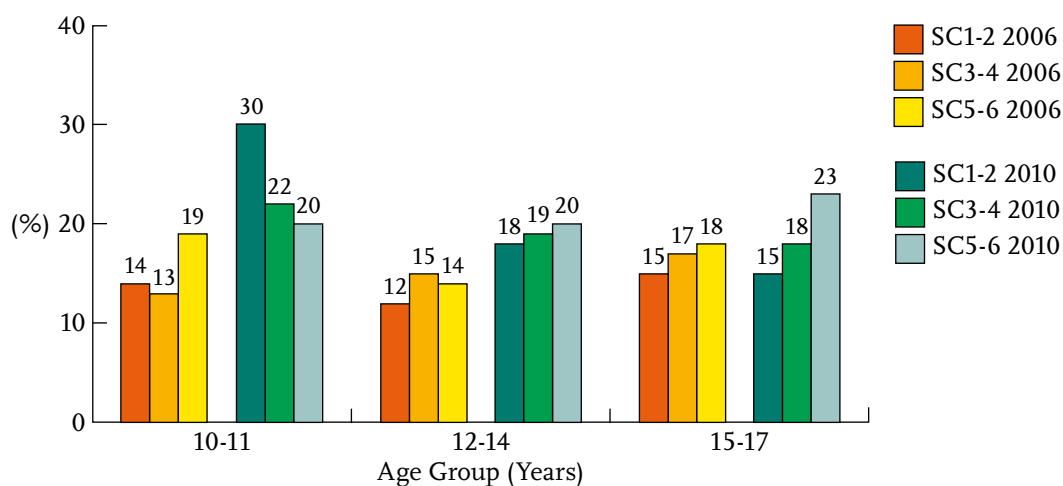
## Going to school/bed hungry

Children were asked to report how often they go to school or to bed hungry because there was not enough food at home. Overall, 21% of children report ever going to school or to bed hungry. There are statistically significant differences by gender, age group and social class. Overall, 22% of boys report ever going to school or bed hungry compared to 19% of girls. Younger children and children from lower social class groups are significantly more likely to report ever going to school or to bed hungry than older children and those from other social class groups, respectively. There is an overall increase in the proportion of children who report ever going to school or bed hungry from 2006 (17% in 2006).

**Figure 42: Percentages of boys who report ever going to school/bed hungry**



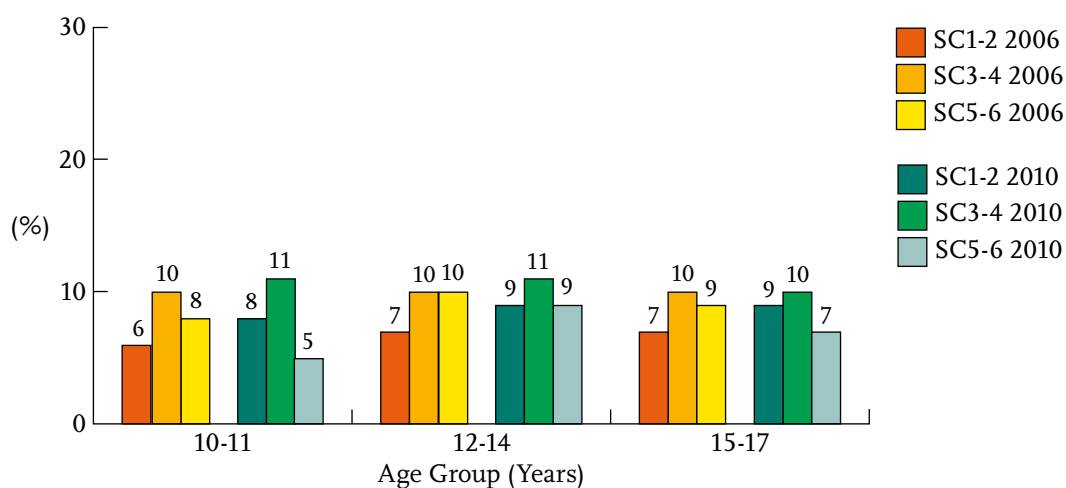
**Figure 43: Percentages of girls who report ever going to school/bed hungry**



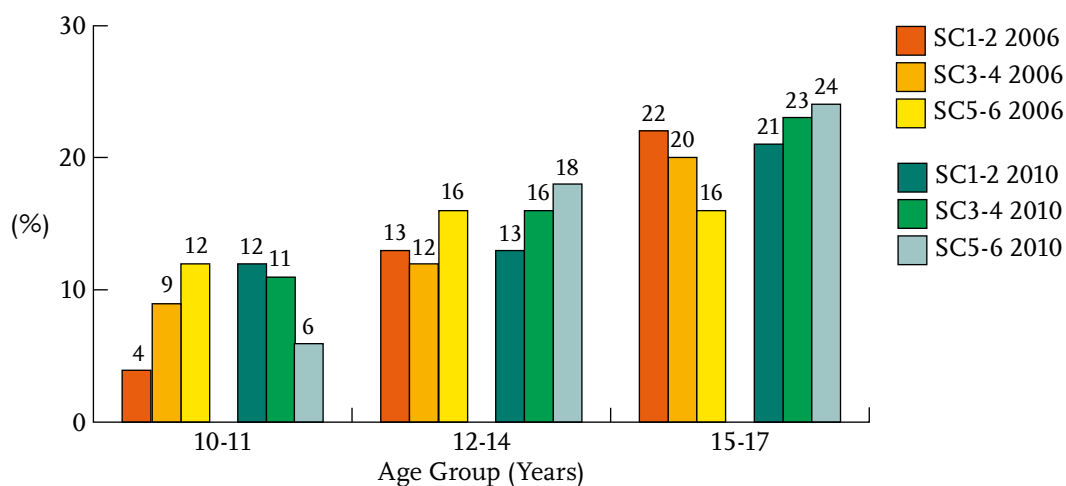
## Dieting

Children were asked if they were currently trying to lose weight or if they needed to lose weight (but were not currently on such a diet). Overall, 13% report trying to lose weight and an additional 19% report that they needed to lose weight. There are statistically significant differences by gender and age group. Overall, 17% of girls report trying to lose weight compared to 10% of boys, and older children are more likely to report trying to lose weight compared to younger children. There are no statistically significant differences across social class groups. Overall, the proportion of children who report currently trying to lose weight remains stable from 2006 (12% in 2006).

**Figure 44: Percentages of boys who report currently trying to lose weight**



**Figure 45: Percentages of girls who report currently trying to lose weight**





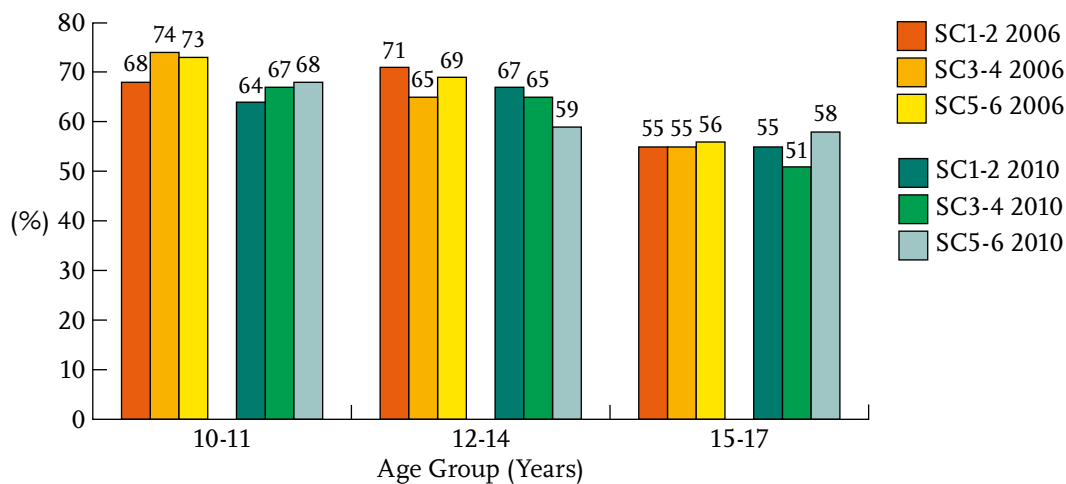
# Exercise and Physical Activity

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.

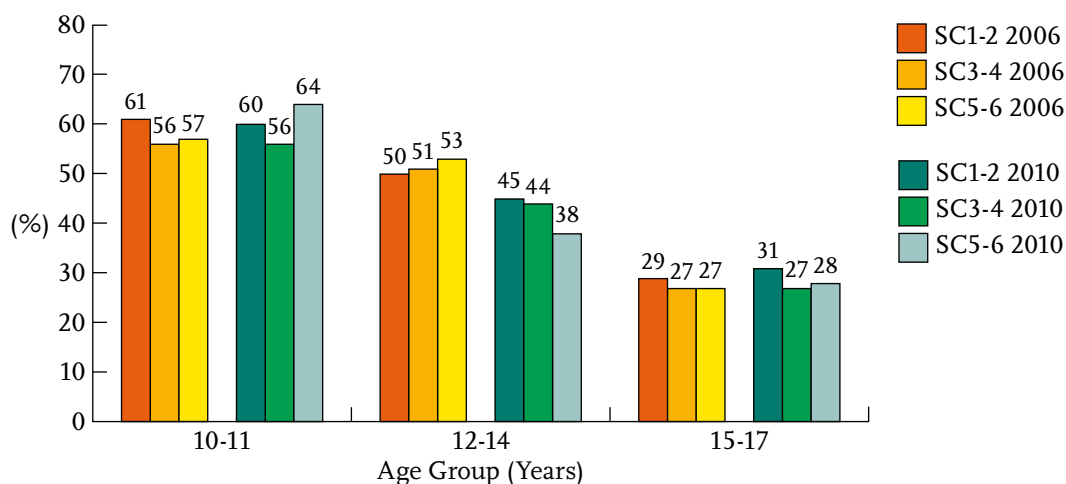
## Vigorous exercise $\geq$ 4 times/week

Overall, 51% of children report exercising four or more times a week. There are statistically significant differences by gender and age group. Overall, 60% of boys report exercising four or more times a week compared to 40% of girls. Younger children are significantly more likely to report exercising four or more times a week compared to older children (62% of 10-11; 54% of 12-14; 41% of 15-17). There are no statistically significant differences across social class groups. Overall, the proportion of children who report exercising four or more times a week remains stable from 2006 (53% in 2006).

**Figure 46: Percentages of boys who report participating in vigorous exercise four or more times per week**



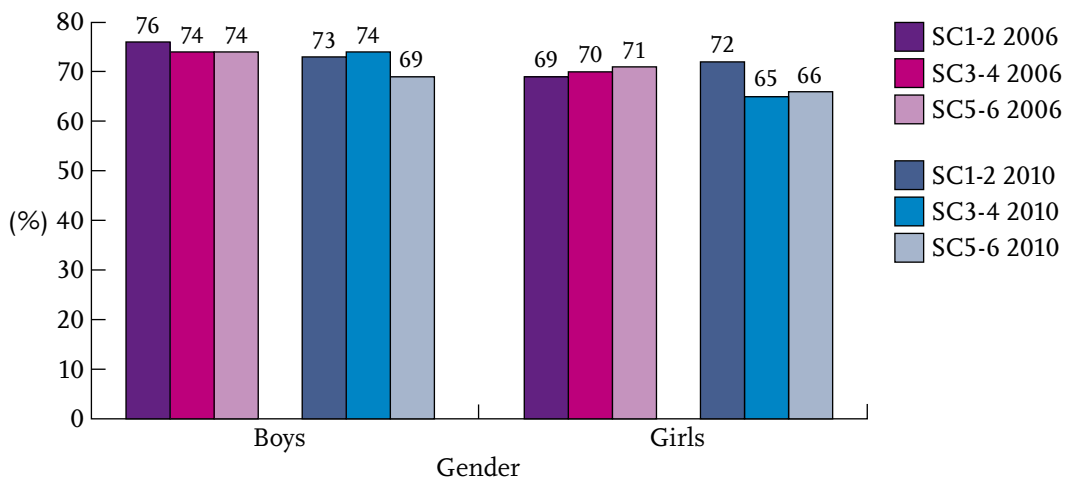
**Figure 47: Percentages of girls who report participating in vigorous exercise four or more times per week**



### Vigorous exercise $\geq$ 4 times/week – Middle Childhood Study

Overall, 70% of 3<sup>rd</sup> and 4<sup>th</sup> class children report exercising four or more times a week, with statistically significant gender differences (72% of boys and 67% of girls). There are no statistically significant differences across social class groups. The proportion of children who report exercising four or more times a week remains stable from 2006 (72% in 2006).

**Figure 48: Percentages of 9 year old boys and girls who report participating in vigorous exercise four or more times per week**

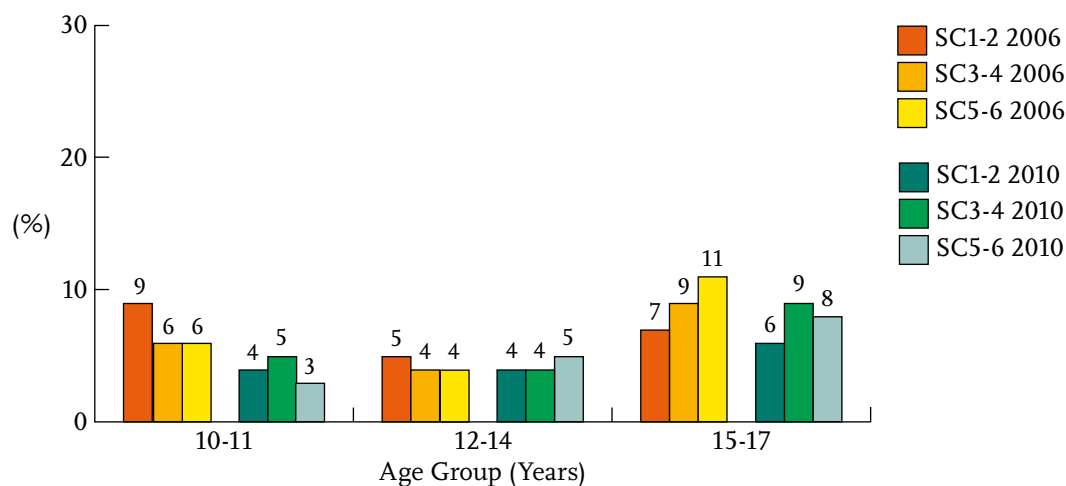


# Exercise and Physical Activity

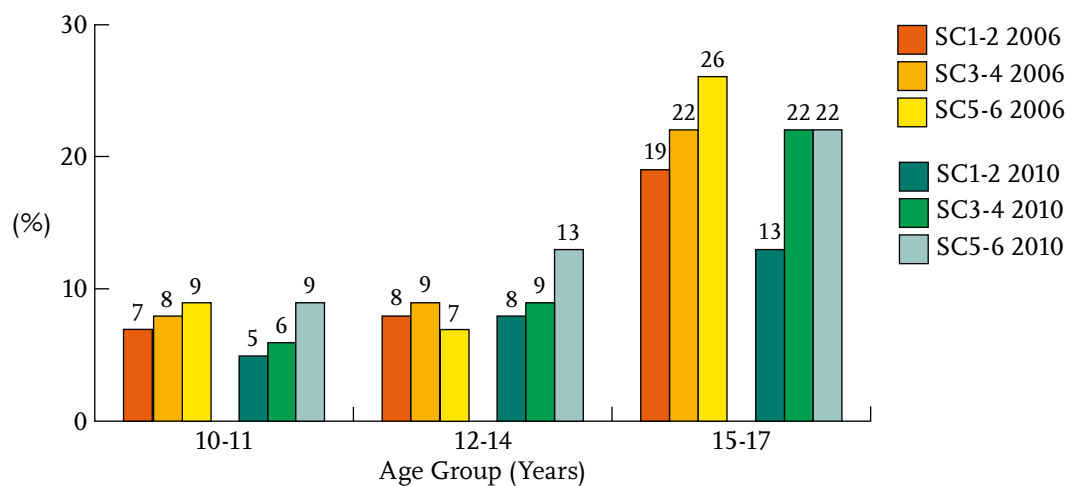
## Physical inactivity

Overall, 9% of children report participating in vigorous exercise less than weekly. There are statistically significant differences by gender, age group and social class. Overall 6% of boys report participating in vigorous exercise less than weekly compared to 13% of girls. Older children and children from lower social class groups are more likely to report participating in vigorous exercise less than weekly compared to younger children and those from other social class groups, respectively. The proportion of children who report being inactive remains stable from 2006 (10% in 2006).

**Figure 49: Percentages of boys who report participating in vigorous exercise less than weekly**



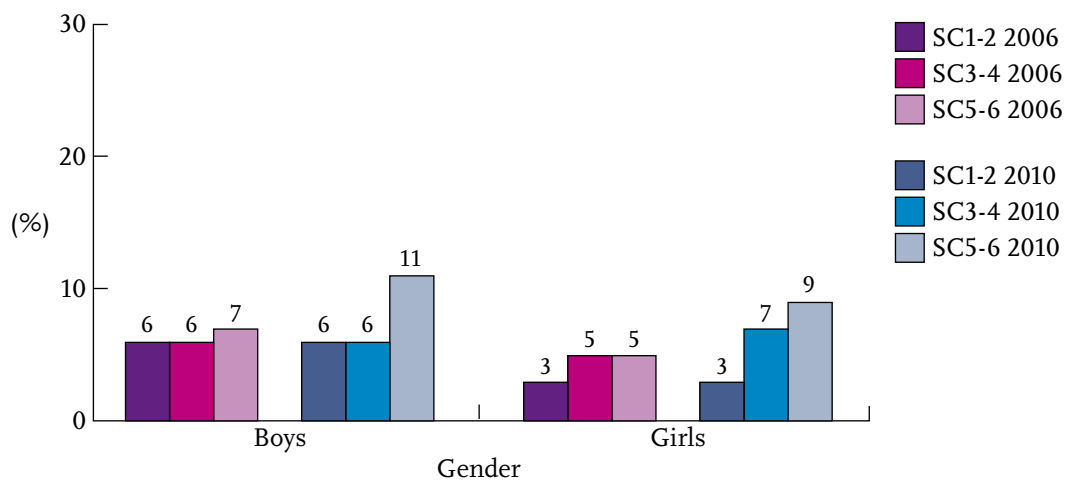
**Figure 50: Percentages of girls who report participating in vigorous exercise less than weekly**



## Physical inactivity - Middle Childhood Study

Overall, 7% of 3<sup>rd</sup> and 4<sup>th</sup> class children report participating in vigorous exercise less than weekly with no statistically significant gender differences. Children from lower social class groups are significantly more likely to report inactivity than those from other social class groups. The proportion of children who report inactivity remains stable from 2006 (8% in 2006).

**Figure 51: Percentages of 9 year old boys and girls who report participating in vigorous exercise less than weekly**

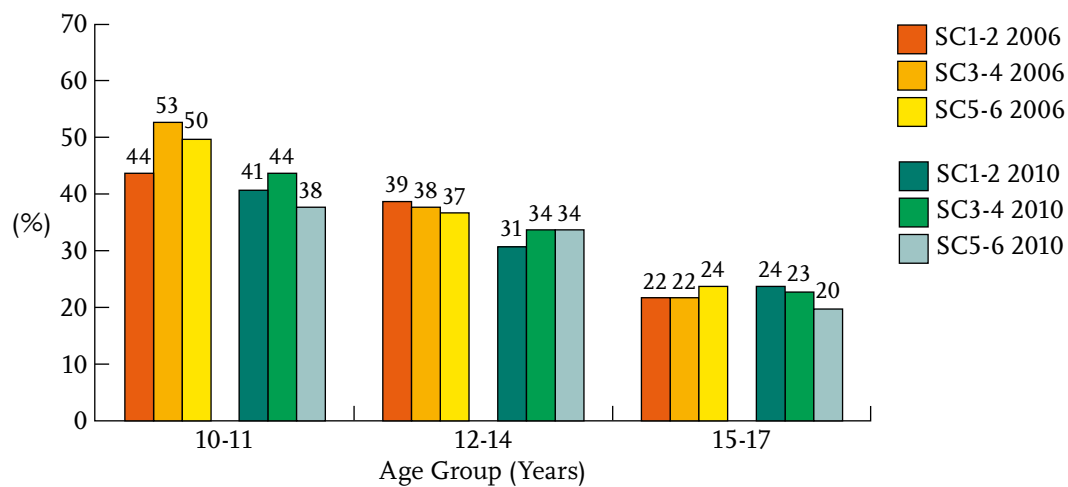


# Exercise and Physical Activity

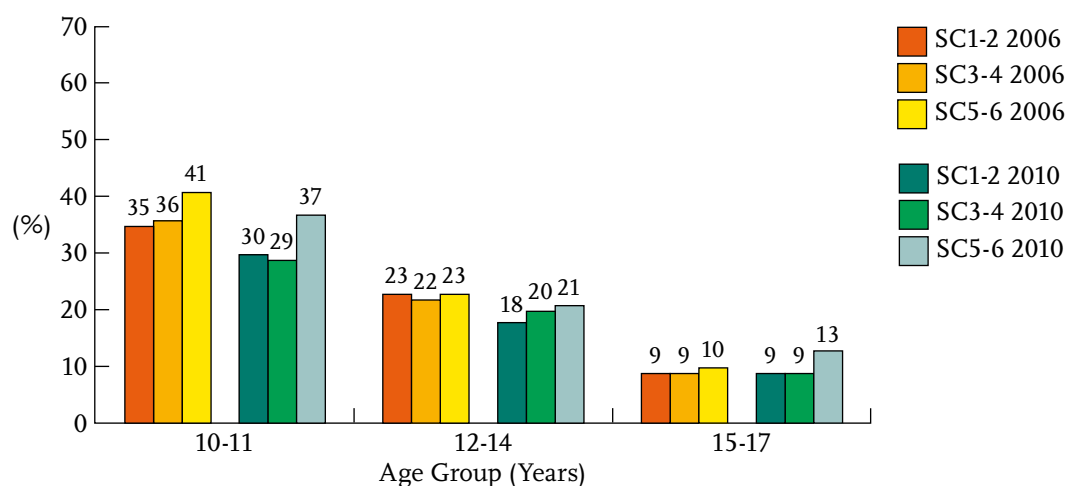
## Physically active on 7 days in the last week

Overall, 25% of children report being physically active on 7 days in the last week. There are statistically significant differences by gender, age group and social class. Overall, 31% of boys report being physically active on 7 days in the last week compared to 18% of girls. Younger children are more likely to report being physically active on seven days in the last week compared to older children. Overall, the proportion of children who report being physically active on 7 days in the last week remains stable from 2006 (27% in 2006).

**Figure 52: Percentages of boys who report being physically active on 7 days in the last week**



**Figure 53: Percentages of girls who report being physically active on 7 days in the last week**







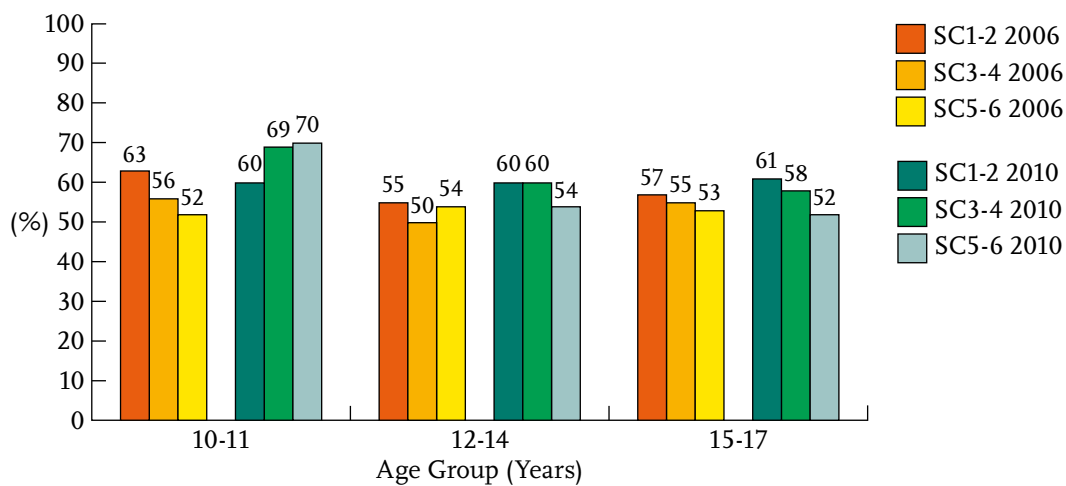


# Self-care

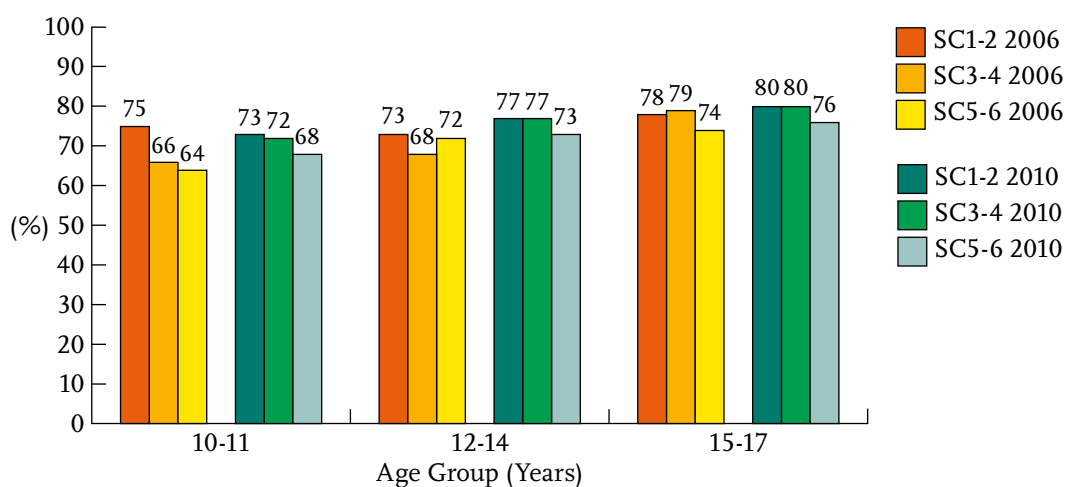
## Tooth-brushing

Children were asked to report how often they brush their teeth. Overall, 67% of children report brushing their teeth more than once a day, with a further 27% brushing their teeth once a day. There are statistically significant differences by gender and social class. Overall, 77% of girls compared to 59% of boys, and children in higher social class groups compared to other social class groups, are more likely to report brushing their teeth more than once a day. There are no statistically significant differences across age groups. The proportion of children who report brushing their teeth more than once a day remains stable from 2006 (63% in 2006).

**Figure 54: Percentages of boys who report brushing their teeth more than once a day**



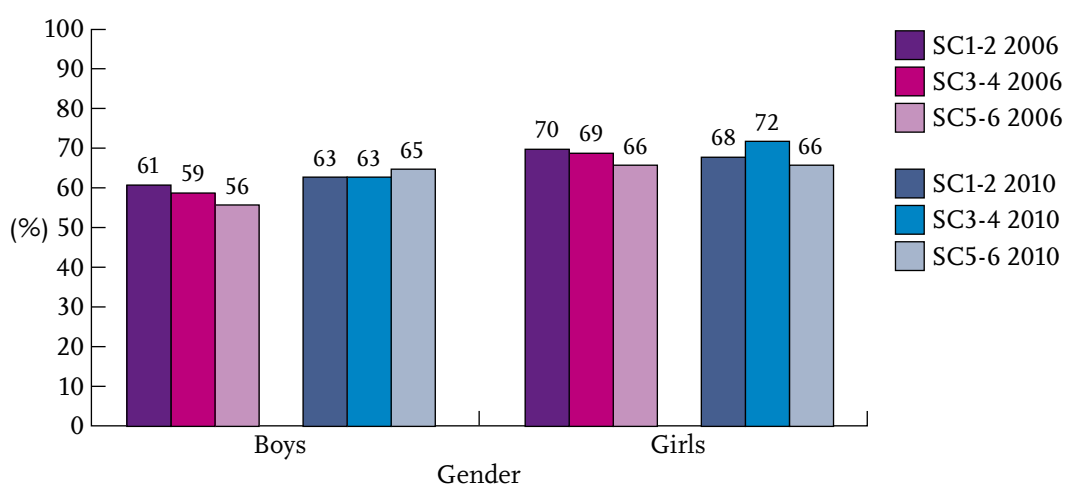
**Figure 55: Percentages of girls who report brushing their teeth more than once a day**



## Tooth-brushing – Middle Childhood Study

Overall, 66% of 3<sup>rd</sup> and 4<sup>th</sup> class children report brushing their teeth more than once a day. There are statistically significant differences by gender with 69% of girls compared to 63% of boys who report that they brush their teeth more than once a day. There are no statistically significant differences across social class groups. The proportion of children who report brushing their teeth more than once a day remains stable from 2006 (64% in 2006).

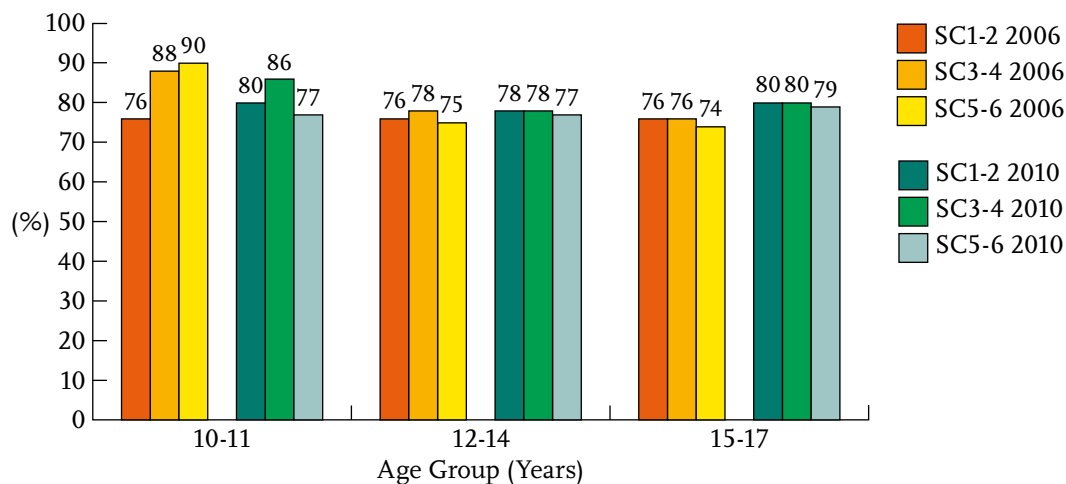
**Figure 56: Percentages of 9 year old boys and girls who report brushing their teeth more than once a day**



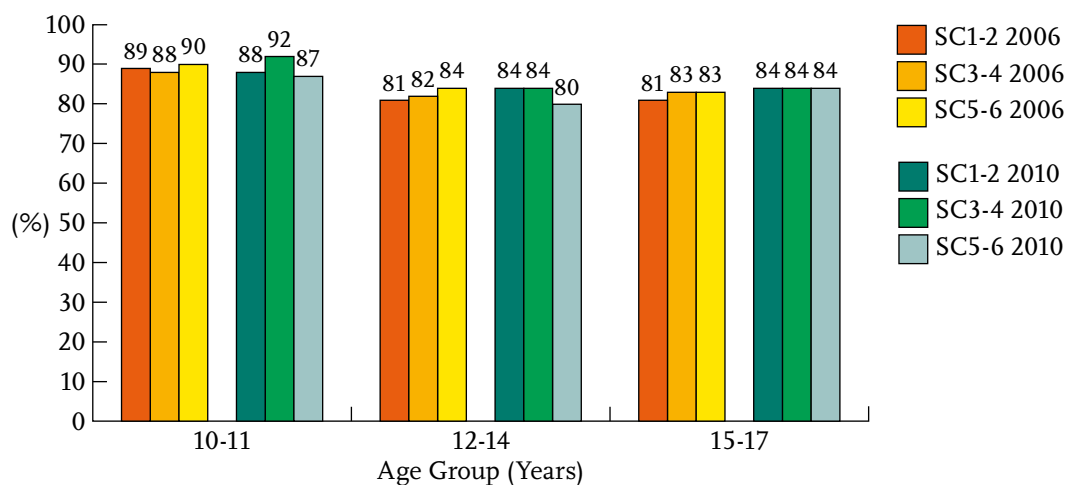
## Seatbelt use

Children were asked to report how often they use a seatbelt when in a car. Overall, 81% of children report always wearing a seatbelt when in a car. There are statistically significant differences by gender and age group. Overall, 84% of girls compared to 79% of boys report always wearing a seatbelt when in a car and younger children are more likely to report this behaviour compared to older children. There are no statistically significant differences across social class groups. Overall, the proportion of children who report always wearing a seatbelt when in a car remains stable from 2006 (79% in 2006).

**Figure 57: Percentages of boys who report always wearing a seatbelt**



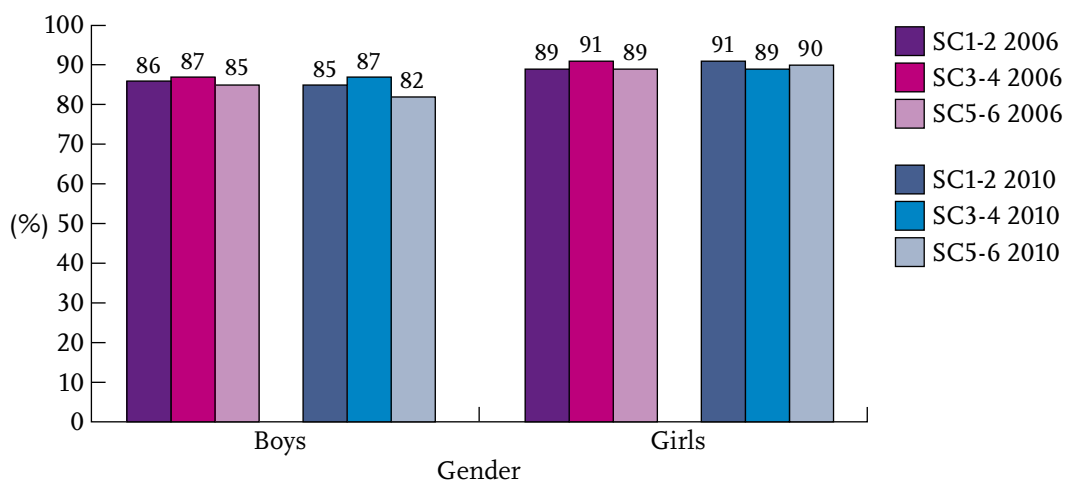
**Figure 58: Percentages of girls who report always wearing a seatbelt**



## Seatbelt use – Middle Childhood Study

Overall, 87% of 3<sup>rd</sup> and 4<sup>th</sup> class children report always wearing a seatbelt when in a car. There are statistically significant differences by gender with 90% of girls compared to 85% of boys who report always wearing a seatbelt when in a car. There are no statistically significant differences across social class groups. Overall, the proportion of children who report always wearing a seatbelt when in a car remains stable from 2006 (88% in 2006).

**Figure 59: Percentages of 9 year old boys and girls who report always wearing a seatbelt**



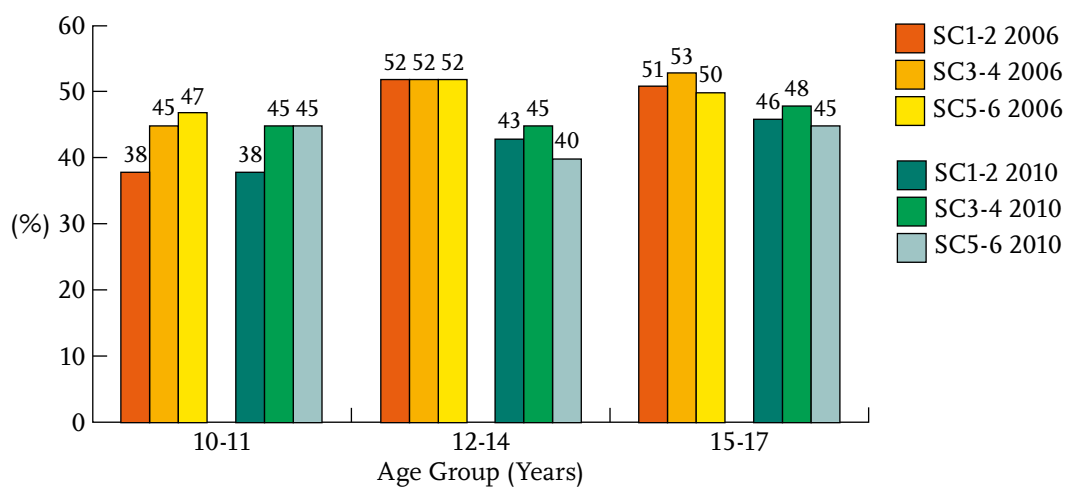


# Injuries

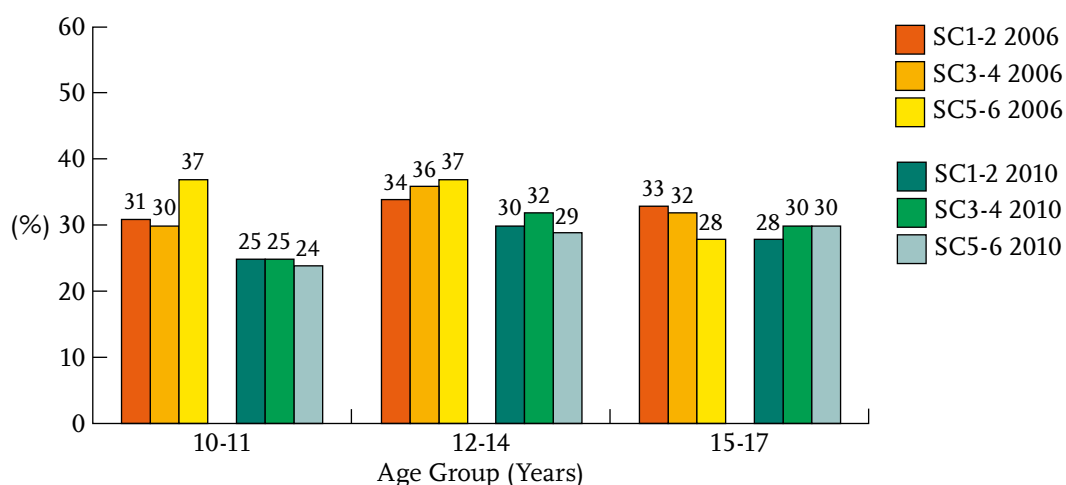
## Ever injured

Overall, 37% of children report being injured once or more in the last 12 months, and requiring medical attention. There are statistically significant differences by gender and age group. Overall, boys and older children, compared to girls and younger children respectively, are more likely to report ever being injured. There are no statistically significant differences across social class groups. There is an overall decrease in the proportion of children who report being injured from 2006 (43% in 2006).

**Figure 60: Percentages of boys who report ever being injured in the last 12 months**



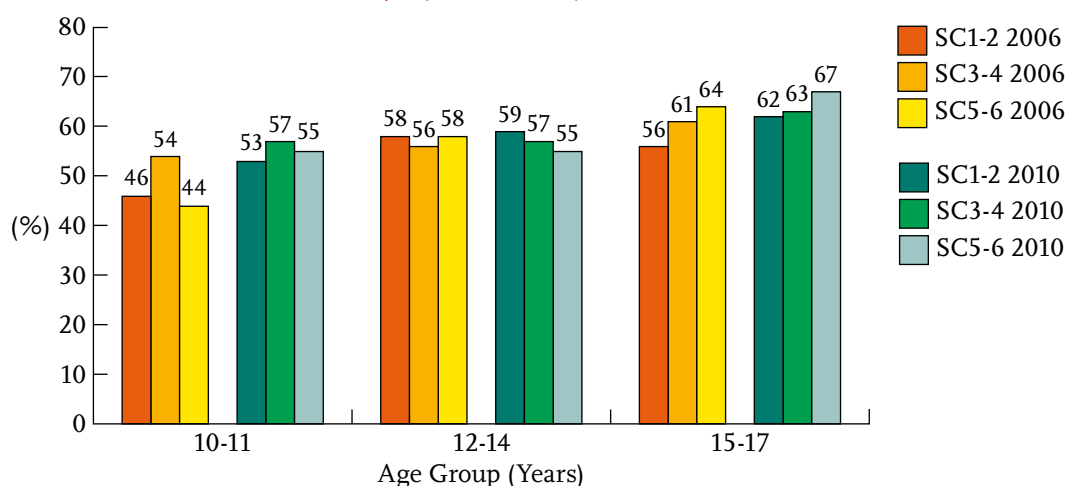
**Figure 61: Percentages of girls who report ever being injured in the last 12 months**



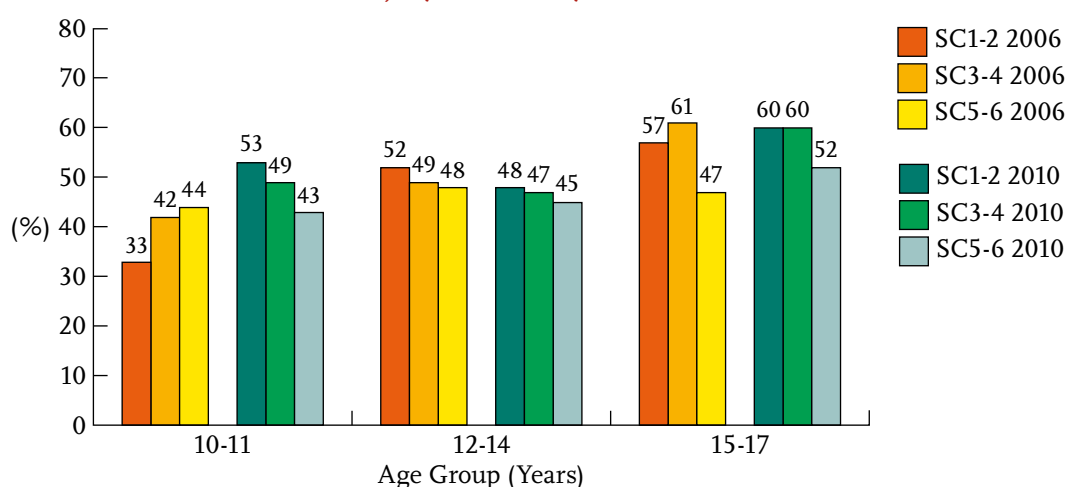
## Loss of activity due to injury

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. Of those reporting an injury, 57% report that they missed 3 or more days of usual activity due to injury. There are statistically significant differences by gender and age group. Overall, 58% of boys compared to 50% of girls report that they missed 3 or more days of activity due to injury and older children are significantly more likely to report missing 3 or more days compared to younger children. There are no statistically significant differences across social class groups. The proportion of children who lost 3 or more days of activity due to injury remains stable from 2006 (56%).

**Figure 62: Percentages of boys who report that they have missed 3 or more days of usual activities due to injury in the last year**



**Figure 63: Percentages of girls who report that they have missed 3 or more days of usual activities due to injury in the last year**



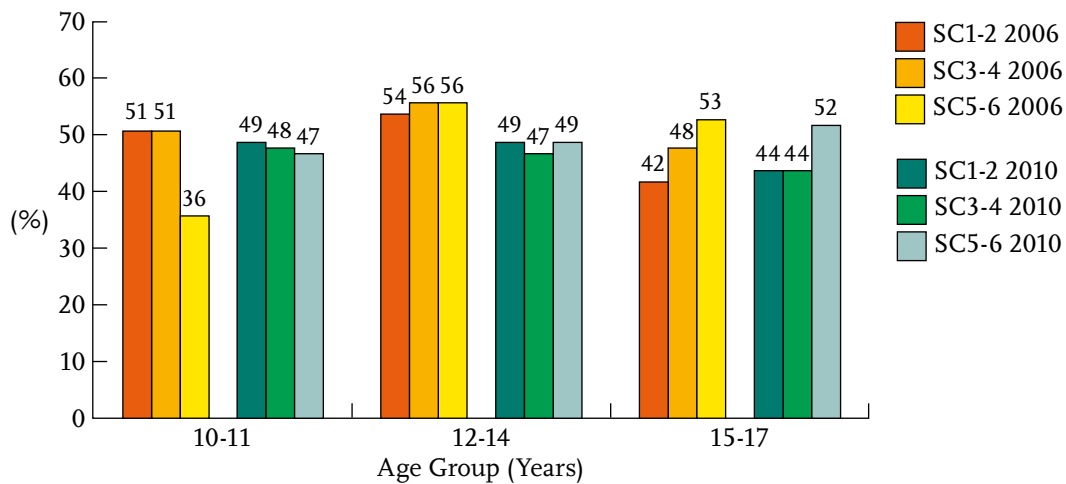


# Physical Fighting and Bullying

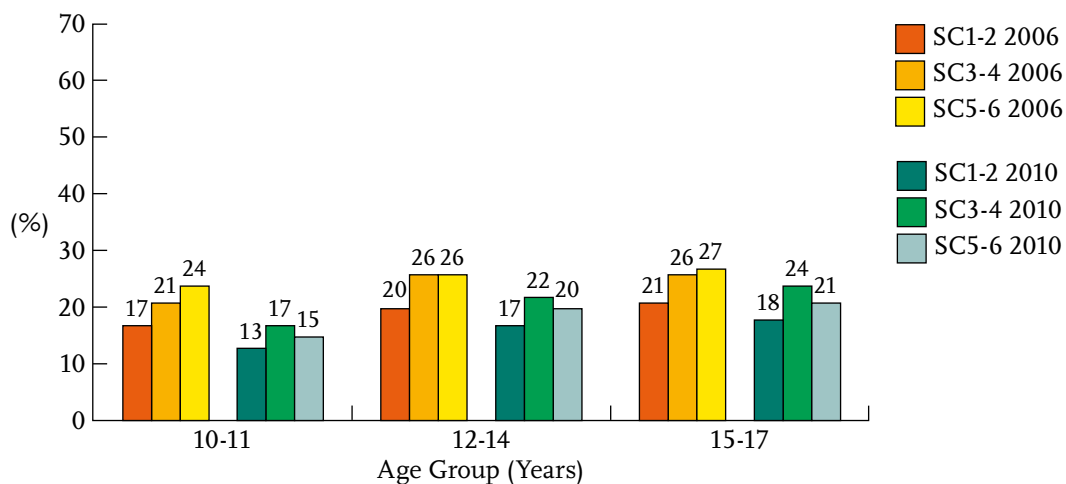
## Physical fight

Children were asked if they had been in a physical fight in the last 12 months. Overall, 35% of children report having been in a physical fight during the last 12 months. Gender and social class differences are statistically significant. Overall, boys (48%) compared to girls (20%), and children from lower social classes compared to other social class groups, are significantly more likely to report fighting. There are no statistically significant differences across age groups. Overall, the proportion of children who report being in a physical fight remains stable from 2006 (38% in 2006).

**Figure 64: Percentages of boys who report ever being in a physical fight in the last 12 months**



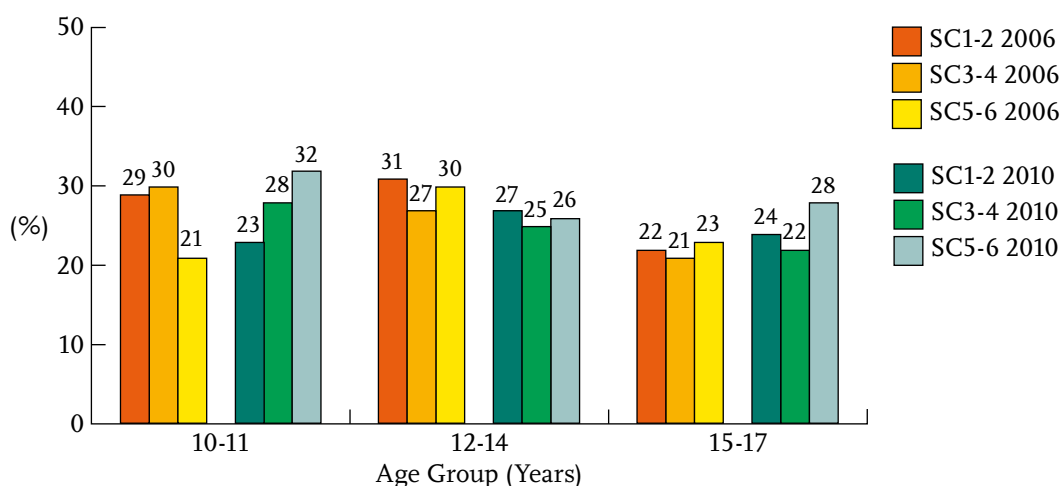
**Figure 65: Percentages of girls who report ever being in a physical fight in the last 12 months**



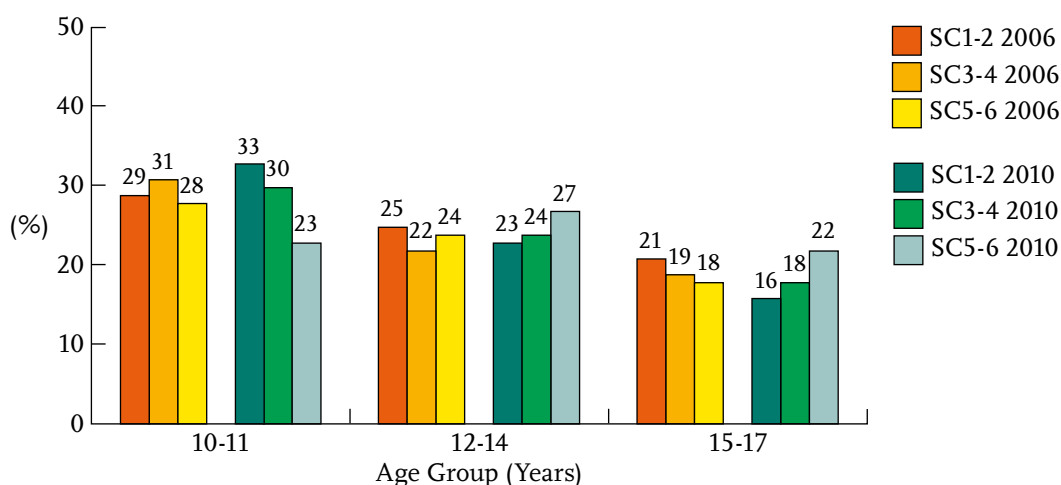
## Being bullied

Children were asked to report how often they have been bullied in school in the past couple of months. Overall, 24% of children report ever being bullied. There are statistically significant differences by gender and age group. Overall, 26% of boys report ever being bullied compared to 23% of girls and younger children are more likely to report ever being bullied compared to older children. There are no statistically significant social class differences. Overall, the proportion of children who report ever being bullied remains unchanged from 2006 (24% in 2006).

**Figure 66: Percentages of boys who report ever being bullied in the past couple of months**



**Figure 67: Percentages of girls who report ever being bullied in the past couple of months**



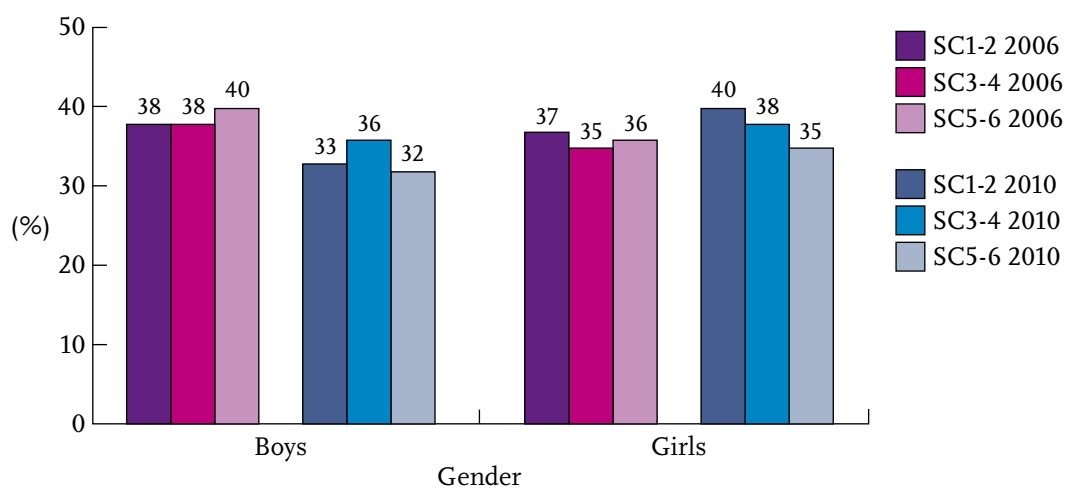


# Physical Fighting and Bullying

## Being bullied – Middle Childhood Study

Overall, 37% of 3<sup>rd</sup> and 4<sup>th</sup> class children report ever being bullied in school in the past couple of months. There are no statistically significant differences across gender and social class groups. The proportion of children who report ever being bullied remains unchanged from 2006 (37% in 2006).

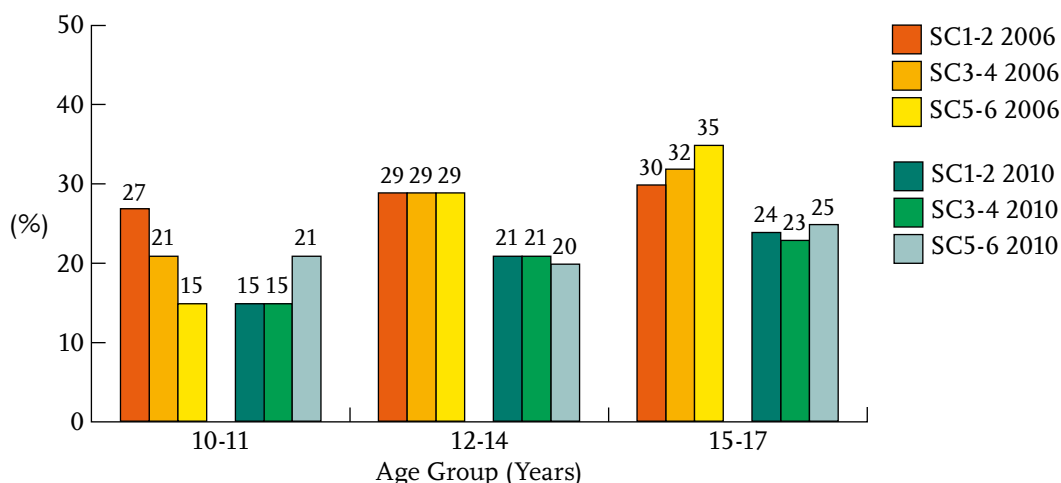
**Figure 68: Percentages of 9 year old boys and girls who report ever being bullied in the past couple of months**



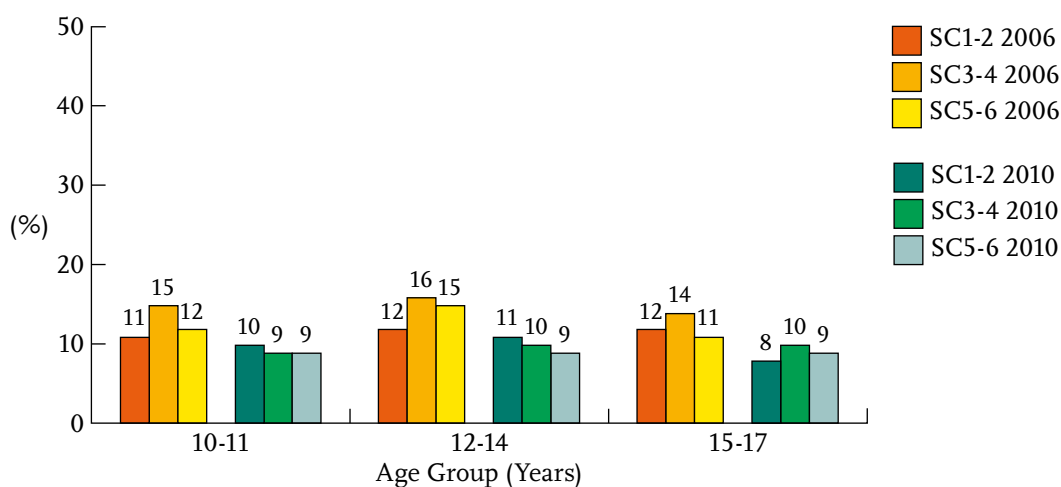
## Bullied others

Children were also asked to report how often they took part in bullying another student at school in the past couple of months. Overall, 17% of children report ever bullying others at school. Gender and age group differences are statistically significant with more boys than girls reporting that they have bullied others (22% and 10% respectively) and older children more likely to report bullying others than younger children. There are no statistically significant differences across social class groups. There is a decrease in the proportion of children who report bullying others from 2006 (22% in 2006).

**Figure 69: Percentages of boys who report ever bullying others in the past couple of months**



**Figure 70: Percentages of girls who report ever bullying others in the past couple of months**





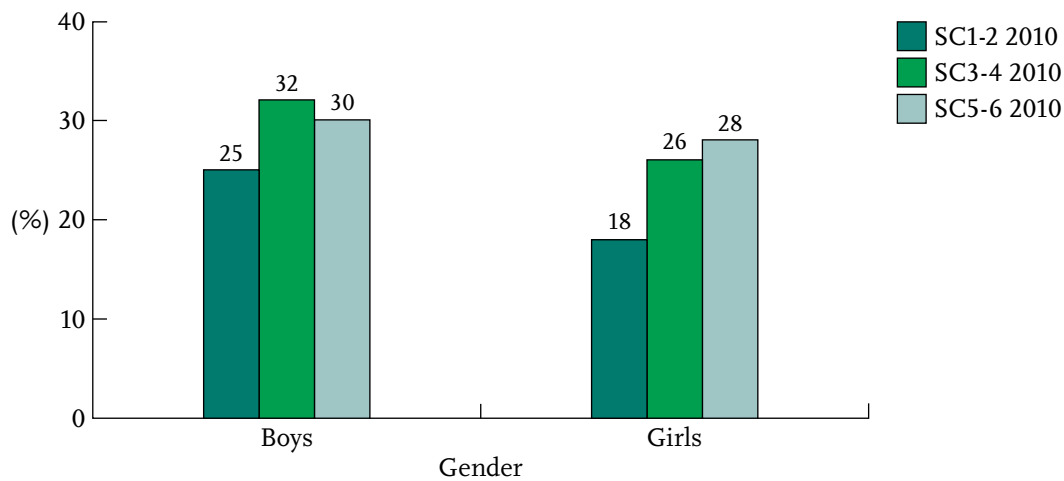
# Sexual Health Behaviours

Children aged 15-17 years old were asked several questions about their sexual health behaviours. They were asked about engaging in sexual intercourse and use of the birth control pill and condoms as methods of contraception at last intercourse.

## Sexual Activity

Overall, 27% of 15-17 year olds report that they have ever had sex. There are statistically significant differences by gender and social class. Overall, boys are more likely than girls to report ever having sex (31% and 23% respectively), as are those from lower social class groups.

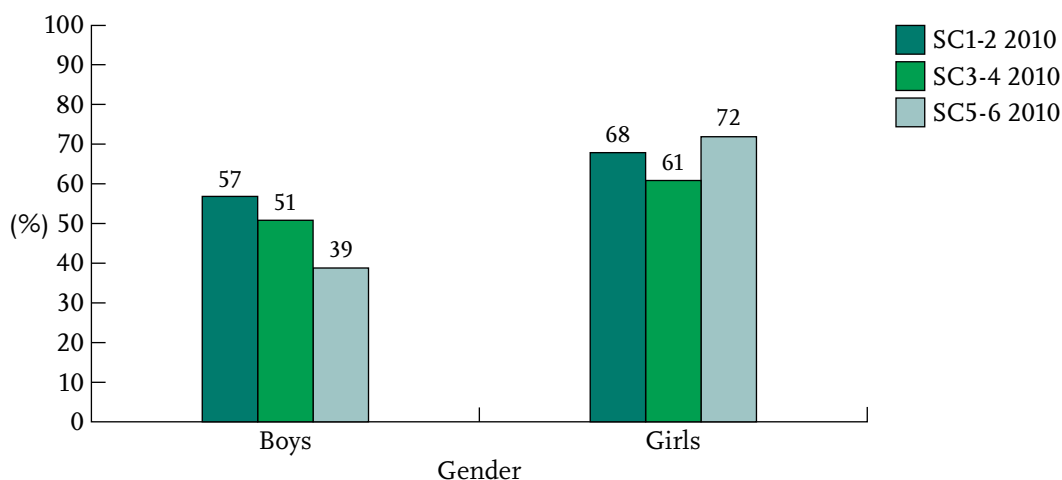
**Figure 71: Percentages of 15–17 year olds who report having ever had sex, by gender**



## Use of birth control pill

Of those who report ever having had sex, 59% report that they used the birth control pill as a form of contraceptive at last intercourse. Gender differences are statistically significant with girls more likely to report using the birth control pill as a form of contraceptive than boys. There are no statistically significant differences across social class groups.

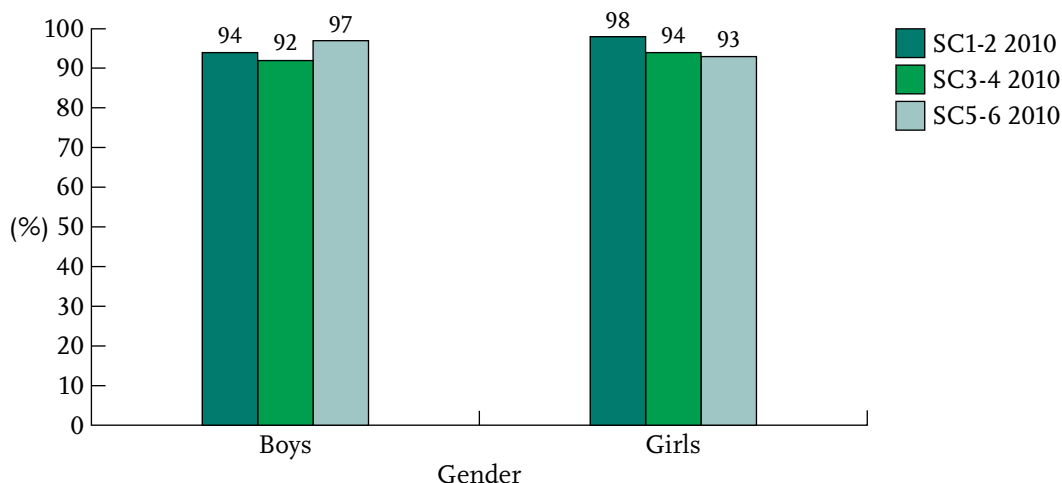
**Figure 72: Percentages of 15–17 year olds who report using the birth control pill, by gender (of those who have ever had sex).**



## Condom use

Of those who report ever having had sex, 93% report that they used condoms as a form of contraceptive at last intercourse. There are no statistically significant differences by gender or social class.

**Figure 73: 15–17 year olds who report using condoms, by gender (of those who have ever had sex)**



# Appendix

## Demographic Representativeness of Respondents: HBSC 2010 Survey

The gender breakdown of the HBSC 2010 participants revealed that 51% were male and 49% were female. Those who participated were compared to data from the 2006 census for region and social class. Table 2 presents the final numbers for each geographical region and the percentage of the total sample that this represents. The sixth column presents the percentages of 7-11 year olds recorded in the regions during the 2006 census. The data are representative of the population distribution across regions with slight variations from the 2006 census.

**Table 2: Comparison of the location of 2006 and 2010 HBSC respondents to the 2006 census**

Health Board Area	n		%		%
	HBSC 2006	HBSC 2010	HBSC 2006	HBSC 2010	Census 2006
East	3055	3869	30	32	33
North East	633	753	6	6	10
South East	1646	919	16	8	12
North West	704	665	7	6	6
South	1450	2760	14	23	15
Mid West	914	1155	9	10	9
West	1427	947	14	8	10
Midlands	395	1132	4	9	7

In addition social class was compared with those presented in the 2006 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 2006 and 2010 HBSC respondents to the 2006 census**

Social Class	HBSC 2006 (%)	HBSC 2010 (%)	Census 2006 (%)
Professional	4	7	7
Managerial	23	30	26
Non-manual	8	13	17
Skilled manual	29	21	17
Semi-skilled	11	10	11
Unskilled	5	2	4
Unclassifiable	-	1	-
Unknown	20	16	18

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

**Table 4: Distribution of 2006 and 2010 HBSC respondents by gender, age group and social class**

	SC 1-2 (%)		SC 3-4 (%)		SC 5-6 (%)		n	
	HBSC 2006	HBSC 2010	HBSC 2006	HBSC 2010	HBSC 2006	HBSC 2010	HBSC 2006	HBSC 2010
<b>BOYS</b>								
10-11 years	26	41	53	44	21	15	498	644
12-14 years	33	41	47	44	20	14	2184	2557
15-17 years	36	46	43	40	20	14	1801	1953
<b>GIRLS</b>								
10-11 years	24	39	51	46	26	15	713	687
12-14 years	31	43	47	43	23	15	2064	2464
15-17 years	37	48	43	37	21	15	1665	1832

## Middle Childhood Study

**Table 5: Comparison of the location of 2006 and 2010 HBSC respondents to the 2006 census**

Health Board Area	n		%		Census 2006
	Middle Childhood Survey 2006	Middle Childhood Survey 2010	Middle Childhood Survey 2006	Middle Childhood Survey 2010	
East	1313	974	39	39	33
North East	189	154	6	6	10
South East	542	160	16	6	11
North West	136	166	4	7	6
South	470	419	14	17	14
Mid West	225	163	7	7	9
West	363	177	11	7	9
Midlands	116	261	4	11	7

**Table 6: Comparison of the social class of 2006 and 2010 HBSC respondents to the 2006 census**

Social Class	HBSC 2006 (%)	HBSC 2010 (%)	Census 2006 (%)
Professional	6	6	7
Managerial	20	23	26
Non-manual	14	13.5	17
Skilled manual	21	20	17
Semi-skilled	21	14.5	11
Unskilled	4	2	4
Unclassifiable		2.5	
Unknown	14	18	18

**Table 7: Distribution of 2006 and 2010 HBSC respondents by gender and social class**

	SC 1-2 (%)		SC 3-4 (%)		SC 5-6 (%)		n	
	HBSC 2006	HBSC 2010	HBSC 2006	HBSC 2010	HBSC 2006	HBSC 2010	HBSC 2006	HBSC 2010
<b>BOYS</b>								
9 year olds	32	36	39	44	29	20	1490	921
<b>GIRLS</b>								
9 year olds	27	37	43	40	30	23	1435	1035

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