HBSC SCOTLAND NATIONAL REPORT

HEALTH BEHAVIOUR IN SCHOOL-AGED CHILDREN:
WORLD HEALTH ORGANIZATION COLLABORATIVE CROSS-NATIONAL STUDY (HBSC)

Findings from the 2010
HBSC Survey in Scotland

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MARCH 2011

CONTENTS

	Tables and Figures	**iv**
	Foreword	**vii**
	Executive Summary	**viii**
	Acknowledgements	**xi**
Chapter 1:	Introduction and Methods	**1**
Chapter 2:	Family life	**9**
Chapter 3:	The school environment	**17**
Chapter 4:	Peer relations	**23**
Chapter 5:	Neighbourhood environment	**29**
Chapter 6:	Eating habits	**37**
Chapter 7:	Physical activity and sedentary behaviour	**45**
Chapter 8:	Weight control behaviour	**53**
Chapter 9:	Body image and Body Mass Index	**57**
Chapter 10:	Tooth brushing	**63**
Chapter 11:	Well-being	**67**
Chapter 12:	Substance use	**75**
Chapter 13:	Sexual health	**85**
Chapter 14:	Bullying and fighting	**91**
Chapter 15:	Injuries	**97**
	Appendix	**101**

TABLES AND FIGURES

TABLES

1.1 Response rates by class 5
13.1 Contraception use 89

FIGURES

CHAPTER 2: FAMILY LIFE

2.1 Family structure 11
2.2 Family structure 1990-2010 11
2.3 SES of mothers and fathers 11
2.4 Family SES 11
2.5 Family affluence 11
2.6 Perceived family wealth by age 13
2.7 Perceived family wealth 1998-2010 13
2.8 Easy to talk to father 13
2.9 Easy to talk to mother 13
2.10 Easy to talk to father 1990-2010 15
2.11 Easy to talk to mother 1990-2010 15

CHAPTER 3: THE SCHOOL ENVIRONMENT

3.1 Like school a lot 19
3.2 Like school a lot 1990-2010 19
3.3 Good academic performance at school 19
3.4 Good academic performance at school 1990-2010 19
3.5 Feel pressured by schoolwork 19
3.6 Feel pressured by schoolwork 1994-2010 21
3.7 Classmates kind and helpful 21
3.8 Classmates kind and helpful 2002-2010 21

CHAPTER 4: PEER RELATIONS

4.1 Three or more close friends of same sex 25
4.2 Spend time with friends after school 4+ days/week 25
4.3 Spend time with friends on 4+ evenings/week 25
4.4 Spend time with friends after school 4+ days/week 2002-2010 25
4.5 Spend time with friends on 4+ evenings/week 1994-2010 25
4.6 Easy to talk to best friend 27
4.7 Electronic media contact with friends every day 27

CHAPTER 5: NEIGHBOURHOOD ENVIRONMENT

5.1 Feeling safe in local area 31
5.2 Local area is a good place to live by age 31
5.3 People say hello and stop to talk in the street 31
5.4 Safe for children to play outside 31
5.5 Able to trust people 31
5.6 Good places to spend free time 33
5.7 Able to ask for help from neighbours 33
5.8 Most people would not try to take advantage of you 33
5.9 Favourable perception of local area 33
5.10 Frequent user of local greenspace 35
5.11 Duration of use of local greenspace 35

CHAPTER 6: EATING HABITS

6.1 Frequency of family meals by age 39
6.2 Daily family meals 1994-2010 39
6.3 Eat breakfast every morning on school days 39
6.4 Eat breakfast every morning on school days 1990-2010 39
6.5 What pupils do for lunch on school days by age 39
6.6 Daily fruit consumption 41
6.7 Daily fruit consumption 2002-2010 41
6.8 Daily vegetable consumption 41
6.9 Daily vegetable consumption 2002-2010 41
6.10 Daily sweets consumption 41
6.11 Daily sweets consumption 2002-2010 42
6.12 Daily crisps consumption 42
6.13 Daily crisps consumption 2002-2010 43
6.14 Daily chips consumption 43
6.15 Daily chips consumption 2002-2010 43
6.16 Daily consumption of coke/other sugary drinks 43
6.17 Daily consumption of diet soft drinks 43

CHAPTER 7: PHYSICAL ACTIVITY AND SEDENTARY BEHAVIOUR

7.1 Meeting physical activity guidelines 47
7.2 Meeting physical activity guidelines 2002-2010 47
7.3 Frequency of leisure time vigorous exercise (4 or more times per week) 47
7.4 Duration of leisure time vigorous exercise (2 or more hours per week) 47
7.5 Frequency of leisure time vigorous exercise 1990-2010 47
7.6 Duration of leisure time vigorous exercise 1990-2010 49
7.7 Mode of travel to school 49
7.8 Mode of travel to school by age 49
7.9 Travel time to school by age 49

7.10 Watching TV for 2 or more hours a day on week days **49**
7.11 Watching TV for 2 or more hours a day on week days 2002-2010 **51**
7.12 Playing computer games for 2 or more hours a day on week days **51**
7.13 Playing computer games for 2 or more hours a day at the weekend **51**
7.14 Using computers (not games) for 2 or more hours a day on week days **51**
7.15 Using computers (not games) for 2 or more hours a day at the weekend **51**

CHAPTER 8: WEIGHT CONTROL BEHAVIOUR
8.1 Currently trying to lose weight **55**
8.2 Currently trying to lose weight 2002-2010 **55**

CHAPTER 9: BODY IMAGE AND BODY MASS INDEX
9.1 Report body is too fat **59**
9.2 Report body is too fat 1990-2010 **59**
9.3 Report good looks **59**
9.4 Report good looks 1990-2010 **61**
9.5 Weight groups according to BMI: 15-year olds **61**

CHAPTER 10: TOOTH BRUSHING
10.1 Brush teeth at least twice a day **65**
10.2 Brush teeth at least twice a day 1990-2010 **65**

CHAPTER 11: WELL-BEING
11.1 Report high life satisfaction **69**
11.2 Report high life satisfaction 2002-2010 **69**
11.3 Feel very happy **69**
11.4 Feel very happy 1994-2010 **69**
11.5 Always feel happy **69**
11.6 Always feel confident **71**
11.7 Always feel confident 1994-2010 **71**
11.8 Never feel left out **71**
11.9 Never feel left out 1998-2010 **71**
11.10 Report excellent health **71**
11.11 Report excellent health 2002-2010 **73**
11.12 Health complaints **73**
11.13 Multiple health complaints **73**
11.14 Multiple health complaints 1994-2010 **73**
11.15 Medicine use **73**

CHAPTER 12: SUBSTANCE USE
12.1 Ever smoked tobacco **77**
12.2 Current smoking **77**
12.3 Smoke tobacco daily **77**
12.4 Ever smoked tobacco: 15-year olds 1990-2010 **77**
12.5 Current smoking: 15-year olds 1990-2010 **77**
12.6 Daily smoking: 15-year olds 1990-2010 **79**
12.7 Drink alcohol weekly **79**
12.8 Weekly drinking: 15-year olds 1990-2010 **79**
12.9 Types of alcohol drunk weekly by 15-year olds **79**
12.10 Been drunk 2 or more times **79**
12.11 Been drunk 2 or more times: 15-year olds 1990-2010 **81**
12.12 Ever used cannabis **81**
12.13 Used cannabis in past 12 months **81**
12.14 Ever used cannabis: 15-year olds **81**
12.15 Used cannabis in past 12 months:15-year olds **81**
12.16 Cannabis user groups: 15-year olds **83**
12.17 Cannabis user groups: 15-year olds 2002-2010 **83**

CHAPTER 13: SEXUAL HEALTH
13.1 Main source of information about sexual matters **87**
13.2 Boys' main source of information about sexual matters 2002-2010 **87**
13.3 Girls' main source of information about sexual matters 2002-2010 **87**
13.4 Person it is easiest to discuss personal and sexual matters with **89**
13.5 Sexual behaviour: had sexual intercourse 1998-2010 **89**

CHAPTER 14: BULLYING AND FIGHTING
14.1 Been bullied at least 2-3 times a month in past couple of months **93**
14.2 Been bullied 2-3 times a month in past couple of months 2002-2010 **93**
14.3 Bullied others at least 2-3 times a month in past couple of months **93**
14.4 Bullied others at least 2-3 times a month 2002-2010 **93**
14.5 Involved in a physical fight 3 times or more last year **95**
14.6 Involved in a physical fight 3 times or more last year 2002-2010 **95**

CHAPTER 15: INJURIES
15.1 Injured at least once in past 12 months **99**
15.2 Injured at least once in past 12 months 2002-2010 **99**


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FOREWORD

Since 1990, children and young people in Scotland aged 11, 13 and 15 years have participated in the Health Behaviour in School-aged Children (HBSC) World Health Organization Collaborative Cross-National Study. This 2010 report is the 6th wave of the survey in Scotland.

HBSC collects data from adolescents in 43 nations in Europe and North America allowing for international comparison and trends over time to be identified. It covers a wide range of topics, from well-being and health behaviours through to contextual factors such as family affluence, peer relations and the school environment. It therefore adds to the scientific knowledge base and informs policy-makers about key trends in health outcomes and inequalities in health for this age group and their determinants.

The Scottish 2010 survey reported here suggests that many things are improving. For example, the proportion of children reporting that they eat sweets daily has declined by a third and the proportion reporting eating chips daily has declined by half since 2002. Cannabis use among adolescents has also declined. Furthermore, the proportion of girls brushing their teeth twice daily has increased to 81% and the proportion of boys to 66%.

Despite these improvements, there remain several worrying findings: only around half of young people always feel safe in their local area; and only a third of young people eat fruit and vegetables daily.

HBSC provides the best tool for investigating why some health-related trends in children and young people are increasing and other trends decreasing by facilitating comparisons internationally. This has recently been recognised by UNICEF who used HBSC to inform their thinking on health inequalities.

NHS Health Scotland is proud to support HBSC and hope that it will continue to generate insights to improve the health of young people in Scotland into the future.

Dr Gerry McCartney
Public Health Consultant and Head of Public Health Observatory Division
NHS Health Scotland

EXECUTIVE SUMMARY

This report presents data on adolescent health from the World Health Organization (WHO) collaborative cross-national Health Behaviour in School-aged Children (HBSC) study in Scotland. Prevalence statistics for 2010 and trends across some or all six consecutive surveys in 1990, 1994, 1998, 2002, 2006 and 2010 are included. Over 6700 pupils were sampled in the most recent Scottish survey of 2010. The main findings are summarised below.

FAMILY LIFE

The majority of young people in Scotland (66%) live with both their parents, while 21% live with just one parent (19% with their mother and 2% with their father), 11% live in a step family, and 2% live in a variety of other care arrangements. Most children living with both parents (76%) report that both are in employment, and a further 21% have one parent in employment. Among children from single parent families, 74% report their parent to be in employment. Over half of young people (55%) think their family is quite or very well off, with larger proportions at younger ages. The proportion of young people reporting that their family is very well off has increased between 1998 and 2010. Young people find it easier to talk to their mother (80%) than to their father (63%) and ease of communication with parents (particularly fathers) deteriorates with age. Boys and girls find it equally easy to talk to their mother about things that bother them but boys are more likely than girls to report easy communication with their father.

THE SCHOOL ENVIRONMENT

A quarter of young people (25%) like school 'a lot' and 64% feel their classmates are kind and helpful, and these proportions are greater among younger adolescents. 69% of pupils rate their school performance highly relative to their classmates and this proportion is greater for younger adolescents. One in five 11-year olds (22%) and over half of 15-year olds (54%) feel pressured by schoolwork. At ages 11 and 13, girls are more likely than boys to report that they like school a lot, but there is no gender difference at age 15. At age 11, girls are more likely than boys to rate their school performance highly relative to their peers and to report that their classmates are kind and helpful, but there are no gender differences at the older ages. At age 11, boys are more likely than girls to report that they are pressured by schoolwork, but at ages 13 and 15 this is more common among girls.

PEER RELATIONS

Boys are more likely than girls to spend time with friends immediately after school, and at age 15, boys are more likely than girls to spend time with friends in the evening. Frequent contact with friends after school and in the evening has declined between 2002 and 2010. Most young people (88%) say they find it easy to talk to their best friend about things that really bother them (93% of girls and 84% of boys), with greater proportions of older than younger children. Half of young people (52%) contact their friends daily via phone, text messages and/or the internet. Electronic media contact is more common among girls than boys, and among older rather than younger adolescents.

NEIGHBOURHOOD ENVIRONMENT

Half of young people (51%) always feel safe in their local area, (53% of boys and 48% of girls), and a further 38% feel safe most of the time. A third of young people think their local area is a really good place to live, (36% of boys and 31% of girls), with larger proportions at age 13. Half of young people agree that there are good places to go locally and two thirds feel they trust people in their local area, with larger proportions at age 13. At age 15, both boys and girls are less likely to have a favourable perception of their local area. 15-year old girls use green space less frequently and for shorter periods compared with 13-year old girls or boys of either age.

EATING HABITS

Almost three quarters of young people (72%) eat a meal with their family four or more days a week and almost two thirds (63%) eat breakfast every school day. The frequency of family meals and breakfast consumption is greater among younger adolescents. 36% of young people eat fruit daily and 36% eat vegetables daily, with higher proportions of girls eating fruit and vegetables daily than boys. The proportion of young people eating fruit daily is greater among younger adolescents, while there is no age difference in consumption of vegetables. Girls and boys are equally likely to eat sweets (29%), crisps (21%) or chips (8%) daily. Between 2002 and 2010, daily sweet consumption fell by a third while consumption of crisps and chips halved.

PHYSICAL ACTIVITY AND SEDENTARY BEHAVIOUR

19% of boys and 11% of girls meet the Scottish Government guidelines for moderate to vigorous physical activity. Older boys and girls take part in vigorous exercise less often than younger boys and girls. Duration of exercise is greater among older boys, but remains the same among girls across all ages. Approximately half of young people in Scotland walk to school and walking to school is more common among primary than secondary school children. Primary school children watch TV less often during the week than secondary pupils with no gender differences in watching TV at any age. TV viewing on week days has decreased since 2002 but TV viewing at the weekend has remained stable. Boys play computer games more often than girls at all ages. Computer use for purposes other than games is higher among secondary girls than boys during the week and at the weekend.

WEIGHT CONTROL BEHAVIOUR

Girls are twice as likely as boys to be on a diet or doing something else to lose weight (21% and 10% respectively). Older girls are more likely than younger girls to try to control their weight, whilst there is no age difference among boys. There was no change in the proportions of boys and girls on a diet between 2002 and 2010.

BODY IMAGE AND BMI

A quarter of boys and two fifths of girls report that they feel too fat. 37% of boys and 24% of girls consider themselves to be good looking. Young people's views of their physical appearance and body size are less favourable at ages 13 and 15 than at age 11. The proportion of boys reporting that they are too fat increased between 1990 and 2010. Three quarters of 15-year olds are classified as having a normal weight according to their BMI and 3% are classified as being obese.

TOOTH BRUSHING

Girls are more likely than boys to brush their teeth at least twice a day (81% compared with 66%). There has been a steady increase from 1990 to 2010 in the proportion of boys and girls who brush their teeth two or more times a day. The greatest increases were found among boys and 11-year olds.

WELL-BEING

The majority of young people (87%) are satisfied with their life, 44% are very happy, 22% never feel left out of things, 17% always feel confident and 21% rate their health as excellent. 29% of young people have multiple health complaints and 55% have used medicine in the previous month. Boys fare better than girls on all seven measures of well-being. Life satisfaction, confidence, self-rated health and happiness are higher among younger age groups, while multiple health complaints and medicine use are lower. Happiness, confidence and never feeling left out increased between 1994 and 2006, while multiple health complaints decreased. Between 2006 and 2010, however, boys' and girls' happiness and

girls' confidence have decreased, while there has been no change in the proportions never feeling left out or having multiple health complaints.

SUBSTANCE USE

One in five young people have tried smoking, and 9% of girls and 8% of boys report that they smoke at present. At age 15, 59% of current smokers report that they smoke every day. Smoking behaviour among young people increased in the 1990's but smoking rates have since fallen to those of 1990. The gender gap in smoking that appeared in the late 90s, with girls smoking more than boys is no longer apparent. One in ten 13-year olds and more than one in four 15-year olds drink alcohol at least once a week. Boys are most likely to drink beer, while girls prefer spirits and alcopops. Weekly drinking among young people increased in the 1990's but weekly drinking rates have since returned to those of 1990. 19% of 15-year olds and 4% of 13-year olds have used cannabis. There was a considerable drop in cannabis use among 15-year olds between 2002 and 2010, observed among former, experimental, regular and heavy users.

SEXUAL HEALTH

Friends and schools rank first and second as primary sources of information on sexual matters for both boys and girls. Compared with 2006, boys are more likely to source information on sexual matters from the internet and less likely to get information from school. Approximately three quarters of 15-year olds report that it is easiest to discuss personal and sexual matters with friends. Almost a third of 15-year olds say that they have had sexual intercourse, with girls (35%) more likely to report sexual intercourse than boys (27%). The proportion of 15-year olds who used a condom during last intercourse increased between 2002 and 2006, from 70% to 79%, but has since dropped to 72% in 2010.

BULLYING AND FIGHTING

9% of young people have been bullied at least two or three times a month at school in the previous two months, although prevalence of bullying is lowest among 15-year olds (6%). 5% of young people report having bullied others in the past couple of months (7% of boys and 2% of girls). The proportion of boys involved in a physical fight three or more times in the previous 12 months decreased between 2002 and 2010, from 23% to 17%. Fighting is more prevalent among younger than older boys.

INJURIES

Almost half of young people (47%) have received an injury requiring medical attention in the past 12 months. Boys are more likely to be injured than girls.

ACKNOWLEDGEMENTS

We thank the Regional and Island Authorities for granting permission for their schools to participate in the survey; and all the young people who completed questionnaires; and the schools and teachers who kindly agreed to administer the survey. Data collection and data entry was carried out by George Street Research.

Acknowledgement is made to all national teams in the international HBSC research network who collaborated on the production of the HBSC international research protocol and the support of the WHO Regional Office for Europe. We are grateful to Gerry McCartney, Head of the Public Health Observatory and his team at Health Scotland for their ongoing support. The HBSC study in Scotland is funded by NHS Health Scotland. Special thanks go to Justine Geyer for her input to the Neighbourhood environment chapter and Emily Healy, Jehane Barbour, Anne Valentine and Paula Grieve for editorial support.

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1

INTRODUCTION AND METHODS

INTRODUCTION

Health improvement of young people in Scotland

The improvement of young people's health in Scotland is a key aim of recent Government policies. National and local targets and programmes concerned with children and adolescents have focused on physical activity, nutrition and their importance in tackling obesity, as well as mental health and sexual health, with an overarching aim to reduce health inequalities. Other areas of concern are smoking, alcohol and drug use, and risks associated with overweight. The strong commitment to young people's health is evident in recent policy documents, such as *Healthy Eating, Active Living: an action plan to improve diet, increase physical activity and tackle obesity (2008-2011)* (Scottish Government, 2008) and *Towards a Mentally Flourishing Scotland* (Scottish Government, 2009). Within the school context, the importance of a health promoting environment for young people is emphasised in The Curriculum for Excellence (Scottish Executive, 2004) which stipulates that mental, emotional, social and physical well-being is essential for successful learning. This is supported by the Schools (Health Promotion and Nutrition) (Scotland) Act 2007 (Scottish Government, 2007) which states that schools have a duty to promote the mental, emotional social and physical health and well-being of all pupils.

The Health Behaviour in School-Aged Children: WHO Collaborative Cross-National Study (HBSC)

The Health Behaviour in School-Aged Children (HBSC) Study in Scotland is a key source of information on child and adolescent health in the country. HBSC takes a broad perspective, gathering information on wide ranging aspects of young people's health and well-being as well as the social contexts within which they are growing up (Currie et al., 2004; 2008; 2010). The HBSC Cross-National Study initiated in 1983 in three countries, has now grown to include 43 countries in Europe and North America. Scotland became a member country in 1986 and the first national HBSC survey was conducted in 1990. National surveys have been conducted every four years since then in line with the cross-national survey cycle. The study in Scotland is based at the Child and Adolescent Health Research Unit (CAHRU), University of Edinburgh. CAHRU is also the HBSC International Coordinating Centre (ICC). NHS Health Scotland funds the national study and also provides support to the ICC.

The target population of the HBSC study is young people attending school, aged 11, 13 and 15 years. These age groups were selected because it is during these years that important stages of development occur (i.e., the onset of adolescence, the challenge of physical and emotional changes and the middle teenage years when important life and career decisions are being made). The school-based survey is administered to a nationally representative sample of approximately 1500 pupils from each age group in each participating country. Pupils complete questionnaires in the classroom during one school period.

HBSC is conducted in collaboration with the World Health Organization Regional Office for Europe and this partnership supports the wide dissemination of research findings to inform and influence health promotion and health education policy and practice at national and international levels. The Scottish HBSC team has produced a range of papers, reports and briefing papers to inform policy makers, practitioners, and academics on findings from the study. These are available on the CAHRU website[1]. A full list of international publications is presented on the HBSC website[2].

The report

HBSC surveys in Scotland have produced a wealth of data on the health of the nation's youth over the last two decades. This report provides up-to-date information on young people's health and behaviour in Scotland, as well as the social contexts affecting their lives. Where possible, patterns are traced back to the early 1990s. The data presented capture all the key priority areas of mental health, physical activity, eating habits, substance use and sexual behaviour. Less

commonly reported issues are also examined; examples include how young people feel about their bodies, their efforts at weight control, their experience of bullying and fighting, how they get along with friends and family, their perception of their neighbourhood environment and relationships at school. HBSC places young people's health in social and economic context and gathers data on family structure and socioeconomic circumstances. The report therefore also shows how the social context of young people's lives have changed over recent years. Analyses assessing the role that contextual factors play in explaining young people's health and well-being in Scotland are reported in briefing papers and journal publications listed on the CAHRU website[1].

STUDY METHODOLOGY

Questionnaire design

The Scottish HBSC questionnaire follows the international HBSC survey protocol, developed by the HBSC international network of researchers from member countries. The questionnaire is designed by network members working in focus groups according to area of expertise in various aspects of adolescent health. The study methods are outlined briefly below, with a more comprehensive description available elsewhere (Currie et al., 2010; Roberts et al., 2004; 2007). For each survey round a full research protocol is developed which includes the scientific rationales for topic areas included in the international standard questionnaire. While some items remain from each survey year to the next, others may change and others still may be dropped entirely according to national and international priorities and methodological developments. Items are subject to validation procedures in several countries before final versions are submitted for inclusion in the international questionnaire (eg. Andersen, 2008; Boyce, et al., 2006; Elgar et al., 2005; Haugland and Wold, 2001; Vereecken and Maes, 2003). In 2010 there were 54 questions (with 125 items) that were considered 'core' to the international study. These questions are mandatory for all member countries of the network, including Scotland, to ensure that international comparisons can be made on a number of key social, health and behaviour measures. In addition to the mandatory questions required by the HBSC network, optional thematic packages validated internationally are made available. The Scottish HBSC questionnaire also includes items that are of specific interest to the health of Scottish adolescents.

The Scottish national questionnaire was piloted in the autumn term of 2009 before the final version was submitted for documentation to the international HBSC data management centre in Bergen. The sample was re-surveyed 4 weeks later to allow for the calculation of reliability statistics for each item.

The questionnaire is designed to take approximately 40 minutes to complete.

Sample design

The HBSC 2010 sample was designed to be nationally representative and produce robust prevalence estimates describing the social context, health and health behaviour of 11, 13 and 15-year olds in Scotland. The survey was conducted in schools, using the class as the sampling unit, with all the pupils in selected classes being asked to complete the confidential questionnaire anonymously.

The target population was school children in the final year of primary school (P7, average age 11.5 years) and in the second and fourth years of secondary education (S2; average age 13.5 and S4; average age 15.5 years, respectively). All

local authority-funded and independent sector schools were included in the sample frame, with the exception of schools for children with special educational needs.

The sample was proportionally stratified by school funding (state-funded or independent) and education authority for state funded schools, with implicit stratification for socio-economic status, taking the proportion of children with free school meals as a proxy. Samples were selected separately for each school year group.

Within each strata, schools were selected with probability proportional to the number of classes in the required year group. This meant that larger schools had a higher probability of inclusion in the sample of schools. For each age group, one class from each selected school was included in the sample, so that within those schools selected, individual pupils had a higher probability of inclusion into the sample if they attended smaller schools. This ensured that each Scottish pupil in the age groups described had the same probability of inclusion in the sample.

Sample size and precision of estimates

The sample size aimed for within each of the three age groups was set at around 2000 students, to allow more scope in subgroup analyses. A booster rural sample was also surveyed that will be reported on in future publications. The sample was selected using cluster sampling by school class, rather than simple random sampling. If cluster sampling methods are not accounted for in analysis, this can result in underestimation of standard errors. The design factor is the amount by which the sample size computed for a simple random sample should be multiplied to account for cluster sampling, ie sampling classes rather than children. For example, the proportion of 13-year olds who have ever smoked is 19%. The standard error under the assumption of random sampling is 0.8%.The true complex standard error for this proportion, which takes account of the sample design, is 1.2%, resulting in 95% confidence intervals of 16.4%-21.0%. This compares with a confidence interval of 17.0%-20.3% under the assumption of random sampling. The design factor in this example is 1.2/0.8=1.5. The sample size is adjusted upwards so that despite clustering the required levels of precision (+/- 3%) are maintained.

Response rates

Of the 460 school classes asked to participate in the survey, 334 (73%) took part. The breakdown of response rates is shown in Table 1.1. Pupil responses within classes were good, with approximately 10% of pupils in the class not returning a questionnaire. The main reason for school (class) non-response was that they were too busy. The main reason for pupil non-response was illness or unexplained absence. Pupils not present on the day were not followed up after the survey.

Table 1.1
RESPONSE RATES BY CLASS

RESPONSE RATES IN 2010	PERCENTAGE	ACHIEVED SAMPLES
Primary 7		
Class response	71%	
Pupil response	93%	
Total response	**66%**	**2074**
Secondary 2		
Class response	75%	
Pupil response	89%	
Total response	**66%**	**2131**
Secondary 4		
Class response	72%	
Pupil response	87%	
Total response	**63%**	**2566**
Whole sample response	**65%**	**6771**

Administration of survey instrument

Questionnaires were administered in schools between January and March 2010. The administration of the questionnaire in schools was conducted by school teachers who were given precise instructions on how to carry this out. Teachers were also given a class return form to complete which detailed how many pupils completed the questionnaire, how many were absent and reasons for absence. On completion, each pupil placed the questionnaire in an envelope and sealed it. The completed questionnaires were then returned by all schools. Coding of responses and data entry was conducted according to protocol guidelines. The national dataset was then submitted with complete documentation of the procedures adopted, as well as any deviations in the wording of questions or choice of responses, to the international data management centre in Bergen. The Norwegian Social Science Data Service (NSD) performed cleaning and data quality checks under the supervision of the HBSC data manager, and produced the full international dataset, available for use by members of the research network.

Ethical approval and consent

The study, including the proposed design, timetable and intention of use, was first approved by the Moray House School of Education Ethics Committee. Directors of Education were contacted and permission was requested to invite schools to take part in the survey. Once permission was granted, selected schools were sent a letter of invitation, information about the HBSC survey, along with an example questionnaire, and details of what is involved in taking part. Consenting schools then sent a letter, written by CAHRU, to the parents of pupils in selected classes, requesting consent for their children to be surveyed. Parental consent forms were opt-out, so that only those pupils whose parents signed an opt-out form were not included in the survey. Pupils themselves could also opt out of the survey on the day if they chose not to take part. They were provided with information leaflets about the survey before the survey day.

RESULTS

Presentation of findings

The Report is made up of 15 chapters, including this first one which gives a broad introduction and background to the study. Chapters 2 to 5 give a descriptive summary of social factors which are known to be associated with the health behaviour of young people: family life, the school environment, peer relations and neighbourhood environment. The remainder of the report describes prevalence of various health indicators and behaviours, broken down by age and gender and where possible, over time. Most of the findings presented in this report are based on collapsing response options to questionnaire items.

Data analyses

For the most part, comparisons were drawn between genders and age groups in the prevalence of health outcomes described by proportions. Design adjusted chi-square tests were carried out to assess statistical significance of differences between genders and age groups. All differences or changes reported are significant unless otherwise stated. In this report a 99% level of significance was used in the comparison of proportions. This more conservative measure was used in preference to 95% as many tests of proportions were carried out. The only exception was in comparisons of contraceptive use (Chapter 13) where a 95% level of significance was used as numbers were very small. Analyses for age and gender took account of the effect of the survey design – stratification, clustering and weighting – on the precision of the estimates presented. The statistical package STATA 10 (Stata Corporation, 2007) was used for all design-adjusted analyses.

Many of the items were collected over a number of surveys in Scotland and trends are reported for these. Where, for example, differences 'between 1990 and 2010' are described, the statistical test carried out was between the proportion in 1990 and the proportion in 2010. In some cases comparisons were drawn between intervening years and these are highlighted in the text.

In some cases, reported data appear not to add up, eg. Figure 2.3, percentages of father SES appear to add up in total to 99%. This is due to rounding error.

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NOTES:

1 http://www.education.ed.ac.uk/cahru/

2 http://www.hbsc.org/

2

FAMILY LIFE

- In Scotland, 66% of young people live with both parents, 21% with a single parent (19% with mother and 2% with father) and 11% in a step family. The remaining 2% live in a variety of other care arrangements
- Of those children living with 'both parents', 76% have both parents in employment, and a further 21% have one parent in employment. Among children from single parent families, 74% report that their parent is employed
- Of the 66% of fathers who have been assigned socio-economic status (SES), most fall into the 'managerial/technical' (SES 2) and 'skilled manual' (SES 4) categories. Among the 63% of mothers with an assigned SES, the most common category is 'managerial/technical' (SES 2)
- 55% of young people think their family is quite or very well off. 11-year olds are more likely to describe their family as very well off than 13-year olds and 13-year olds more likely than 15-year olds
- The proportion of young people reporting that their family is well off has increased between 1998 and 2010
- In general, young people find it easier to talk to their mother (80%) than to their father (63%) and ease of communication with parents (particularly fathers) deteriorates with age for both boys and girls
- Boys and girls find it equally easy to talk to their mother about things that bother them but boys are more likely than girls to report easy communication with their father

INTRODUCTION

Family life is an important part of adolescence, allowing for fundamental development during this stage of life (Noller, 1994). There is a large body of research on the influence of the family on outcomes for adolescents, and their health has been linked to such elements as family structure, family affluence, cohesion and communication (Currie et al., 2004; Currie et al., 2008a; Levin and Currie, 2010a; Levin and Currie, 2010b). The recent Scottish action framework *Delivering a Healthy Future* (Scottish Executive, 2007) acknowledges the importance of the family and family life in many aspects of young people's health.

The composition of the family (e.g. biological parents, step families or single parents) has undergone significant change over recent decades. Young people are growing up in increasingly diverse living arrangements, and single parent families have become more prominent over recent years (Murphy, 2000). In Scotland, the proportion of young people living with both parents has gradually declined since 1990 while the proportion living in single parent and step parent families has increased. Similar patterns of change have been identified in many European countries (Iacovou, 2004). As such, the way in which family structure may impact risk behaviours and health outcomes has received increasing attention e.g. (Blum et al., 2000). Although two-parent families have previously been associated with more favourable health outcomes, it is also well established that different social and cultural norms may lead to variations in the association between family structure and health (Sweeting and West, 1995). Family structure is associated with a wide range of health behaviours, for example, tooth brushing (Levin and Currie, 2010b) smoking (Griesbach et al., 2003) and substance use (McArdle et al., 2002).

As well as family structure, aspects of family functioning may also impact on adolescent health. A poor relationship and conflict with parents may result in lower self-esteem and poorer psychological well-being among adolescents (Sweeting and West, 1995). Attachment to parents has been identified as having a strong influence on emotional well-being and emotional problems (Garnefski and Diekstra, 1997). Having good communication with parents is associated with fewer psychological complaints (e.g. feeling low, difficulties in sleeping) (Moreno et al., 2009) and with higher life satisfaction (Levin and Currie, 2010a).

As young people go through adolescence, they typically spend less time with the family, and increasing time is spent with peers (Myers, 2000). Indeed, joint family activities have been shown to decline during adolescence (Zaborskis et al., 2007). Previous research has suggested that a strong family bond can be reflected in a young person's adoption of parental and societal norms and values, thereby offering protection against engagement in certain risk behaviours (Bell et al., 2000). Spending time with family, for example, has been shown to limit adolescent excessive drinking (Kuendig and Kuntsche, 2006), and increase diet quality (Gillman et al., 2000; Verzeletti et al., 2010). Eating together as a family during childhood may also lead to multiple health benefits in later years, and has been associated with increased family cohesion and emotion-focused coping (Franko et al., 2008).

Family socio-economic status may also impact on the health and well-being of young people. The Family Affluence Scale (Currie et al., 1997; 2008a), has been used to categorise young people as having low, medium or high family affluence based on family car and computer ownership, family holidays and own bedroom occupancy. Family affluence and parental occupation have previously been identified as strong independent predictors of vegetable consumption and television viewing (Richter et al., 2009). In a recent cross-national study, an increase in smoking with decreasing parental occupation status was found, as well as a positive association between family affluence and alcohol consumption (Richter et al., 2009). Family affluence is also associated with different measures of well-being, with better outcomes predicted by higher affluence. These include common health complaints, self-rated health and life satisfaction (Currie et al, 2008b).

Figure 2.1:
FAMILY STRUCTURE

HBSC Scotland
2010 Survey

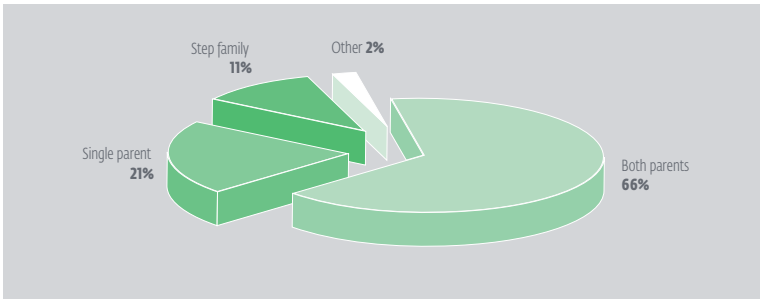


Figure 2.2:
FAMILY STRUCTURE 1990 – 2010

HBSC Scotland
1990 – 2010 Surveys

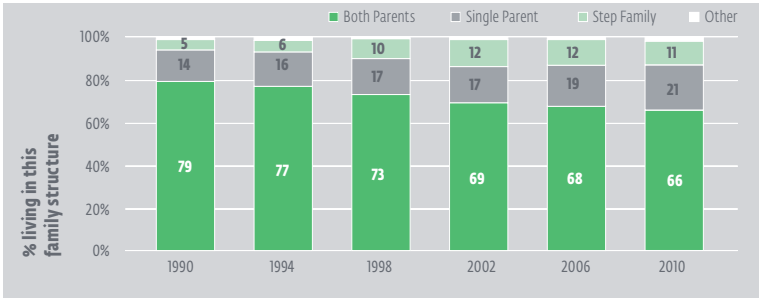


Figure 2.3:
SES OF MOTHERS AND FATHERS

HBSC Scotland
2010 Survey

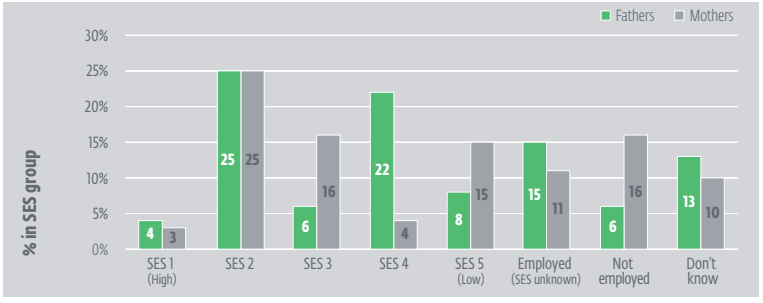


Figure 2.4:
FAMILY SES

HBSC Scotland
2010 Survey

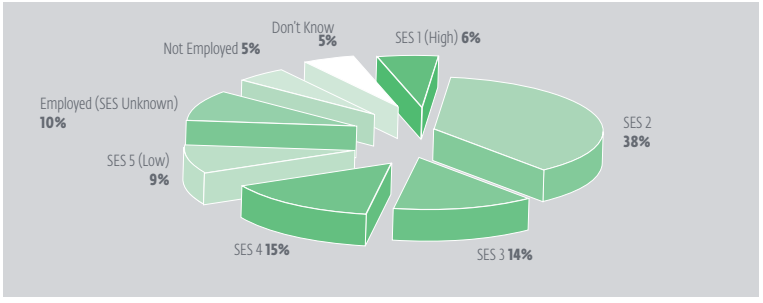
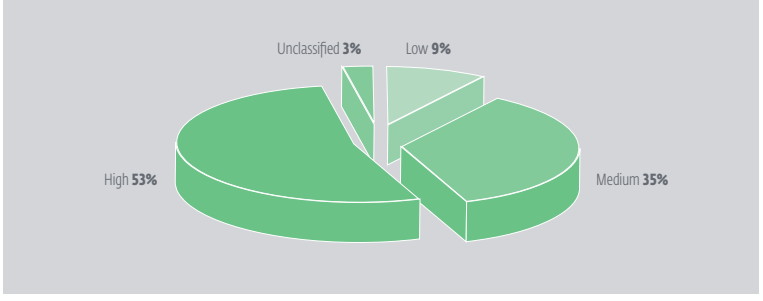


Figure 2.5:
FAMILY AFFLUENCE

HBSC Scotland
2010 Survey



HBSC FINDINGS

Various dimensions of family life are measured within the HBSC study, including family structure, parental employment and occupation, family affluence, perceived wealth and parent-child communication. Family structure and communication with parents have been recorded since 1990 allowing for examination of 20 years of trend data, with perceived wealth having been recorded since 1998.

FAMILY STRUCTURE

Young people were asked who they live with[1]. In 2010, 66% of young people in Scotland lived with both their parents, 21% with a single parent (19% with mother and 2% with father) and 11% in a step family. A further 2% reported living in another home environment, such as a foster home, children's home or with members of their extended family (Figure 2.1). These figures are very similar to those reported by the Office for National Statistics (ONS, 2009).

The proportion of young people living with both parents has gradually declined since 1990, while the proportions living in single parent and step family households have increased (Figure 2.2). This trend is found in many other European countries (Berthoud and Iacovou, 2005).

PARENTAL EMPLOYMENT AND FAMILY SOCIOECONOMIC STATUS

Among children defined as living with 'both parents', 76% have parents who are both employed, 21% have one parent in employment and 3% have parents who are not working. Seventy four percent (74%) of children who live with just their mother have working mothers and 73% of those living with only their father have working fathers.

Young people were asked the occupation of their parent(s) and from this information a socio-economic status (SES) between 1 (high) to 5 (low) was assigned to each parent, using the Registrar General's social class classification. Two thirds of parents could be assigned a socio-economic status (63% of mothers and 66% of fathers). The remainder fall into one of three categories: 'employed and SES unknown', 'not employed' or 'don't know'. Where the job description is impossible to classify (15% of fathers and 11% of mothers), parents are described as 'employed – SES unknown'. Parents who do not work because they are sick, retired, studying, unemployed or caring for others are described as 'not employed'. Where no information is provided, occupational status is classified as 'don't know'.

The occupational status of children's parents is presented in Figure 2.3. Of the 66% of fathers who have been assigned socio-economic status, most fall into the 'managerial/technical' (SES 2) and 'skilled manual' (SES 4) categories. Among the 63% of mothers with an assigned SES, the most common category is 'managerial/technical' (SES 2), followed by 'skilled non-manual' (SES 3) and 'unskilled' (SES 5). Sixty percent (60%) of mothers who are not employed are 'taking care of others' or 'full time in the home', compared with 16% of fathers who are not working.

The family's socio-economic status (Family SES) is that of the parent with the higher SES (where more than one parent is present in the main home). This indicator is useful as it provides a single SES score for the home environment within which the young person is living. Eighty one percent (81%) of young people are assigned a family SES classification in this way. Of the remaining 19%, half have employed parent(s) of unknown SES and the other half are equally divided between families with unemployed parent(s) and families where occupational information was missing or could not be categorised (Figure 2.4). Six percent (6%) are assigned a family SES score of 1. Thirty eight percent (38%) of young people are assigned a family SES score of 2 and a further twenty eight percent (28%) are assigned a family SES score of 3/4.

Figure 2.6:
PERCEIVED FAMILY WEALTH BY AGE

HBSC Scotland
2010 Survey

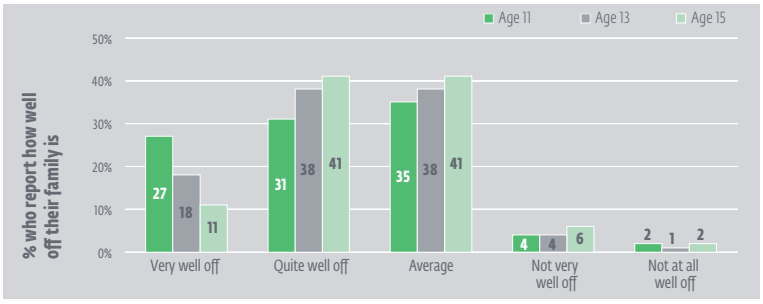
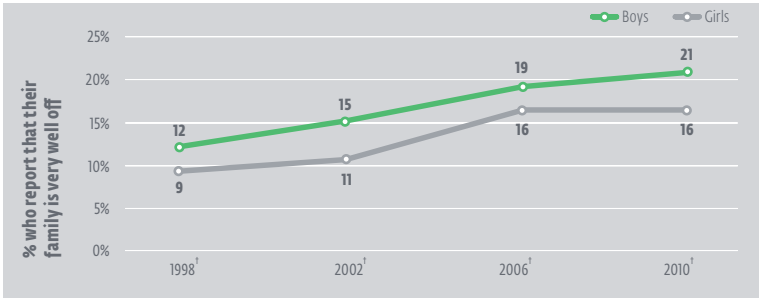


Figure 2.7:
PERCEIVED FAMILY WEALTH 1998 – 2010

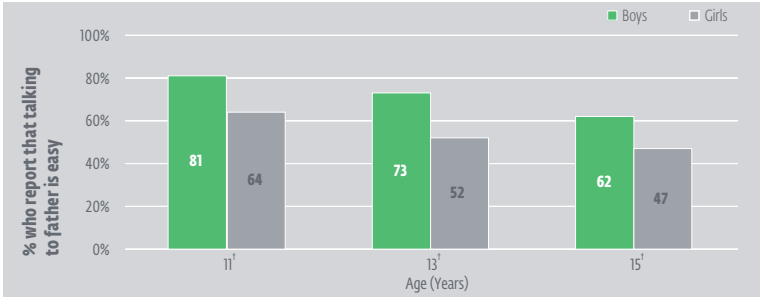
HBSC Scotland
1998 – 2010 Surveys



† Significant gender difference (p<0.01)

Figure 2.8:
EASY TO TALK TO FATHER

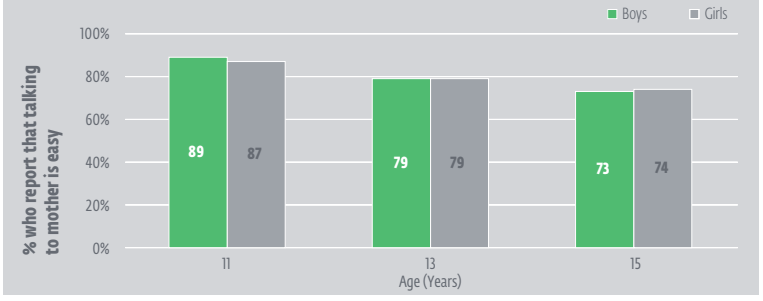
HBSC Scotland
2010 Survey



† Significant gender difference (p<0.01)

Figure 2.9:
EASY TO TALK TO MOTHER

HBSC Scotland
2010 Survey



FAMILY AFFLUENCE

As illustrated above, children and young people are often unable to give sufficient information about their parents' occupational status and therefore it is difficult to assign an SES score. As an alternative, family affluence can be used as a proxy measure of socio-economic status. To assess family affluence, young people were asked to report (a) the number of cars in their family, (b) the number of computers at home, (c) the number of family holidays taken in the previous 12 months and (d) if they have their own bedroom. The Family Affluence Score (FAS) is a validated measure derived from these items and children are classified as having low, medium or high affluence (Currie et al., 1997; 2008a). Fewer children are unclassifiable using FAS than SES (19% of children were unclassifiable according to parental occupation, whereas only 3% could not be given a Family Affluence Score).

In 2010, 53% of young people were classified as having high affluence families, 35% medium affluence and 9% low affluence (Figure 2.5). This classification is based on cut-offs devised for international comparisons, where the UK is relatively affluent. High, medium and low tertiles of the FAS distribution are often used for within-country analyses.

PERCEIVED WEALTH

A subjective measure of family wealth was obtained by asking young people 'How well off do you think your family is?'. As shown in Figure 2.6, 38% of young people responded 'average', 37% 'quite well off' and 19% 'very well off'. Just 6% of young people thought that their family was not well off, although perception of wealth changes with age. 11-year olds are more likely to describe their family as very well off than 13-year olds, and 13-year olds more likely than 15-year olds. The family affluence score, on the other hand, is similar across all three age groups.

Young people were asked to report perceived wealth in three previous surveys in Scotland (1998, 2002 and 2006) and trend analysis shows an increase in the proportion describing their family as very well off between 1998 and 2010. The data show increases from 9% to 16% among girls (with no change between 2006 and 2010) and 12% to 21% among boys (Figure 2.7).

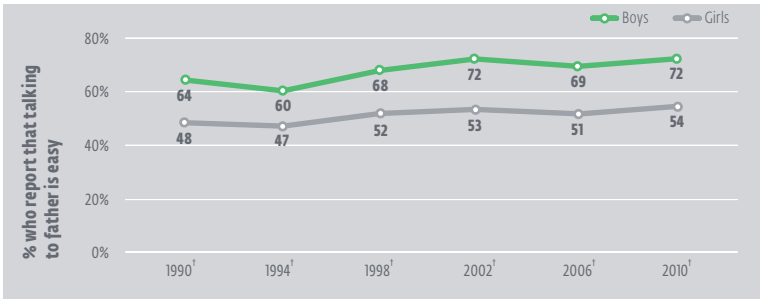
COMMUNICATION BETWEEN PARENTS AND ADOLESCENTS

Young people are more likely to find it easy to talk to their mother (80%) than to their father (63%) about things that really bother them. Easy communication with parents becomes less likely with age for both boys and girls (Figure 2.8). Seventy two percent (72%) of 11-year olds, 62% of 13-year olds and 54% of 15-year olds find it easy to talk to their father. Boys and girls find it equally easy to communicate with their mother, but boys find it easier than girls to talk to their father at all three ages (Figures 2.8 and 2.9).

Between 1990 and 2010 there was an increase in easy communication with fathers for boys but not for girls and very little change in easy communication with mothers for either boys or girls (Figures 2.10 and 2.11). The data also show a persistent gender difference in ease of communication with fathers but not mothers.

Figure 2.10:
EASY TO TALK TO FATHER 1990 – 2010

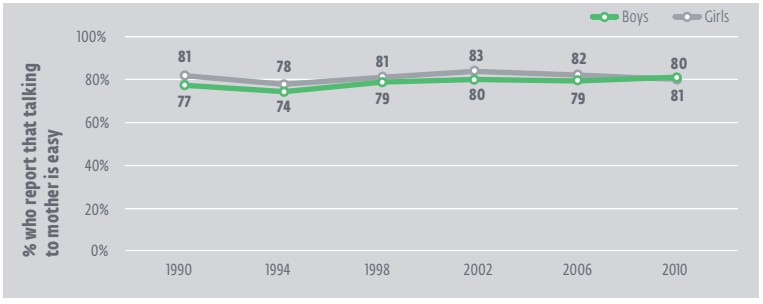
HBSC Scotland
1990 – 2010 Surveys



† Significant gender difference (p<0.01)

Figure 2.11:
EASY TO TALK TO MOTHER 1990 – 2010

HBSC Scotland
1990 – 2010 Surveys



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NOTES

1 Children were asked about where they live all or most of the time (their main home) and, if applicable, a second home (where they live some of the time). Results described in this report refer to their main or only home.

3

THE SCHOOL ENVIRONMENT

- One in four pupils (25%) like school a lot and 64% of pupils feel their classmates are kind and helpful, but these proportions vary by age and are greatest among 11-year olds
- 69% of pupils rate their school performance highly relative to their classmates, 74% of 11-year olds, 70% of 13-year olds and 65% of 15-year olds
- Pupils of all ages are affected by schoolwork pressure, from one in five 11-year olds (22%) to over half of all 15-year olds (54%)
- At ages 11 and 13 girls are more likely than boys to report that they like school a lot, but there is no gender difference at age 15
- At age 11 girls are more likely than boys to rate their school performance highly relative to their peers and to report that their classmates are kind and helpful, but there are no gender differences in secondary school
- At age 11 boys are more likely than girls to report that they are pressured by schoolwork, but at age 13 and 15 girls are more likely to report feeling the pressures of schoolwork

INTRODUCTION

Adolescents spend a large proportion of their time within the school environment. The way in which they perceive their school environment may, therefore, influence not only their academic achievement (Freeman et al., 2009), but also their physical and mental health (Roeser et al., 1996). Positive perceptions of the school social climate have previously been associated with fewer emotional and behavioural problems (Kuperminc et al., 1997).

Scotland's action framework for children and young people's health, *Delivering a Healthy Future* (Scottish Executive, 2007) identifies the school as having a unique opportunity to impact positively on young people's physical, mental and emotional health. This may present itself through education and training, the modelling of good examples, and the provision of supportive environments and opportunities. Furthermore, the Curriculum for Excellence (Scottish Executive, 2004) stipulates that mental, emotional, social and physical well-being is essential for successful learning. As such, it aims to promote a learning environment in which young people are able to develop the knowledge and understanding, as well as the skills and capabilities required for well-being, both within their school career and for their future. Teachers are encouraged to foster a safe, caring, supportive and purposeful environment that enables the development of relationships based on mutual respect.

An important element of school life is the degree to which young people feel a sense of belonging (Osterman, 2000). Relationships with peers, friends and teachers all contribute to this feeling. Previous findings confirm that the school environment and its disciplinary climate can predict student health and well-being outcomes (Saab and Klinger, 2010). Young people who hold positive perceptions of their school environment, perceive their teachers as supportive, and have a supportive peer network are more likely to engage in health promoting behaviours (McLellan et al., 1999). Positive school perceptions have also been associated with high academic achievement, low truancy, high teacher and peer support, as well as more positive emotional health and lower incidence of bullying (Freeman et al., 2009). Likewise, positive classroom management climates, participation in extracurricular activities, tolerant disciplinary policies and small school size have all been positively associated with higher school connectedness (McNeely et al., 2002). The school environment has been shown to affect girls' general perceived health and life satisfaction more than that of boys (Raven-Sieberer et al., 2009).

HBSC FINDINGS

The HBSC survey contains a number of questions that relate closely to the school environment: how much pupils enjoy school (data collected since 1990), perceived academic performance (data collected since 1998), pressure from schoolwork (data collected since 1994) and support from classmates (data collected since 2002).

ENJOYMENT OF SCHOOL

One in four young people (25%) report that they like school a lot. However, this decreases with age group as shown in Figure 3.1; 37% of 11-year olds, 23% of 13-year olds and 14% of 15-year olds say they like school a lot. Boys are less likely than girls to report liking school a lot at ages 11 and 13, although there is no gender difference at age 15.

Figure 3.2 also shows the consistent differences over time between boys and girls in liking school a lot (except in 2002). There has been little change since 1994 in the proportion of boys or girls who report they like school a lot.

PERFORMANCE AT SCHOOL

Young people were asked how they thought their teachers rated their school performance compared with their classmates. Sixty six percent (66%) of boys and 73% of girls feel their performance is good or very good, although perceived performance is lower among older pupils. Seventy four percent (74%) of 11-year olds, 70% of 13-year olds and 65% of 15-year olds report high school performance (Figure 3.3). At age 11, girls tend to rate their performance higher than boys.

Figure 3.1:
LIKE SCHOOL A LOT

HBSC Scotland
2010 Survey

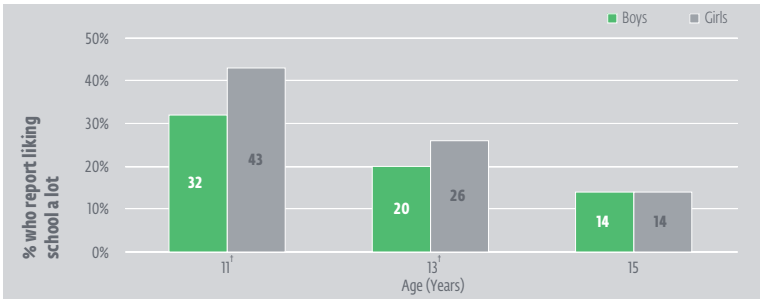


Figure 3.2:
LIKE SCHOOL A LOT 1990 – 2010

HBSC Scotland
1990 – 2010 Surveys

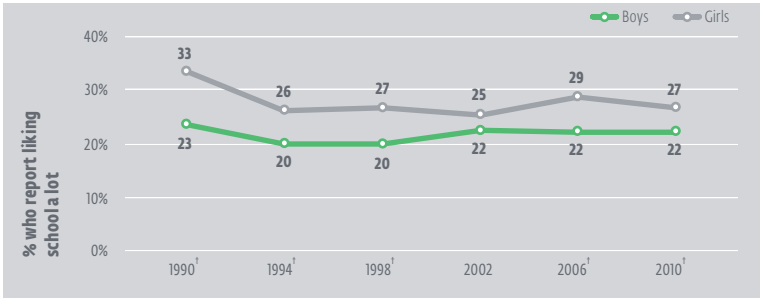


Figure 3.3:
GOOD ACADEMIC PERFORMANCE AT SCHOOL

HBSC Scotland
2010 Survey

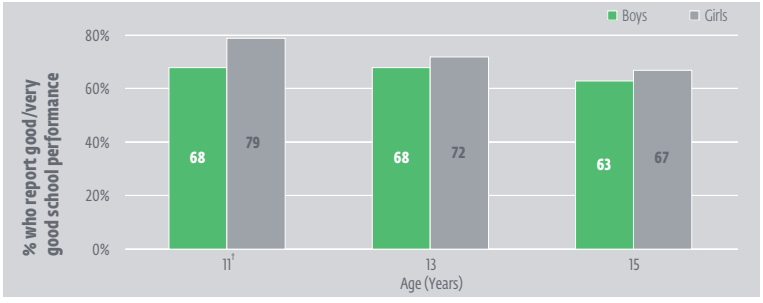


Figure 3.4:
GOOD ACADEMIC PERFORMANCE AT SCHOOL 1998 – 2010

HBSC Scotland
1990 – 2010 Surveys

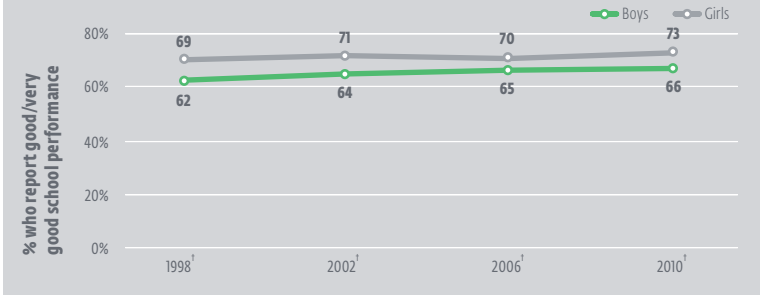
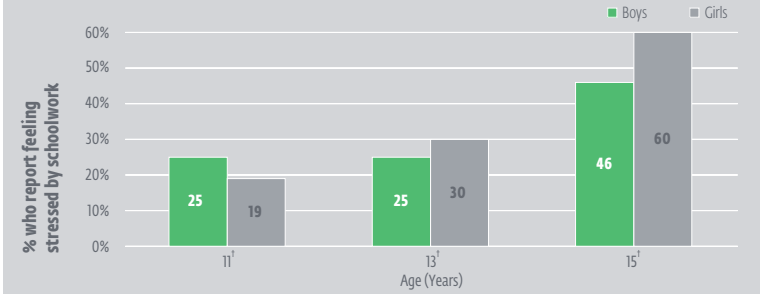


Figure 3.5:
FEEL PRESSURED BY SCHOOLWORK

HBSC Scotland
2010 Survey



Trend data show that there has been little change in the past four surveys in young people's perceptions of their performance at school (Figure 3.4). However, a gender difference is apparent at each time point, with a higher proportion of girls than boys reporting 'good' or 'very good' performance.

PRESSURE OF SCHOOL WORK

Approximately one in three young people (34%), report that they feel some or a lot of pressure from schoolwork (Figure 3.5). Feeling pressured by school work is most likely to be reported by older pupils; 54% of 15-year olds compared with 28% of 13-year olds and 22% of 11-year olds. Among 15-year olds, there is a substantial gender difference, with substantially more girls than boys reporting feeling pressured (60% and 46% respectively). There are smaller gender differences among younger pupils, and among 11-year olds, girls feel less pressured than boys (19% and 25% respectively).

The proportions of girls and boys feeling pressured by schoolwork in 2010 (37% and 32% respectively) are higher than in 2006 for both genders, and are a similar level to those in 2002 (Figure 3.6).

CLASSMATE SUPPORT

Sixty four percent (64%) of young people agree with the statement 'most of the pupils in my class(es) are kind and helpful', but the proportion is smaller at the older ages; 75% of 11-year olds, 59% of 13-year olds and 57% of 15-year olds (Figure 3.7). More girls than boys report that their classmates are kind and helpful at age 11 (78% and 72% respectively). In 2010, fewer pupils report that their classmates are kind and helpful compared with 2002 (Figure 3.8). Whereas in 2002, 70% of both boys and girls report there classmates in this way, in 2010 this has declined to 65% of girls and 62% of boys.

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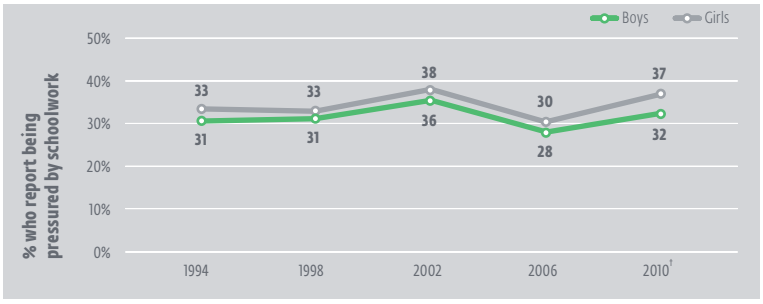
Figure 3.6:
FEEL PRESSURED BY SCHOOLWORK 1994 – 2010

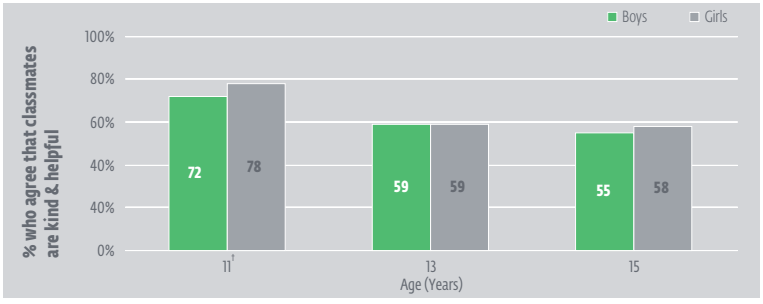
HBSC Scotland
1994 – 2010 Surveys



† Significant gender difference (p<0.01)

Figure 3.7:
CLASSMATES KIND AND HELPFUL

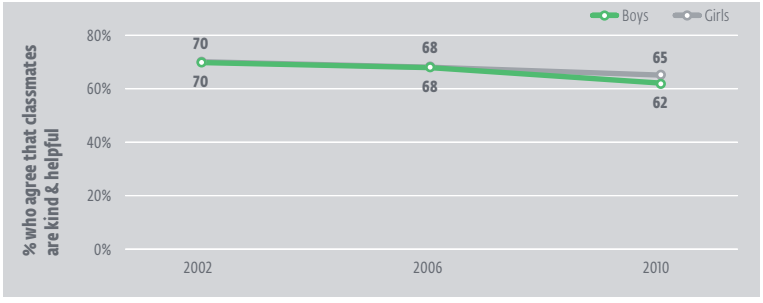
HBSC Scotland
2010 Survey



† Significant gender difference (p<0.01)

Figure 3.8:
CLASSMATES KIND AND HELPFUL 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys



4

PEER RELATIONS

- Boys are more likely than girls to spend time with friends immediately after school (35% compared with 28%) and 15-year old boys are more likely than 15-year old girls to spend time with friends in the evening (39% compared with 32%)
- Frequent contact with friends after school and in the evening has declined between 2002 and 2010
- Most young people (88%) say they find it easy to talk to their best friend about things that really bother them
- Easy communication with best friend is most prevalent at age 15 (92%) and across all three ages girls find it easier to talk to their best friend than boys do (93% compared with 84%)
- Half of young people (52%) contact their friends daily via phone, text messages and/or the internet. Electronic media contact is more common among girls than boys, and among older rather than younger adolescents

INTRODUCTION

As young people move through adolescence, they spend increasing amounts of time with their peers, both in and out of school (Kuntsche and Delgrande Jordon, 2006). Adolescence is a time when health-behaviours are developing and track into adulthood (Gordon-Larsen et al., 2004). A young person's peers and the relationships they form at this time may have an effect on the types of behaviours they adopt. For instance, peers have been shown to share similarities in risk behaviours, including smoking (Holliday et al., 2010), alcohol consumption (Ali and Dwyer, 2010), risky sexual behaviours (Ali and Dwyer, 2011) and eating disorders (Hutchinson and Rapee, 2007). Conversely, social support from friends has been positively associated with increased levels of physical activity (Duncan et al., 2005). Adolescent girls, for example, are more physically active if their close friends engage in high levels of physical activity (Voorhees et al., 2005). However, whether young people seek out friends with similar behaviours to themselves or whether they conform to peer group norms is unclear.

The number of friends a young person has, and the way in which they fit into friendship networks, may also affect well-being. Isolation from peers can lead to psychological symptoms such as depression and low self-esteem (Hall-Lande et al., 2007), whereas adolescents who are integrated into friendship networks at school and experience feelings of belonging report fewer depressive symptoms (Ueno, 2005).

A core element of peer groups is the ability for frequent interaction and communication (Steinberg, 2002). Young people who report better communication with their peers show fewer psychological complaints (Moreno et al., 2009). The use of electronic media communication among young people is increasing, thereby adding an extra dimension to peer relations and creating new possibilities for peer communication. A recent cross-national comparison showed that electronic media communication among adolescents facilitated face-to-face peer contacts rather than superseding it (Kuntsche et al., 2009).

Peer relations fit into a broader context of social well-being, as identified within the Curriculum for Excellence (Scottish Executive, 2004) which reports being and feeling secure in relationships with family, friends and community, having a sense of belonging and recognising and understanding contribution in society as core outcomes.

HBSC FINDINGS

Several aspects of peer relations are measured within the HBSC survey. These include number of friends, time spent with friends, use of electronic media communication and ease of talking to best friend. Data on time spent with friends straight after school and in the evenings have been collected since 2002 and 1994 respectively, allowing for examination of trends over a number of years.

NUMBER OF CLOSE FRIENDS

The majority of young people report having several close friends. Less than 1% say they have no close friends, 1% have just one, 2% have two and 96% have three or more close friends. The vast majority of boys (88%) and girls (92%) have three or more close friends of the same sex and this does not vary with age (Figure 4.1). Opposite sex friendships, however, do vary with age; approximately 54% of 11-year old boys and girls have three of more friends of the opposite sex compared with 67% of 13 and 15-year old pupils.

PEER CONTACT FREQUENCY

Thirty one percent (31%) of young people (35% of boys and 28% of girls) have frequent contact with their friends after school. Boys are more likely than girls to have frequent contact with friends immediately after school and 15-year olds are less likely than younger boys and girls to have frequent after school contact (Figure 4.2).

Figure 4.1:
THREE OR MORE CLOSE FRIENDS OF SAME SEX

HBSC Scotland 2010 Survey

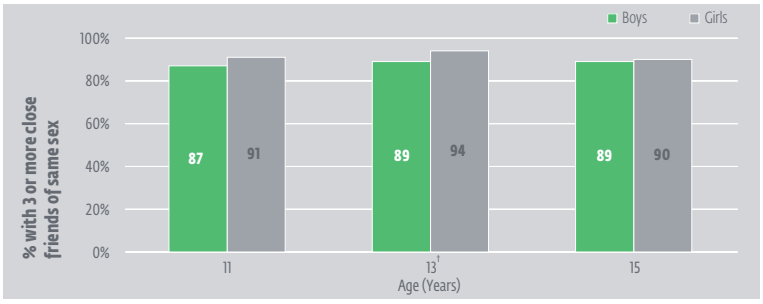


Figure 4.2:
SPEND TIME WITH FRIENDS AFTER SCHOOL 4+ DAYS/WEEK

HBSC Scotland 2010 Survey

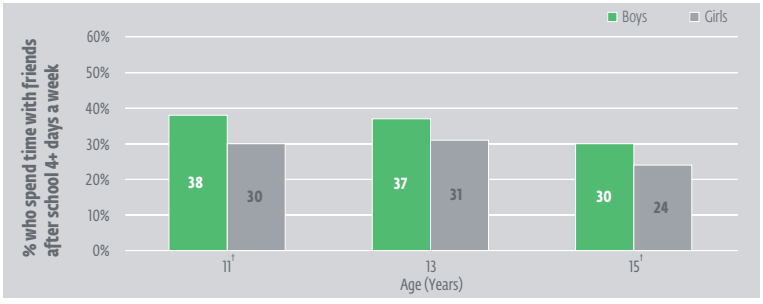


Figure 4.3:
SPEND TIME WITH FRIENDS ON 4+ EVENINGS/WEEK

HBSC Scotland 2010 Survey

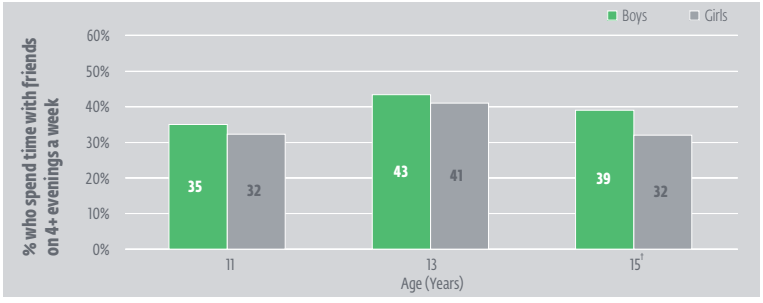


Figure 4.4:
SPEND TIME WITH FRIENDS AFTER SCHOOL 4+ DAYS/WEEK: 2002 – 2010

HBSC Scotland 2002 – 2010 Surveys

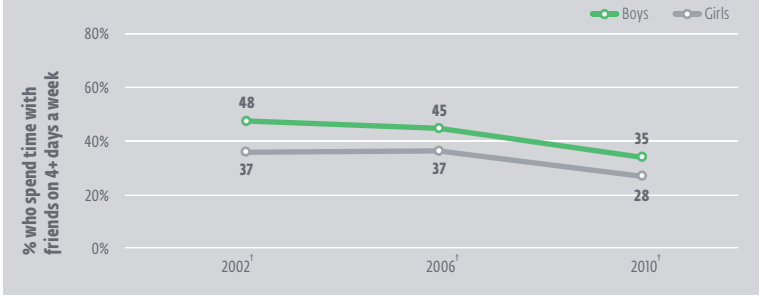


Figure 4.5:
SPEND TIME WITH FRIENDS ON 4+ EVENINGS/WEEK: 1994 – 2010

HBSC Scotland 1994 – 2010 Surveys

Thirty seven percent (37%) of young people (39% of boys and 35% of girls) have frequent contact with their friends in the evenings. There is no gender difference in time spent with friends in the evening among 11 or 13-year olds (Figure 4.3). At age 15, however, boys are more likely than girls to report frequent contact with friends in the evening.

Frequent peer contact after school has declined between 2002 and 2010. In 2002, 48% of boys and 37% of girls reported spending time with friends immediately after school on 4 or more days a week compared with 2010, when only 35% of boys and 28% of girls reported this frequency of contact (Figure 4.4).

Between 1994 and 2002 rates of frequent contact with friends in the evening remained constant, but have since declined among both boys and girls from 58% of boys and 49% of girls reporting spending 4 or more evenings per week with friends to 39% and 35% of boys and girls respectively in 2010 (Figure 4.5). Frequent contact has remained consistently higher among boys, but this gender difference is smaller in 2010 than that found in previous surveys.

COMMUNICATION WITH BEST FRIEND

Most young people (88%) say they find it easy ('easy' or 'very easy') to talk to their best friend about things that really bother them (93% of girls and 84% of boys). A small proportion of young people say they do not have a best friend (1% of girls and 3% of boys). Easy communication with a best friend is most prevalent at the age 15 (92%) and at all ages girls find it easier to talk to their best friend than boys do (Figure 4.6).

ELECTRONIC MEDIA CONTACT

Fifty-two percent (52%) of young people report daily contact with friends using the phone, texting or using the internet (61% of girls and 43% of boys). Older boys and girls are more likely to use electronic media daily to contact their friends than their younger counterparts (Figure 4.7). Gender differences are apparent within all three age groups, with girls more likely than boys to use electronic media daily to contact friends.

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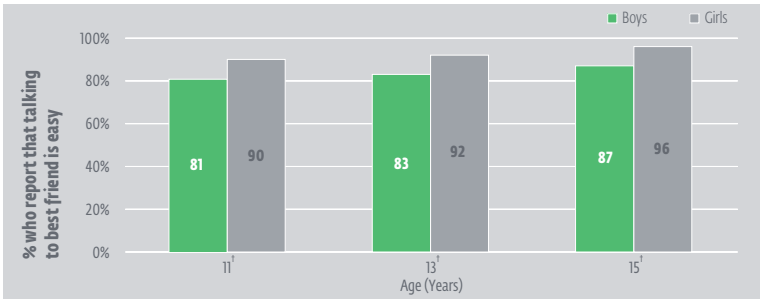
Figure 4.6:
EASY TO TALK TO BEST FRIEND

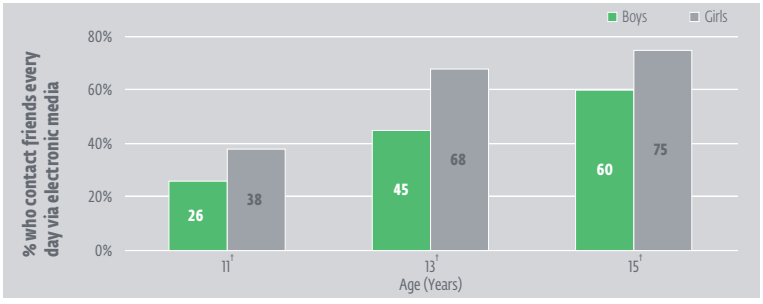
HBSC Scotland 2010 Survey



† Significant gender difference (p<0.01)

Figure 4.7:
ELECTRONIC MEDIA CONTACT WITH FRIENDS EVERY DAY

HBSC Scotland 2010 Survey



† Significant gender difference (p<0.01)

5

NEIGHBOURHOOD ENVIRONMENT

- 51% of young people always feel safe in their local area, 54% of boys and 48% of girls. A further 38% feel safe most of the time
- 33% of young people think their local area is a really good place to live, 36% of boys and 31% of girls, with larger proportions at age 13
- Half of young people agree that there are good places to go locally and two thirds of young people feel they trust people in their local area, with larger proportions at age 13
- At age 15, both boys and girls are less likely to have a favourable perception of their local area compared with at ages 11 and 13
- At age 15, girls use green space less frequently and for shorter periods compared with 13-year old girls, or boys of either age

INTRODUCTION

The place in which young people live may impact on their health (Diez Roux and Mair, 2010). This includes aspects of both the social environment (e.g. socio-economic status (SES), sense of community) and the physical environment (e.g. walkability, safety, access to facilities, greenspace[1]). Studies on the link between the neighbourhood and health have shown that place has an independent effect on health over and above individual characteristics (Pickett and Pearl, 2001). The relationship between neighbourhood factors and health may vary according to the population subgroup studied (Parkes and Kearns, 2006).

The Scottish Government acknowledges the importance of quality open spaces and sports facilities in both urban and rural settings in engaging people in more physically active lives. This ultimately aims at improving mental health and well-being, as well as providing a resource for education among young people (Scottish Government, 2007). *Good Places, Better Health* (Scottish Government, 2008a) recognises that to deliver on the Government's purpose, themes, and national outcomes there is a need for greater connections around how the physical environment influences health. Furthermore, *Equally Well*, the report of the Ministerial Task Force on Health Inequalities highlighted the need to work to reduce further people's exposure to factors in their physical and social environments that cause stress, damage health and wellbeing and lead to inequalities (Scottish Government, 2008b).

The relationship between the neighbourhood environment and health is commonly investigated within the context of physical activity. Higher levels of physical activity among adolescents have, for example, been associated with aesthetics and access to recreational facilities (Mota et al., 2005). Similarly, children with social networks in the neighbourhood and more positive perceptions of neighbourhood social capital tend to be more physically active (Hume et al., 2009). The influence of such factors however is complex. Social factors may interact with neighbourhood resources. For example, the availability of parks may provide greater opportunities for meeting others (Maas et al., 2009). However, anti-social behaviour and crime may have a negative impact on park use.

Poorer neighbourhoods have been associated with increased crime and traffic, poorer services, more hazardous play spaces and are more physically deteriorated than wealthier neighbourhoods (Evans, 2004). Individuals living in high SES neighbourhoods have reported lower incidence of mental health problems and emotional stress than those living in low SES neighbourhoods (Xue et al., 2005). Despite better accessibility to greenspace in some deprived areas, people within them have reported more negative perceptions and are less likely to use greenspace (Jones et al., 2009).

HBSC FINDINGS

HBSC collects data on several neighbourhood environment variables, including young people's perceptions of their neighbourhood, neighbourhood safety and use of local greenspace. These questions were only asked of S2 and S4 pupils.

FEEL SAFE IN LOCAL AREA

Fifty one percent (51%) of young people always feel safe in their local area, 53% of boys and 48% of girls (Figure 5.1). A further 38% feel safe most of the time. The proportion who always feel safe in their local area does not differ between ages 13 and 15 among boys. Among girls, however, it is smaller for 15-year olds (46% compared with 51% of 13-year olds), so that a gender difference in always feeling safe exists only at age 15.

LOCAL AREA IS A GOOD PLACE TO LIVE

One third (33%) of young people think their local area is a really good place to live, 36% of boys and 31% of girls. Proportions are greater at age 13 for both boys (41% compared with 31% at age 15) and girls (35% compared with 27% at age 15) (Figure 5.2). Seven percent (7%) of boys and girls think their local area is not a good place to live, with a higher proportion at age 15 (9%) than 13 (6%).

Figure 5.1:
FEELING SAFE IN LOCAL AREA

HBSC Scotland 2010 Survey

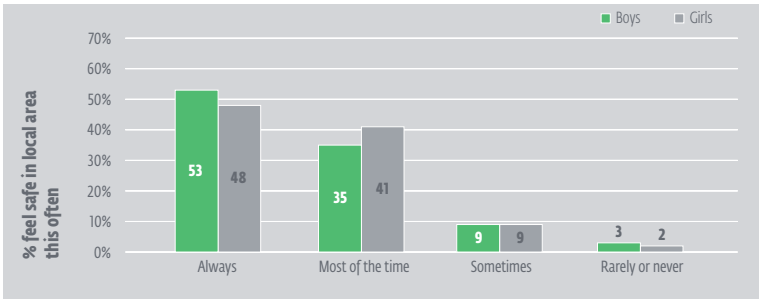


Figure 5.2:
LOCAL AREA IS A GOOD PLACE TO LIVE BY AGE

HBSC Scotland 2010 Survey

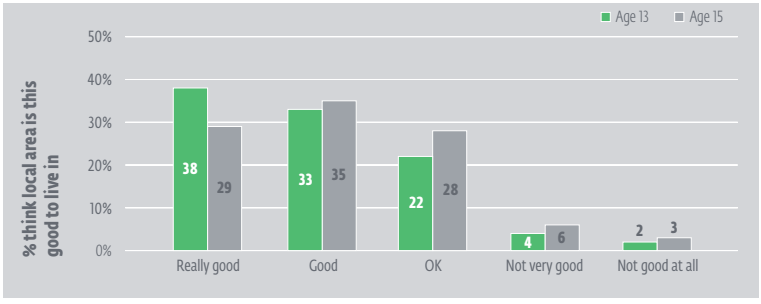
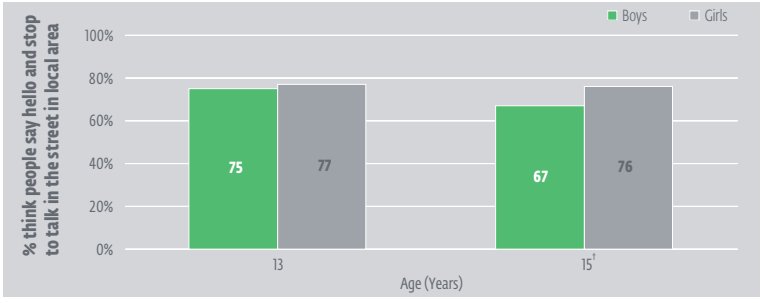


Figure 5.3:
PEOPLE SAY HELLO AND STOP TO TALK IN THE STREET

HBSC Scotland 2010 Survey



† Significant gender difference ($p<0.01$)

Figure 5.4:
SAFE FOR CHILDREN TO PLAY OUTSIDE

HBSC Scotland 2010 Survey

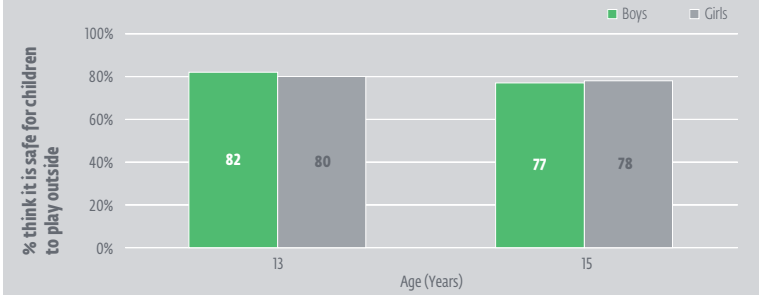
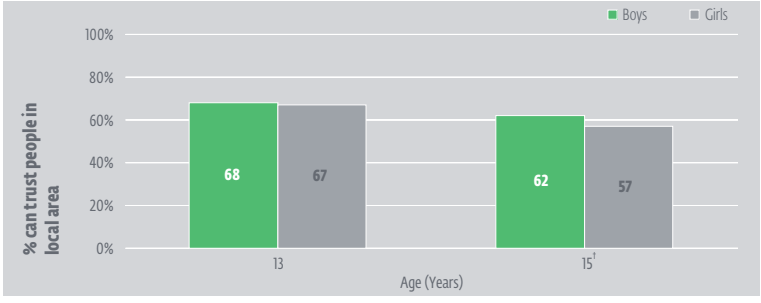


Figure 5.5:
ABLE TO TRUST PEOPLE

HBSC Scotland 2010 Survey



† Significant gender difference ($p<0.01$)

GENERAL PERCEPTIONS OF LOCAL AREA

Young people were presented with six statements regarding their local area and asked to what extent they agreed with each. Seventy four percent (74%) of young people agree that people say hello and talk to each other in the street, 71% of boys and 77% of girls. When split by age, a gender difference is only seen at age 15, where 67% of boys agree compared with 76% of girls (Figure 5.3). A further 12% of young people neither agree nor disagree and the remaining 14% disagree with this statement.

Seventy nine percent (79%) of young people feel it is safe for children to play outside, an equivalent proportion of boys and girls (Figure 5.4). This proportion is smaller at age 15 for boys only (77% compared with 82% at age 13). Nine percent (9%) do not agree with this statement.

Sixty four percent (64%) of young people agree that they can trust people in their local area, 65% of boys and 62% of girls. This proportion is greater at age 13 (68% compared with 60% at age 15) but this age difference is significant among girls only (Figure 5.5).

Approximately half of young people (51%) agree that there are good places to spend their free time locally, 54% of boys and 49% of girls. Proportions are greater at age 13 than age 15 among both boys and girls (Figure 5.6). At age 13, 24% of boys and 27% of girls disagree with the statement, while at age 15, 36% of boys and 41% of girls do so.

Seventy one percent (71%) of young people agree that they can ask for help from neighbours, an equal proportion of boys and girls. The proportion of girls that feel they can ask for help does not change with age however for boys this proportion is smaller at age 15 (Figure 5.7). Seventeen percent (17%) neither agree nor disagree with the statement, and a further 13% disagree.

Fifty eight percent (58%) of young people do not feel that most people in their neighbourhood would try to take advantage of them if they got the chance. A further 19% do feel most people would take advantage, while the remaining 23% neither agree nor disagree with this statement. These proportions do not differ by age group or gender (Figure 5.8).

When responses to all six items were combined, a favourable perception of local area was defined as agreement to the first five statements and disagreement to the sixth. One fifth (20%) of young people have a favourable perception of their local area, an equal proportion of boys and girls (Figure 5.9). A greater proportion of 13-year olds have a favourable perception of their local area (23% compared with 16% of 15-year olds).

Figure 5.6:
GOOD PLACES TO SPEND FREE TIME

HBSC Scotland 2010 Survey

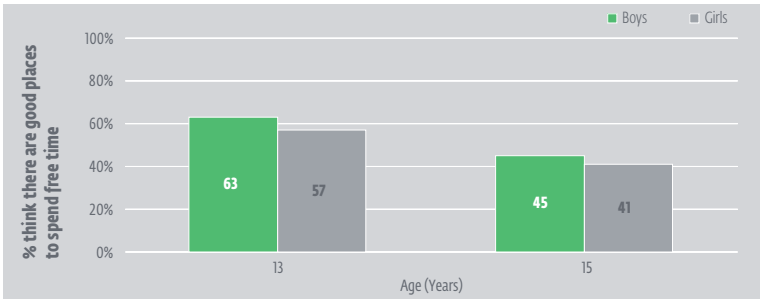


Figure 5.7:
ABLE TO ASK FOR HELP FROM NEIGHBOURS

HBSC Scotland 2010 Survey

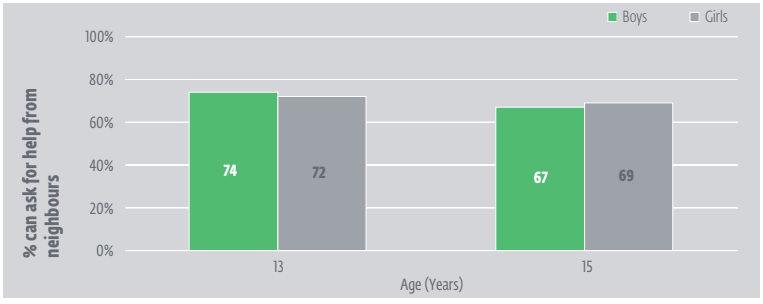


Figure 5.8:
MOST PEOPLE WOULD NOT TRY TO TAKE ADVANTAGE OF YOU

HBSC Scotland 2010 Survey

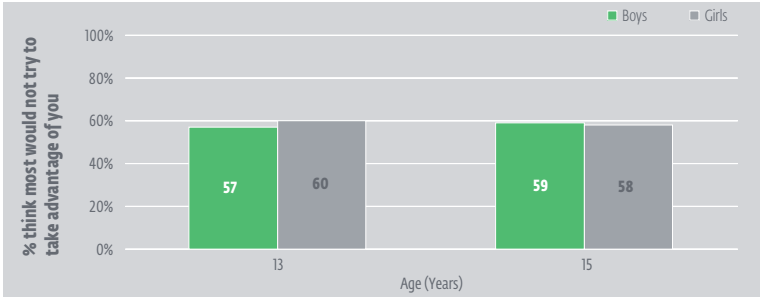
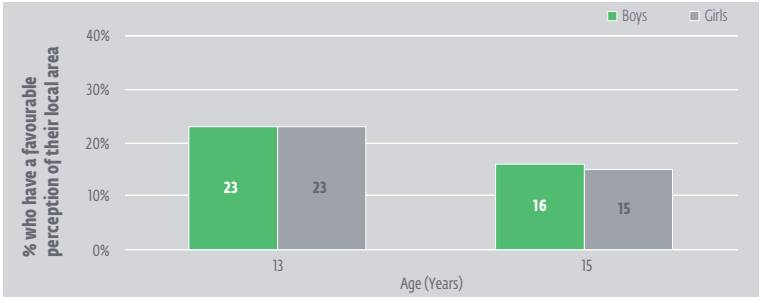


Figure 5.9:
FAVOURABLE PERCEPTION OF LOCAL AREA

HBSC Scotland 2010 Survey



USE OF LOCAL GREENSPACE

For the first time, data on time spent in local greenspace were collected in the 2010 survey. When asked how often they use their local greenspace in the summertime, 11% report that they are infrequent users (less than once a month), 19% are occasional users (1-3 times per month) and 71% are frequent users (at least once a week). Seventy four percent (74%) of 13-year olds and 68% of 15-year olds are frequent users of greenspace with more boys than girls at age 15 (Figure 5.10).

When asked how many hours a week they spent in their local greenspace during the summertime, 19% were classified as non/light users (one hour or less), 23% as moderate users (between 1 and 4 hours a week) and 58% as heavy users (more than 4 hours a week). At age 13 no gender difference was seen. However, at age 15, girls were less likely to be heavy users (50% compared with 61% of boys) and more likely to be non/light users (26% compared with 18%) (Figure 5.11).

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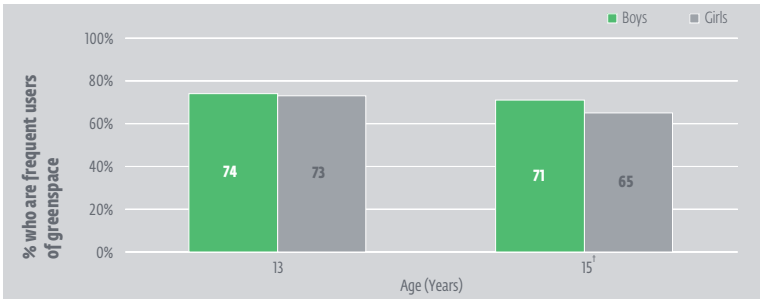
NOTES

1 Parks, play areas, public gardens, woods, playing fields or sports pitches, golf courses, beaches, canals, rivers or by lochs, other types of natural open space.

Figure 5.10:
FREQUENT USER OF LOCAL GREENSPACE

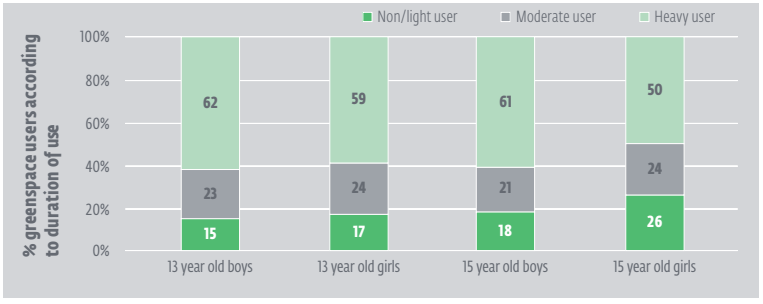
HBSC Scotland
2010 Survey



† Significant gender difference (p<0.01)

Figure 5.11:
DURATION OF USE OF LOCAL GREENSPACE

HBSC Scotland
2010 Surveys



6

EATING HABITS

- Almost three quarters of young people (72%) eat a meal with their family four or more days a week and almost two thirds (63%) eat breakfast every school day
- Frequency of family meals and breakfast consumption is greater among younger adolescents
- 36% of young people eat fruit daily and 36% eat vegetables daily. Fruit and vegetable consumption is higher among girls than boys
- The proportion of young people eating fruit daily is greater among younger adolescents, while there is no age difference in consumption of vegetables
- Girls and boys are equally likely to eat sweets (29%), crisps (21%) or chips (8%) daily
- Between 2002 and 2010, daily sweet consumption fell by a third while consumption of crisps and chips halved

INTRODUCTION

A balanced diet during childhood and adolescence is essential to good health, particularly as eating habits formed during this time are thought to track into adulthood, influencing the risk of major chronic diseases (McPherson et al., 1995). The need to focus on young people's diet in Scotland has received increasing government attention over the last two decades. The Scottish diet has been defined as a key priority area, particularly among young people (Scottish Executive, 2003; 2007; Scottish Government, 2008). Recent policy documents have highlighted the particular importance of nutrition in tackling obesity (Scottish Government, 2008) and *Recipe for Success*, The National Food and Drink Policy for Scotland was launched in June 2009 (Scottish Government, 2009).

Food and drink choices present themselves throughout the day, and as children move into adolescence they gain greater control over these choices, with more opportunities to choose and buy their own food and drinks outside the home (Cooke et al., 2005).

Cross-national comparisons have highlighted issues surrounding the diet of Scottish schoolchildren in the international context of Europe and North America. In Scotland, breakfast consumption is low compared to other European countries (Haug et al., 2009; Vereecken et al., 2009), and although fruit and vegetable consumption is comparable with other nations, less than 50% of young people report eating fruit and vegetables daily across Europe and North America (Haug et al., 2009).

The importance of diet and health promotion in schools has been the focus of a number of recent Scottish Government initiatives. As a result of the *Hungry for Success* initiative (Scottish Executive, 2002), school meals across Scotland have undergone major transformations. In particular, the Schools (Health Promotion and Nutrition) (Scotland) Act (2007) places duties on education authorities to comply with nutritional requirements, as well as to promote school lunches. The provision of free school lunches where appropriate is also stated, whilst taking steps to protect the identity of those pupils receiving them. However, evidence from the Consumer Focus Scotland 'Out to lunch' report (2008) suggests that several factors influence young people's choices to leave school for lunch, including being with friends, independence, exercise, being away from the school environment and buying food which is perceived as better quality and value for money. The Act has identified a need for health promoting schools to help children and young people to develop an understanding of the relationship between food, health and wellbeing. Furthermore, the need to develop an awareness of various issues regarding food, including sourcing and production and cultural differences is also identified. The Curriculum for Excellence (Scottish Executive, 2004), in conjunction with guidance on the Schools (Health Promotion and Nutrition) (Scotland) Act, further describes the expectations, on individuals, schools and local authorities for promoting the health and wellbeing of children and young people.

A regular family meal is an aspect of family life which has been demonstrated to benefit young people. Eating together as a family during childhood may have multiple benefits in later years (Franko et al, 2008). Frequent family meals have been associated with the development of 'regular' eating patterns, thereby decreasing the risk of unhealthy weight control (Videon and Manning, 2003), and enhancing health and well-being (Eisenberg et al, 2004). Breakfast consumption is an important component of nutrition and, as part of a healthy diet and lifestyle, can positively impact on children's health and well-being (Rampersaud et al., 2005). Skipping breakfast is associated with increased consumption of snacks during the rest of the day (Berkey et al., 2003). Fruit and vegetables are vital components of a healthy diet and protect against certain diseases such as heart disease and some cancers (Department of Health, 2000). Common snack foods among young people include sugary drinks, crisps and sweets. Evidence has linked high intake of sugary snacks with dental caries (Sheiham and Watt, 2000) as well as increased risk of overweight (Nicklas et al, 2003). Furthermore, high TV viewing rates have been associated with higher rates of daily consumption of sugared drinks and sweets (Vereecken et al, 2006).

Figure 6.1:
FREQUENCY OF FAMILY MEALS BY AGE

HBSC Scotland
2010 Survey

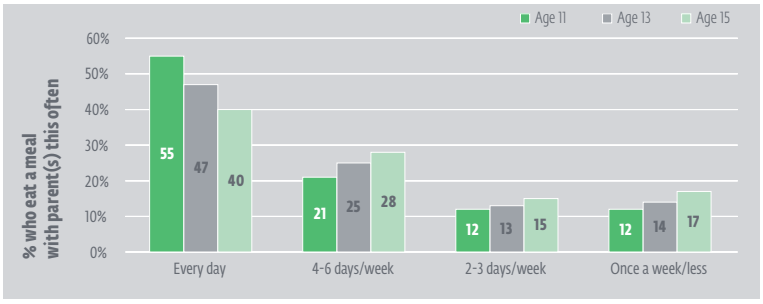
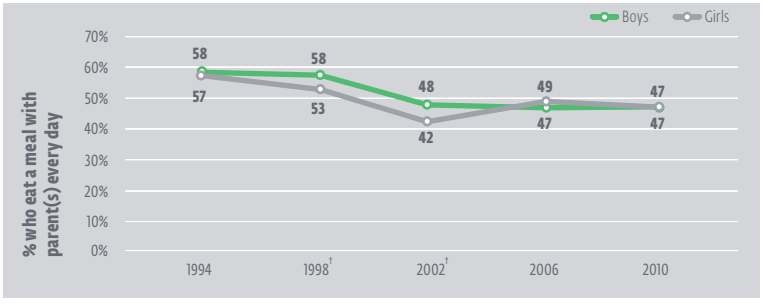


Figure 6.2:
DAILY FAMILY MEALS 1994 – 2010

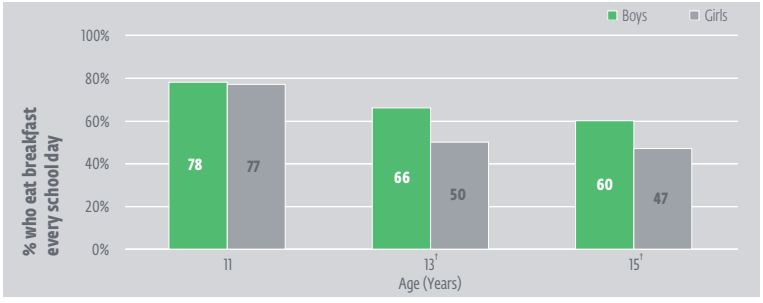
HBSC Scotland
1994 – 2010 Surveys



† Significant gender difference (p<0.01)

Figure 6.3:
EAT BREAKFAST EVERY MORNING ON SCHOOL DAYS

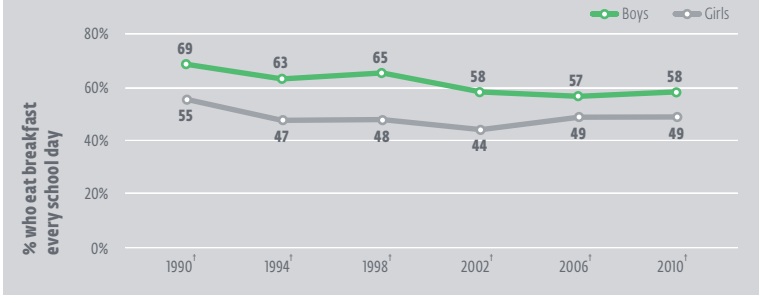
HBSC Scotland
2010 Survey



† Significant gender difference (p<0.01)

Figure 6.4:
EAT BREAKFAST EVERY MORNING ON SCHOOL DAYS 1990 – 2010

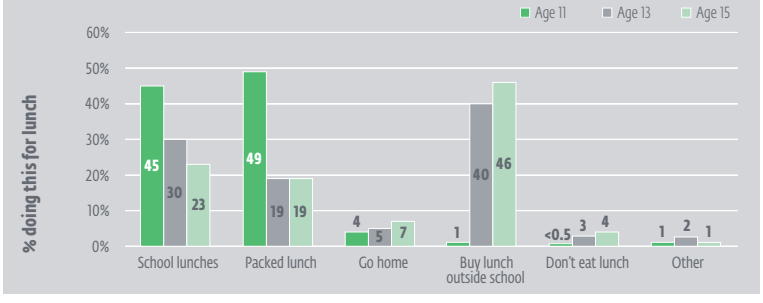
HBSC Scotland
1990 – 2010 Surveys



† Significant gender difference (p<0.01)

Figure 6.5:
WHAT PUPILS DO FOR LUNCH ON SCHOOL DAYS BY AGE

HBSC Scotland
2010 Survey



HBSC FINDINGS

The HBSC study measures the frequency with which a range of foods and drinks is consumed, as well as young people's experience of eating family meals, breakfast and school meals. Comparable information on daily food and drink consumption has been collected since 2002.

FAMILY MEALS

Almost three quarters (72%) of young people eat a meal with their family everyday. Over half of 11-year olds (55%) eat a meal with their parents every day compared with 40% of 15-year olds (Figure 6.1). A further 28% of 15-year olds eat a family meal 4-6 days a week and 17% eat with their parents once a week or less often. There is no gender difference in the reported frequency of family meals.

The frequency with which young people eat family meals has been included in the Scottish HBSC survey since 1994. In 1994, 58% of young people ate a meal with their parents every day but this has fallen to 47% in 2010 (Figure 6.2). There was an increase in the proportion of girls reporting daily family meals between 2002 and 2010 (42% to 47%) but this is still lower than in 1994 (57%).

BREAKFAST CONSUMPTION

Almost two thirds (63%) of young people eat breakfast every school day. Eating breakfast every school day is more common among younger adolescents; 78% of 11-year olds do so compared with 54% of 15-year olds. Whilst there is no gender difference at age 11, at 13 and 15 girls are less likely to eat breakfast than boys (Figure 6.3). There was a gradual decline between 1990 and 2002 in daily breakfast consumption, although this was followed by a small increase between 2002 and 2006 among girls[1]. A persistent gender difference is evident over the last 20 years, with girls consistently less likely to eat breakfast than boys (Figure 6.4).

LUNCH ON SCHOOL DAYS

Almost all 11-year olds (93%) report that they eat either a packed lunch or a school dinner on school days, while 4% go home for lunch (Figure 6.5). Among 13- and 15-year olds, the most common option for lunch is buying it outside school from a local shop, café or van (40% and 46% respectively), followed by eating school lunches (30% and 23% respectively). Eating a packed lunch is far less common among secondary pupils (19%). Four percent (4%) of 15-year olds report not eating lunch at all and 7% go home for lunch. Girls are more likely than boys to eat a school lunch (36% versus 29%) or a packed lunch (32% versus 27%) and boys are more likely than girls to buy their lunch outside school (35% compared with 23%).

Compared with survey results of 2006, when this item was first included in the HBSC survey, there has been no change in school lunch choices among all three age groups.

FRUIT AND VEGETABLE CONSUMPTION

Overall, 36% of young people eat fruit daily. Daily fruit consumption is lower at age 13 than 11 (33% compared with 46%). A higher proportion of girls than boys consume fruit daily at ages 11 and 15 (Figure 6.6). There was no consistent trend in fruit consumption between 2002 and 2010 (Figure 6.7). Girls were more likely than boys to consume fruit at all three time points.

Similarly, 36% of young people eat vegetables daily and girls are more likely to than boys at ages 11 and 15. However, daily consumption is equivalent across all age groups (Figure 6.8). As with daily fruit consumption, there was no consistent trend between 2002 and 2010 (Figure 6.9), but girls were more likely than boys to consume vegetables at all three time points.

Figure 6.6:
DAILY FRUIT CONSUMPTION

HBSC Scotland
2010 Survey

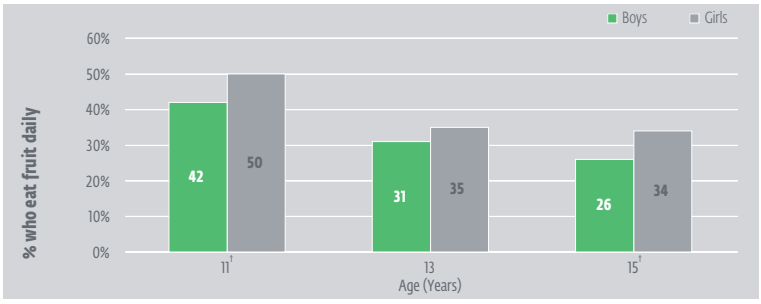


Figure 6.7:
DAILY FRUIT CONSUMPTION 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys

Figure 6.8:
DAILY VEGETABLE CONSUMPTION

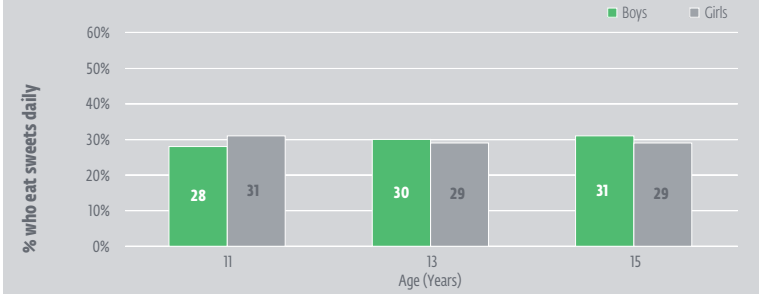
HBSC Scotland
2010 Survey

Figure 6.9:
DAILY VEGETABLE CONSUMPTION 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys

Figure 6.10:
DAILY SWEETS CONSUMPTION

HBSC Scotland
2010 Survey



CONSUMPTION OF SWEETS, CRISPS AND CHIPS

Twenty-nine percent (29%) of young people eat sweets every day with similar proportions of boys and girls at each age (Figure 6.10). There is no difference in daily consumption of sweets between ages 11 and 15. Daily consumption of sweets has declined significantly since 2002 from 47% to 30% for boys and 43% to 29% for girls (Figure 6.11). This reduction is seen across all three age groups.

Twenty-one percent (21%) of young people eat crisps every day. Crisp consumption is approximately the same for boys and girls and does not differ by age (Figure 6.12). Daily consumption of crisps has halved since 2002 from 40% to 21% in 2010 (Figure 6.13). This reduction is seen across all three age groups but is particularly great among 11-year olds (from 44% to 22%) and 13-year olds (from 40% to 18%).

Eight percent (8%) of young people eat chips daily. There are no gender differences in daily consumption at younger ages, but at age 15 girls are less likely than boys to eat chips daily (Figure 6.14). Boys' daily consumption of chips does not differ across age groups, however among girls the proportion eating chips daily is greater for 11-year olds than 13 and 15-year olds. Daily consumption of chips has more than halved since 2002, from 22% to 9% among boys, and from 16% to 7% among girls (Figure 6.15). This reduction is seen across all three age groups but is greatest for 13-year olds (from 20% to 7%).

CONSUMPTION OF SUGARY DRINKS AND DIET SOFT DRINKS

Coke or other sugary drinks are only consumed daily by 22% of young people (25% of boys; 18% of girls). When split by age, a gender difference is found among 13- and 15-year olds (Figure 6.16). Daily consumption of sugary soft drinks increases between ages 11 and 15 (16% to 26%), and this increase is particularly marked among boys. The proportion drinking sugary drinks has decreased since 2006 (from 32% to 25% of boys and from 25% to 18% of girls).

Figure 6.17 shows daily consumption of diet soft drinks. Thirteen percent (13%) of young people drink diet soft drinks every day with no age or gender differences. The proportion drinking diet soft drinks has decreased since 2006 (from 18% to 13% of boys and from 20% to 14% of girls).

Figure 6.11:
DAILY SWEETS CONSUMPTION 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys

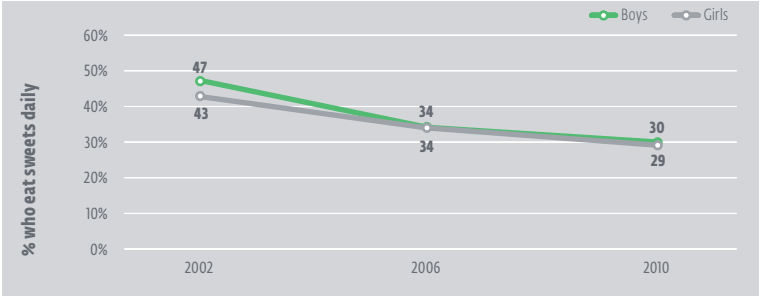


Figure 6.12:
DAILY CRISPS CONSUMPTION

HBSC Scotland
2010 Survey

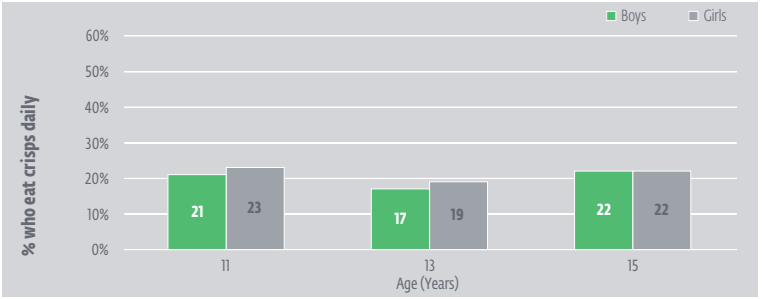


Figure 6.13:
DAILY CRISPS CONSUMPTION 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys

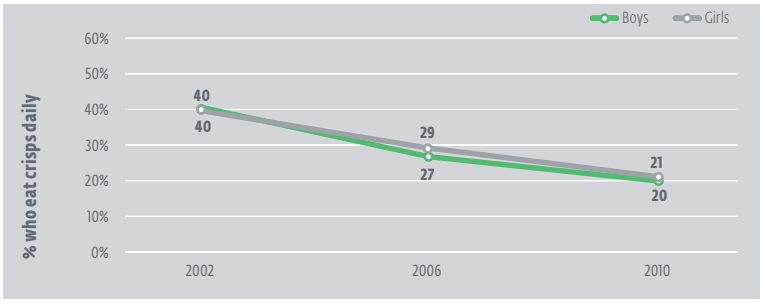


Figure 6.14:
DAILY CHIPS CONSUMPTION

HBSC Scotland
2010 Survey

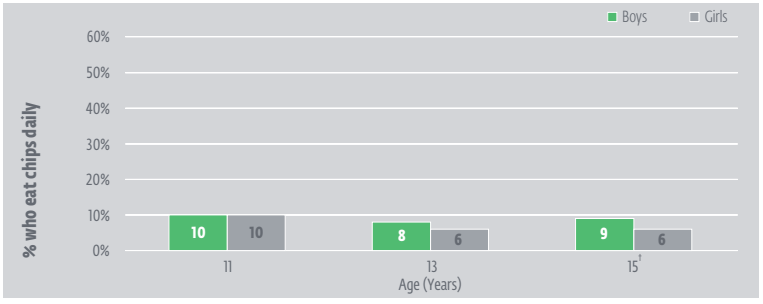


Figure 6.15:
DAILY CHIPS CONSUMPTION 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys

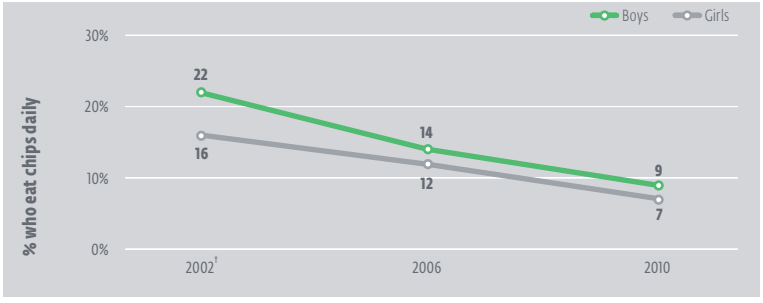


Figure 6.16:
DAILY CONSUMPTION OF COKE/OTHER SUGARY DRINKS

HBSC Scotland
2010 Survey

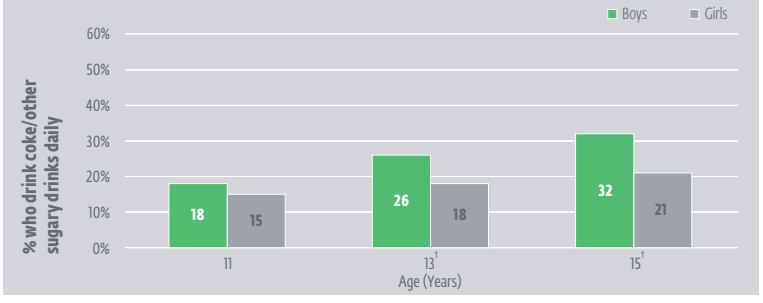
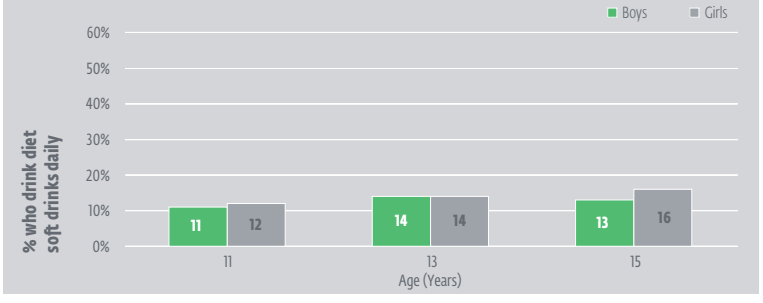


Figure 6.17:
DAILY CONSUMPTION OF DIET SOFT DRINKS

HBSC Scotland
2010 Survey



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NOTES

1 Prior to 2002, the breakfast consumption item made no distinction between weekdays and the weekend. By combining responses to weekday and weekend breakfast eating, the 2002 and 2006 data are compared with 1990, 1994 and 1998.

PHYSICAL ACTIVITY AND SEDENTARY BEHAVIOUR

7

- 19% of boys and 11% of girls meet the Scottish Government guidelines for moderate to vigorous physical activity
- Older boys and girls take part in vigorous exercise less often than younger boys and girls. Duration of exercise is greater among older boys, but remains the same among girls across all ages
- Approximately half of young people in Scotland walk to school and walking to school is more common among primary than secondary school children
- Primary school children watch TV less often during the week than secondary pupils with no gender differences. in watching TV at any age
- TV viewing on week days has decreased since 2002 but TV viewing at the weekend has remained stable
- Boys play computer games more often than girls at all ages. Computer use for purposes other than games is higher among secondary girls than boys during the week and at the weekend

INTRODUCTION

Physical activity provides important physical, mental and social health benefits (Department of Health, 2004). Participation in physical activity has been associated with increased musculoskeletal, cardiovascular and mental health, including reduced anxiety and depression, among children and adolescents (Strong et al., 2005). Establishing active lifestyles during adolescence is important, as inactivity during this time has been shown to track into adulthood (Kjonniksen et al., 2008). Despite the associated health benefits, physical activity levels have been shown to decrease over the primary-secondary school transition and across the secondary school years (Inchley et al., 2008).

The measurement of physical activity is of key importance in the understanding of physical activity prevalence. Whereas vigorous activity is often over-reported in self-report surveys (Graff-Iversen et al., 2007), moderate physical activity has a tendency for under-reporting due to it being part of everyday life and more difficult to recall accurately (Gard and Wright, 2005). This may be particularly true of children and young people, whose physical activity tends to be more ad-hoc and spontaneous than adults, and where a broader range of activities may be present. Incidental exercise, such as active travel, has received increasing attention in the physical activity literature, with children cycling and walking to school shown to be more active during the week (van Sluijs et al., 2009) and to have increased cardiovascular fitness (Cooper et al., 2006).

Physical activity participation among adolescents is known to vary according to such variables as gender, age and ethnicity, as well as perceived competence, intentions to be active, previous physical activity, social support, and opportunities to exercise (Sallis et al., 2000). It is well established that physical activity decreases with age and that girls typically exhibit lower physical activity levels than boys (Nelson et al., 2006; Inchley et al., 2008). As such, the national strategy for physical activity in Scotland aims to increase the proportion of all children aged 16 and undertaking the minimum recommended level of physical activity (one hour of daily moderate activity) to 80% by 2022 (Scottish Executive, 2003). Recent policy documents in Scotland have also highlighted the importance of physical activity in tackling obesity (Scottish Government, 2008; 2010).

Sedentary behaviour refers not only to an absence of physical activity, but also to engagement in activities involving minimal movement and low energy expenditure (Reilly et al., 2003; Biddle et al., 2004). It is increasingly recognised that sedentary behaviours occur independently of physical activity levels. Sedentary behaviours such as watching television and playing computer games have been shown not to displace time spent in physical activity (Ray-Lopez, 2008). However, sedentary behaviours have been associated with increased consumption of energy dense snacks (Vereeken et al., 2006) and sugary drinks (Kremers et al., 2007) as well as higher levels of obesity (Rennie et al., 2005).

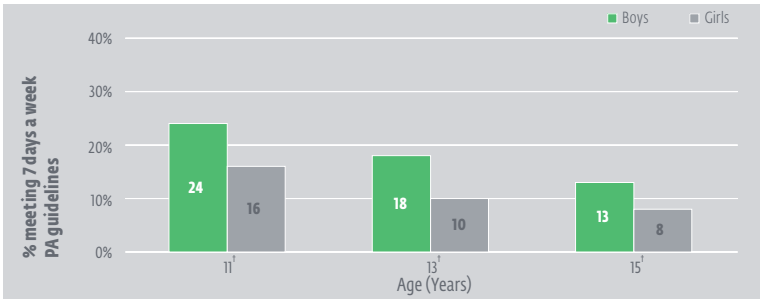
Although daily moderate-to-vigorous physical activity levels among 11-year olds in Scotland are relatively high in comparison to other European and American countries, a marked decrease is evident in 13 and 15-year olds (Currie et al., 2008). While some cross-national variations exist in the proportion of young people who report watching television for two or more hours a day on weekdays, overall, it is a common behaviour, particularly among less affluent households (Currie et al., 2008).

HBSC FINDINGS

Physical activity participation and sedentary behaviours have been recorded within the HBSC survey using various measures. Frequency and duration of vigorous physical activity outside school hours have been reported since 1990. Moderate to vigorous activity has been measured since 2002, allowing for examination of an eight year time trend, in the proportion of adolescents meeting the current guideline. Data on mode of transport and time taken to travel to school have been collected since 2006. Data on time spent watching television has been collected since 2002, whereas separate questions relating to computer use for games and purposes other than playing games have been included in the survey since 2006.

Figure 7.1:
MEETING PHYSICAL ACTIVITY GUIDELINES*

HBSC Scotland 2010 Survey



† Significant gender difference (p<0.01)
* 60 mins. or more of at least moderate physical activity every day

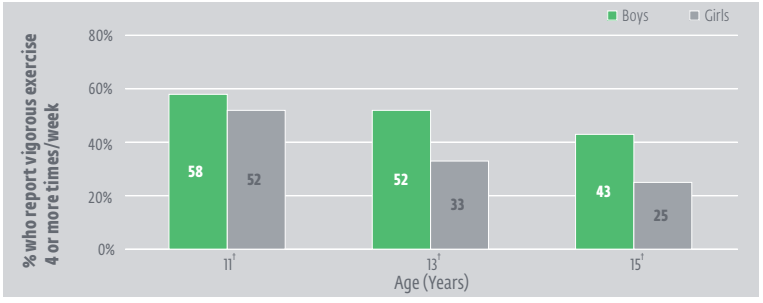
Figure 7.2:
MEETING PHYSICAL ACTIVITY GUIDELINES 2002 – 2010*

HBSC Scotland 2002 – 2010 Surveys

† Significant gender difference (p<0.01)
* 60 mins. or more of at least moderate physical activity every day

Figure 7.3:
FREQUENCY OF LEISURE TIME VIGOROUS EXERCISE (4 OR MORE TIMES PER WEEK)

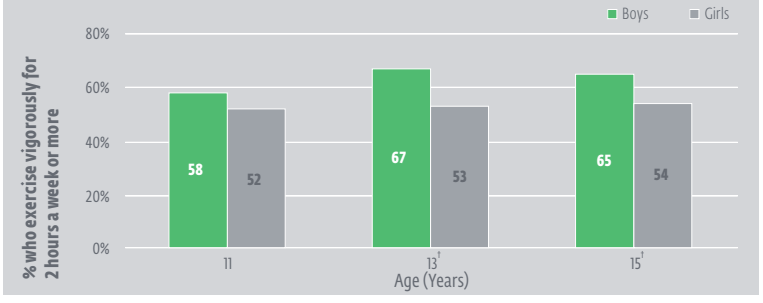
HBSC Scotland 2010 Survey



† Significant gender difference (p<0.01)

Figure 7.4:
DURATION OF LEISURE TIME VIGOROUS EXERCISE (2 OR MORE HOURS PER WEEK)

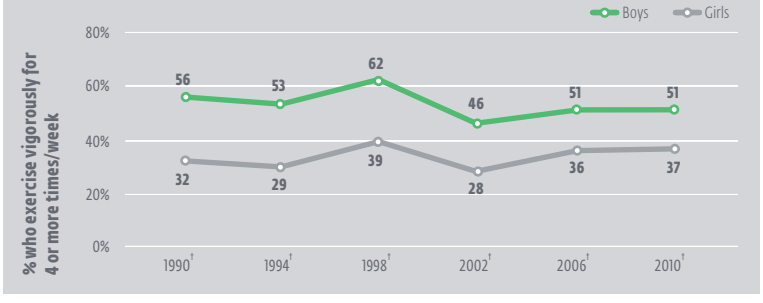
HBSC Scotland 2010 Survey



† Significant gender difference (p<0.01)

Figure 7.5:
FREQUENCY OF LEISURE TIME VIGOROUS EXERCISE 1990 – 2010

HBSC Scotland 1990 – 2010 Surveys



† Significant gender difference (p<0.01)

MEETING SCOTTISH GOVERNMENT PHYSICAL ACTIVITY GUIDELINES

In Scotland, 15% of young people take part in moderate-intensity physical activity for at least 60 minutes every day. There is a significant gender difference with 19% of boys compared with 11% of girls reporting this level of physical activity (Figure 7.1). Levels of physical activity are higher among younger boys and girls and this difference is most marked between age 11 and 13. Boys are more likely than girls to meet the physical activity guidelines at all three ages.

There was a small increase in the proportion of young people meeting the physical activity guidelines between 2002 and 2006; from 19% in 2002 to 23% in 2006 (Figure 7.2). However, there has been a decrease since 2006, with 15% of young people meeting the physical activity guidelines in 2010. This decrease has occurred among both boys (29% to 19%) and girls (16% to 11%). Compared with 2002, there has therefore been a decrease among boys but no overall change among girls.

LEISURE TIME VIGOROUS PHYSICAL ACTIVITY (OUTSIDE OF SCHOOL HOURS)

Participation in vigorous physical activity is also higher among boys than girls. Half of boys (51%) and just over one third of girls (37%) take part in vigorous exercise four times or more per week in their free time (Figure 7.3). Frequency of participation is highest at age 11 (58% of boys and 52% of girls), particularly compared with 15-year olds when 43% of boys and 25% of girls are vigorously active four or more times a week.

Duration of vigorous physical activity shows a different pattern to that of frequency. While frequency of participation decreases with age, duration increases among boys (Figure 7.4). Older boys are more likely to take part in vigorous exercise for two or more hours a week than younger boys; 65% of 15-year olds compared with 58% of 11-year olds. Among girls, however, duration of vigorous exercise does not vary with age. Overall, 63% of boys and 53% of girls exercise vigorously for two or more hours a week in their free time.

Overall, proportions of young people participating in vigorous physical activity outside of school have seen little change from 1990 among boys and an increase among girls (Figures 7.5 and 7.6). Proportions have increased since 2002. However, there has been no change between 2006 and 2010 among boys. The gender difference in leisure time vigorous physical activity has remained since 1990 with a greater frequency and duration of participation among boys than girls in each survey year.

TRAVEL TO SCHOOL

Approximately half (48%) of young people in Scotland report that they usually walk to school (Figure 7.7). Cycling is very rare with only 1% reporting that they travel this way and the majority of these are boys. Twenty six percent (26%) usually travel to school by bus or train and 23% by car.

Walking to school is more common among primary than secondary schoolchildren (Figure 7.8). A higher proportion of primary school pupils travel to school by car whereas secondary pupils are more likely to travel to school by bus or train.

TRAVEL TIME TO SCHOOL

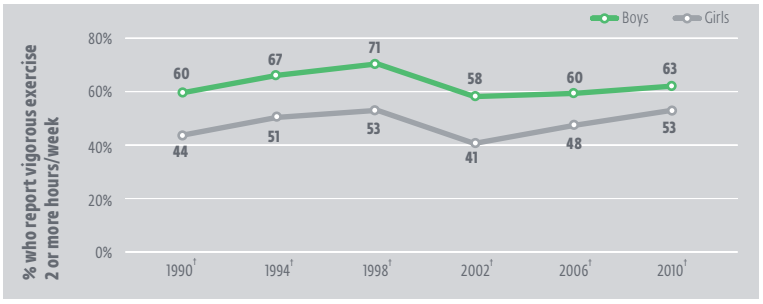
The vast majority (90%) of young people report that it takes 30 minutes or less to travel to school from home (Figure 7.9). One quarter (25%) travel 15-30 minutes to get to school, less than half (44%) travel for 5-15 minutes and about a fifth (21%) travel for less than five minutes. For one in ten pupils (10%), the journey time to school is more than 30 minutes. As would be expected with the increased size of catchment area for secondary schools, pupils aged 13 and 15 years are less likely than those aged 11 to have a journey of less than five minutes but more likely to have a journey of 15 minutes or more.

TIME SPENT WATCHING TELEVISION

Around two-thirds of young people (65%) watch television for two or more hours daily during the school week and this figure is greater at age 15 years (68%) compared with age 11 (60%) (Figure 7.10). There is no gender difference at any age.

Figure 7.6:
DURATION OF LEISURE TIME VIGOROUS EXERCISE 1990 – 2010

HBSC Scotland
1990 – 2010 Surveys



† Significant gender difference (p<0.01)

Figure 7.7:
MODE OF TRAVEL TO SCHOOL

HBSC Scotland
2010 Survey

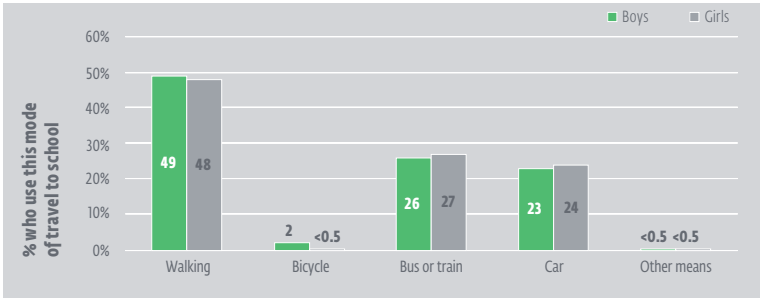


Figure 7.8:
MODE OF TRAVEL TO SCHOOL BY AGE

HBSC Scotland
2010 Survey

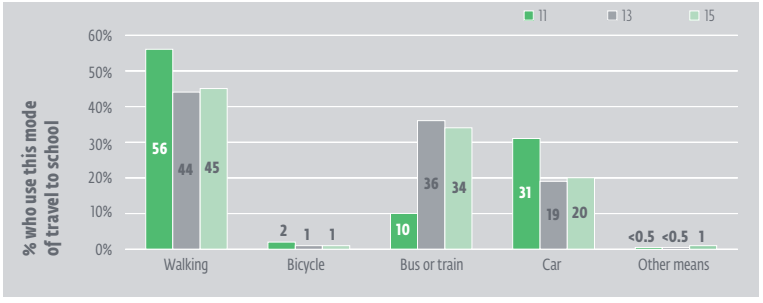


Figure 7.9:
TRAVEL TIME TO SCHOOL BY AGE

HBSC Scotland
2010 Survey

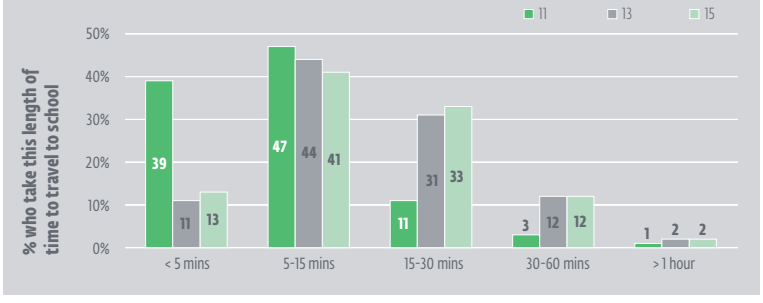
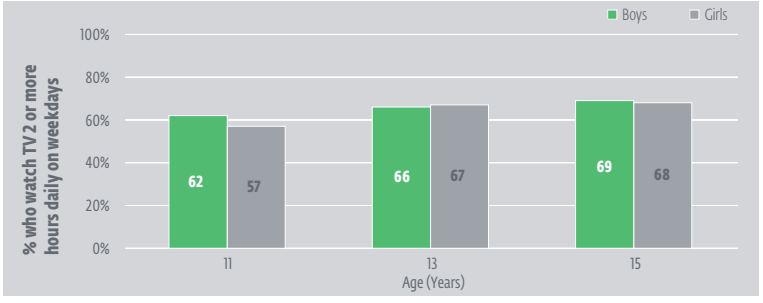


Figure 7.10:
WATCHING TV FOR 2 OR MORE HOURS A DAY ON WEEK DAYS

HBSC Scotland
2010 Survey



The proportion of young people watching TV is slightly higher at weekends than on weekdays, with 76% watching two or more hours of TV per day at the weekend. There is no significant age or gender difference in TV viewing at the weekend (no figure presented).

TV viewing on school days has decreased since 2002 (Figure 7.11). The proportion of young people watching TV for two hours or more fell from 75% to 65%. However, TV viewing at the weekend has remained stable with 75% of young people reporting weekend TV viewing in 2006 and 76% in 2010 (no figure presented).

TIME SPENT PLAYING COMPUTER GAMES

During the school week, boys play computer games for at least two hours a day, more often than girls (65% compared with 29%) (Figure 7.12). This gender difference is seen within each age group.

Playing computer games on weekdays has increased among boys and girls since 2006. In 2006, 54% of boys and 22% of girls played computer games for at least two hours a day, compared with 65% and 29% respectively in 2010 (no figure presented).

The proportion of young people who play two hours or more of computer games a day is greater at the weekends than on weekdays. At the weekend, 77% of boys and 37% of girls play computer games for two or more hours a day (Figure 7.13). The increase in playing computer games at the weekend is observed among both girls and boys at all three ages.

Playing computer games for two or more hours a day at the weekend has increased among boys and girls since 2006. In 2006, 64% of boys and 28% of girls played computer games for at least two hours a day, compared with 77% of boys and 37% of girls in 2010 (no figure presented).

USING A COMPUTER FOR PURPOSES OTHER THAN PLAYING GAMES

Girls are more likely than boys to use a computer for purposes other than playing games on weekdays. Fifty five percent (55%) of girls use a computer for chatting on-line, internet, emailing, homework etc. for at least two hours every day during the school week, compared with 46% of boys (Figure 7.14). There is no gender difference among 11-year olds; however, girls are more likely than boys to use the computer for non-game activities at ages 13 and 15.

The proportion of boys and girls who use a computer for purposes other than games for two or more hours is higher at weekends than on weekdays (Figure 7.15). Greater proportions of older than younger boys and girls use the computer at the weekend (for purposes other than games). Girls are more likely than boys to use the computer for this purpose at the weekend, at all three ages.

There has been an increase in computer use for purposes other than games on weekdays since 2006. In 2006, 43% of young people used a computer for purposes other than games on weekdays, compared with 51% in 2010. Similarly, weekend use has increased from 46% in 2006 to 57% in 2010.

It is interesting to note that whilst the proportion playing computer games is equivalent for all ages, the proportion using the computer for other activities is greater at the older ages. It is possible that higher demands for schoolwork at secondary school result in increases in other computer use. Furthermore, chatting on-line with friends and emailing may become more popular with age. The increase in computer use for purposes other than games since the 2006 survey may suggest an increase in the variety and use of internet based programmes available to young people.

Figure 7.11:
WATCHING TV FOR 2 OR MORE HOURS A DAY ON WEEK DAYS 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys

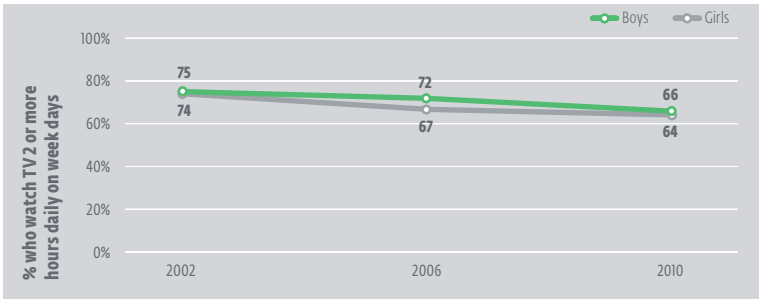


Figure 7.12:
PLAYING COMPUTER GAMES FOR 2 OR MORE HOURS A DAY ON WEEK DAYS

HBSC Scotland
2010 Survey

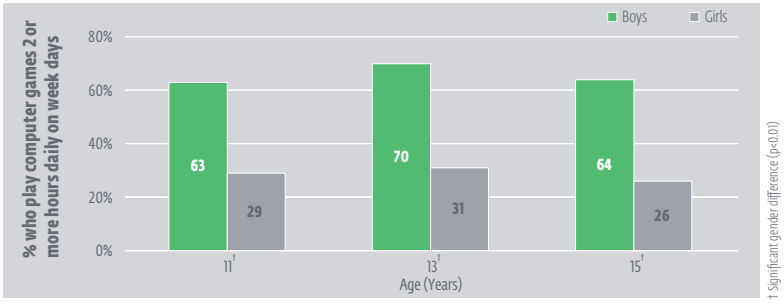


Figure 7.13:
PLAYING COMPUTER GAMES FOR 2 OR MORE HOURS A DAY AT THE WEEKEND

HBSC Scotland
2010 Survey

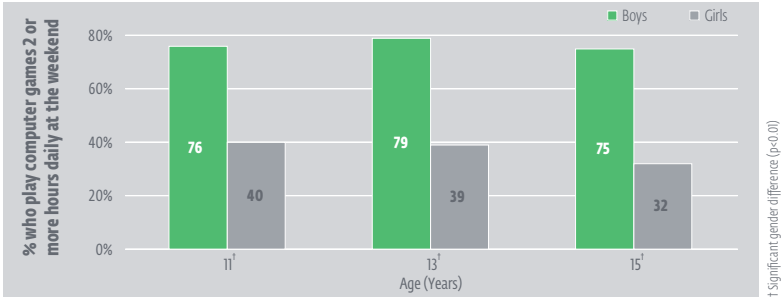


Figure 7.14:
USING COMPUTERS (NOT GAMES) FOR 2 OR MORE HOURS A DAY ON WEEK DAYS

HBSC Scotland
2010 Survey

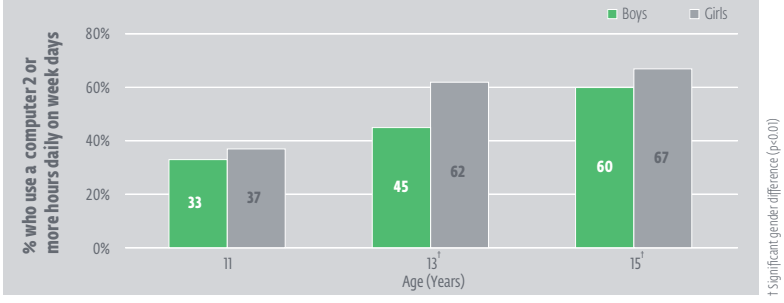
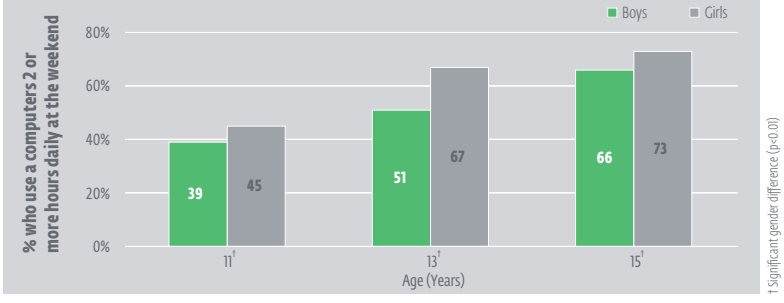


Figure 7.15:
USING COMPUTERS (NOT GAMES) FOR 2 OR MORE HOURS A DAY AT THE WEEKEND

HBSC Scotland
2010 Survey



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8

WEIGHT CONTROL BEHAVIOUR

- Girls are twice as likely as boys to be on a diet or doing something else to lose weight at present (21% and 10% respectively)
- Older girls are more likely than younger girls to try to control their weight, whilst there is no age difference among boys
- There was no change in the proportions of boys and girls on a diet between 2002 and 2010

INTRODUCTION

Dieting and weight control behaviours are common among adolescents (Larson et al., 2009; Ojala et al., 2007). Girls are more likely to try to reduce their weight than boys and are also more likely to engage in risky weight control behaviours (Larson et al., 2009).

The 'obesity epidemic' places young people's eating habits and weight control behaviour in the spotlight for health policy makers and practitioners. However, adolescents' concerns about body image are more likely to be influenced by the media and popularity with peers, resulting in pressures for girls to be slim and boys to be muscular (McCabe et al., 2002; Wertheim et al., 1997). Girls therefore tend to resort to dieting whereas boys are more likely to use exercise to attain their desired body shape and size (Ricciardelli et al., 2000).

Recent policy documents in Scotland have highlighted the importance of diet and physical activity in tackling obesity (Scottish Government, 2008; 2010). Adolescents are encouraged to adopt healthy approaches to weight loss, based around a healthy diet and exercise (Scottish Government, 2008). While many adolescents do demonstrate healthy weight loss behaviours (e.g. exercise and calorie reduction) (Paxton et al., 2004), there are concerns that some young people rely on risky weight control behaviours such as skipping meals, using food substitutes, self-inducing vomiting, and diet pills (Larson et al., 2009). Disordered eating has also been significantly associated with compulsive exercise (Siegel and Hetta, 2001). Adolescents' investment in appearance and body image has been shown to mediate the relationship between sociocultural pressures and a compulsive need to exercise (White and Halliwell, 2010). Body image distortion has been shown to predict onset of unsafe, rather than safe weight loss behaviour (Liechty, 2010). Furthermore, risky weight control behaviours have been associated with poorer psychological well-being, including lower self-esteem, and higher depressive symptoms (Crow et al., 2006), as well as greater use of alcohol and tobacco (Rafiroiu et al., 2003). A link between risky weight control and increased risk of overweight, binge eating and eating disturbances over time has also been established (Neumark-Sztainer et al., 2006a).

Self-perception of overweight is an important factor leading to attempts to lose weight, thus highlighting the importance of promoting a healthy body image (Ojala et al., 2007). Indeed, body dissatisfaction has previously been associated with some risky weight control behaviours, including increased binge eating among boys (Lynch et al., 2008; Neumark-Sztainzer et al., 2006b). Weight reduction behaviour among non-overweight schoolchildren is also associated with considerable risk to physical health and emotional well-being (Kelly et al., 2009).

The promotion of safe and sensible approaches to weight management is therefore crucially important to the well-being of young people. The training resource for professionals working with young people, 'Growing through Adolescence' provides strategies for encouraging such measures to maintain a healthy weight during growth and development occurring in adolescence (Cooke et al, 2005).

HBSC FINDINGS

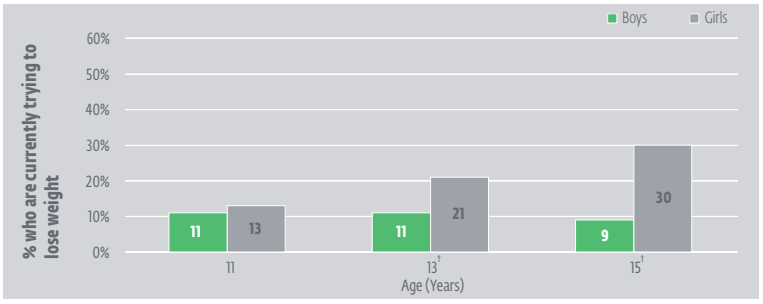
A measure of current weight control behaviour has been included in the Scottish HBSC questionnaire since 1994. However, the wording changed in 2002, making it comparable only over the last three surveys.

CURRENT WEIGHT CONTROL BEHAVIOUR IN SCOTLAND

Girls are twice as likely as boys to be on a diet or doing something else to lose weight (21% compared with 10% of boys). Weight control behaviour increases with age among girls, but remains constant for boys (Figure 8.1). Consequently, gender differences in dieting behaviour increase with age. Three times as many girls as boys are trying to lose weight at age 15 years (30% of girls compared with 9% of boys). There was no significant change in the proportions of boys and girls on a diet between 2002 and 2010 (Fig 8.2).

Figure 8.1:
CURRENTLY TRYING TO LOSE WEIGHT

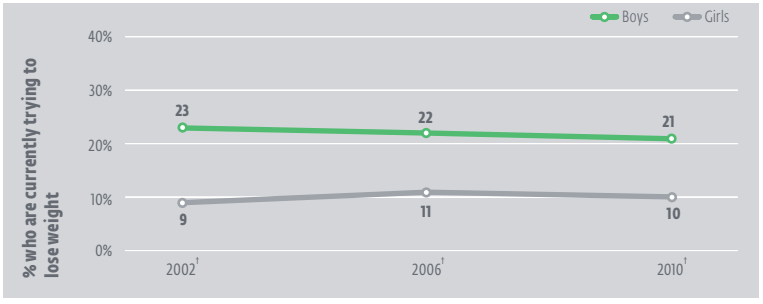
HBSC Scotland
2010 Survey



† Significant gender difference (p<0.01)

Figure 8.2:
CURRENTLY TRYING TO LOSE WEIGHT 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys



† Significant gender difference (p<0.01)

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BODY IMAGE AND BODY MASS INDEX

9

- 26% of boys and 40% of girls report that they feel too fat
- 37% of boys and 24% of girls consider themselves to be good looking
- Young people's views of their physical appearance and body size are less favourable at ages 13 and 15 than at age 11
- The proportion of boys reporting that they are too fat increased between 1990 and 2010
- Three quarters of 15-year olds are classified as having a normal weight according to their BMI and 3% are classified as being obese

INTRODUCTION

Adolescence is a time of major physical development and, as such, presents a period during which the body is subject to increased scrutiny and heightened evaluation, both by oneself and others (Abbott and Barber, 2010). Body image encompasses a young person's body-related self-perceptions and self-attitudes and plays an important role in the development of self-esteem (Davison and McCabe, 2006), as well as influencing eating and physical activity behaviours (Huang et al., 2007). Adolescents may have a desire to either lose or gain weight, stemming from or leading to body image perceptions of either under- or overweight (Bearman et al., 2006).

Body Mass Index (BMI) is derived from weight and height measurements and acts as an indicator of relative body fatness. Age-appropriate cut-offs have been agreed to identify children and adolescents who are overweight and obese (Cole et al, 2000). Prevention of overweight and obesity is a key priority in Scotland, and the recent policy document *Preventing Overweight and Obesity in Scotland: A Route Map Towards Healthy Weight* (Scottish Government, 2010) identifies a national target to 'reduce the rate of increase in the proportion of children with their Body Mass Index outwith a healthy range by 2018'.

Perceived weight does not always reflect actual weight status based on BMI. Among adolescents, underestimation of body weight is more common than overestimation, implying that overweight or obese adolescents may be unaware of excess weight (Standley et al., 2009). Furthermore, prevalence of underestimation of body weight is greatest among boys and ethnic minorities. A positive association has been found between BMI and body image dissatisfaction (Presnell et al., 2004). Body weight dissatisfaction has previously been shown to be highly prevalent and more common among girls than boys, among overweight than non-overweight adolescents, and among older than younger adolescents (Currie et al., 2008; Al Sabbah et al., 2009).

Being thin is commonly desired across Western societies, especially among girls. This leads to many normal weight girls perceiving themselves as overweight (Ojala et al., 2007). High levels of body dissatisfaction are predictive of perceived negative health (Meland et al., 2007), eating disturbances, (Espinoza et al., 2010), and depressive mood (Stice et al., 2000). The influence of the media may lead to increased importance given to physical appearance (Thompson and Stice, 2001). However, enhanced parent communication contributes to decreased levels of body dissatisfaction (Al Sabbah et al., 2009).

Scotland's National Programme for mental health acknowledges that poor body image may lead to responses such as self-harm (Scottish Government, 2009). Practitioners, including teachers, who are working with adolescents, can find issues such as body image complex to deal with in their professional role. The resource 'Growing through Adolescence' developed jointly between NHS Health Scotland and CAHRU, was designed to meet this training need (Cooke et al., 2005)

HBSC FINDINGS

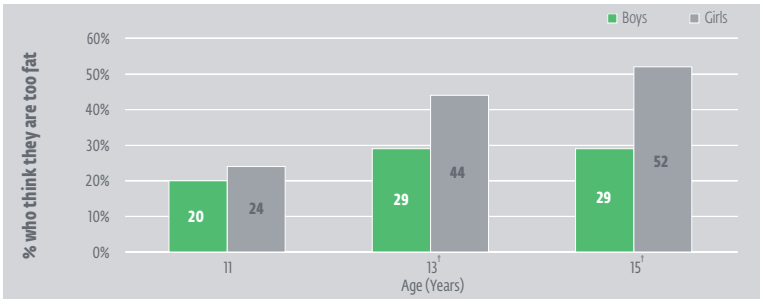
The HBSC survey asks questions relating to perceived body size and looks, both of which have been collected since 1990. BMI is determined based on children's self-reported height and weight (kg/m^2) and this data has been collected since 2002.

BODY SIZE

Twenty-six percent (26%) of boys and 40% of girls report that they are too fat. There are considerable differences between 11 and 13-year olds, particularly among girls, with higher proportions of older adolescents describing themselves as too fat (Figure 9.1). At all ages, girls are more likely than boys to report that they are too fat. Whilst there was little change between 1990 and 2010 in girls' reports of their body size, the proportion of boys reporting that they are too fat has increased, reducing the gender difference which exists across all six survey years (Figure 9.2).

Figure 9.1:
REPORT BODY IS TOO FAT

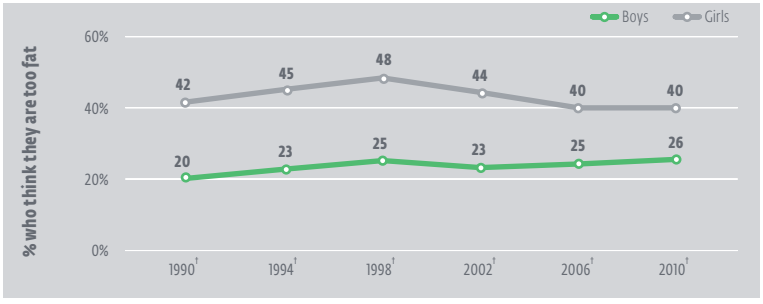
HBSC Scotland
2010 Survey



† Significant gender difference (p<0.01)

Figure 9.2:
REPORT BODY IS TOO FAT 1990 – 2010

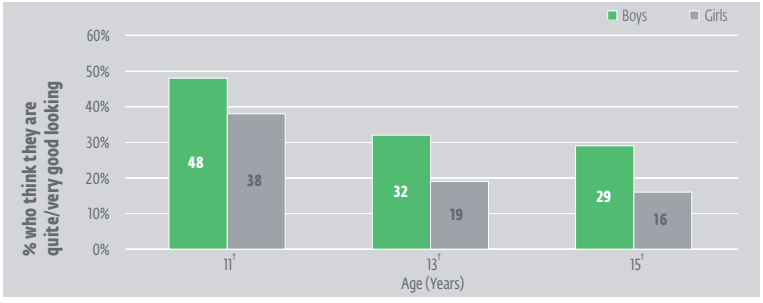
HBSC Scotland
1990 – 2010 Surveys



† Significant gender difference (p<0.01)

Figure 9.3:
REPORT GOOD LOOKS

HBSC Scotland
2010 Survey



† Significant gender difference (p<0.01)

REPORTING GOOD LOOKS

Boys are more likely than girls to report that they are 'quite' or 'very' good looking (37% compared with 24%), also at all ages (Figure 9.3). Mirroring the findings on reported body size, young people's views of their physical appearance are less favourable at ages 13 and 15 than at age 11. At age 13, 32% of boys and 19% of girls think they are good looking compared with 48% and 38%, respectively, at age 11. There is little difference between 13 and 15-year olds.

Across all six surveys between 1990 and 2010, boys consistently reported their looks more favourably than girls (Figure 9.4). The proportion of young people reporting that they are good looking declined between 1990 and 1998, but then increased in 2002, remaining at approximately the same level thereafter.

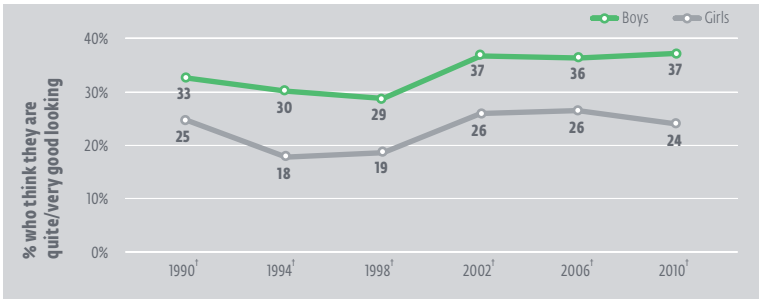
BODY MASS INDEX (BMI)

The Body Mass Index (BMI) of young people is derived from their self-reported height and weight (body weight (kg)/height $(m)^2$) and standardised cut-offs are used to create the following four categories: underweight, normal weight, overweight and obese (Cole et al., 2000; Cole et al., 2007). It should be noted that obesity estimates derived from self-reports tend to be lower than those obtained from health examinations (Elgar et al., 2005). In the 2010 Scottish HBSC survey, only a minority of young people reported both their height and weight: 29% of 11-year olds, 36% of 13-year olds and 48% of 15-year olds. Therefore, the results shown are based on data from S4 pupils only.

Of those 15-year olds who reported height and weight data, three out of four (74%) are classified as having a normal weight (Figure 9.5). A higher proportion of girls (16%) than boys (10%) are classified as underweight and a higher proportion of boys (13% compared with 8% of girls) are classified as overweight. Among 15-year olds, 57% reported their height and weight in 2002 and 50% did so in 2006. The distribution of weight groups according to BMI has not changed between 2002 and 2010.

Figure 9.4:
REPORT GOOD LOOKS 1990 – 2010

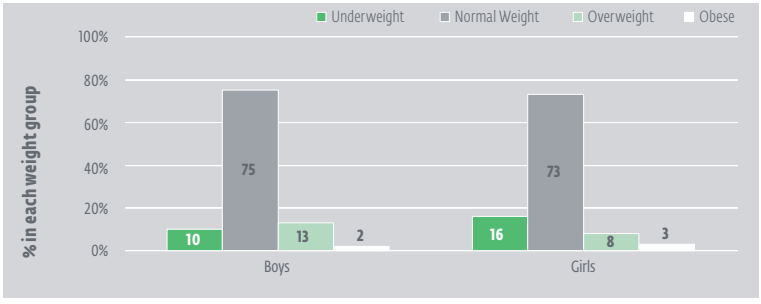
HBSC Scotland
1990 – 2010 Surveys



† Significant gender difference (p<0.01)

Figure 9.5:
WEIGHT GROUPS ACCORDING TO BMI: 15-YEAR-OLDS

HBSC Scotland
2010 Survey



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10

TOOTH BRUSHING

- Girls are more likely than boys to brush their teeth at least twice a day (81% compared with 66%)
- There has been a steady increase from 1990 to 2010 in the proportion of boys and girls who brush their teeth two or more times a day. The greatest increases were found among boys and 11-year olds

INTRODUCTION

Oral hygiene habits are established early in life (Blinkhorn, 1981) and the importance of this is highlighted in studies showing that adolescents who brush their teeth at least twice daily by the age of 12 tend to continue to do so throughout their teenage years (Kuusela et al., 1996). Historically, Scotland's young people have had relatively poor oral health compared with other countries in the UK and beyond (National Dental Inspection Programme, 2003; Pitts et al., 2006). This is largely due to a diet high in sugar and low levels of oral care including infrequent tooth brushing (Scottish Executive, 2002). Furthermore, young people who consume sugary drinks are less likely to brush their teeth twice a day or more, while those with a diet which includes daily fruit and vegetables are more likely to brush their teeth at least twice a day (Kirby et al., 2009).

Following a government consultation document highlighting the need for significant improvement (Scottish Executive, 2002), oral health Heat targets have been drawn up directed at the early years (Scottish Government, 2010) and several initiatives, collectively known as Childsmile (NHS Scotland, 2007), designed to target the oral health of children and young people in Scotland, are under way. More recent statistics show improvements in oral health across the overall population of children and young people (Merrett et al., 2009, Macpherson et al., 2010). However, socioeconomic and geographic inequalities in oral health persist (Levin et al., 2009; Levin et al., 2010). At least twice daily tooth brushing is recommended to reduce levels of tooth decay and gum disease (Loe, 2000; Scottish Executive, 2002). Previous HBSC findings have shown a steady increase in the proportion of young people brushing their teeth at least twice daily, with girls more likely than boys to report this (Kirby et al., 2009; Levin and Currie, 2009). Higher family socioeconomic status is also associated with greater odds of tooth brushing twice a day or more (Levin and Currie, 2009).

Recent research using HBSC data found eating breakfast to be a strong predictor of tooth brushing among boys and girls (Levin and Currie, 2010). The family and home environment were identified as key factors in the promotion of oral health, particularly in relation to family meals, parenting styles and positive family relationships (Levin and Currie, 2010).

HBSC FINDINGS

HBSC has been collecting data on tooth brushing frequency in Scotland since 1990, allowing for examination of trends across a 20-year period. This study has also investigated socioeconomic and cross-national differences in patterns of tooth brushing (Levin and Currie, 2009; Maes et al., 2006).

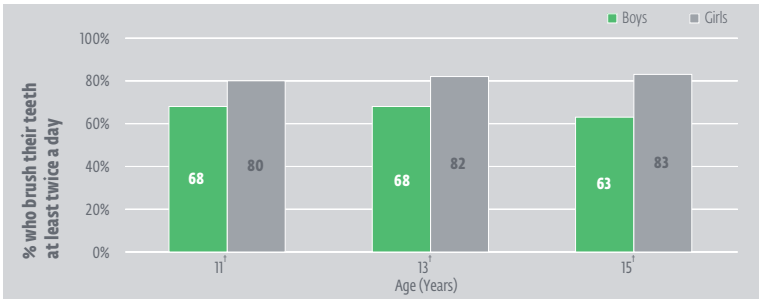
TOOTH BRUSHING AT LEAST TWICE A DAY

The majority (74%) of young people in Scotland brush their teeth at least twice a day. Girls are more likely than boys to brush their teeth this often (81% compared with 66% respectively). Gender differences exist within every age group (Figure 10.1). Between the ages of 11 and 15 there is little change in the prevalence of tooth brushing among girls or boys, highlighting the importance of establishing good oral health habits early in life.

Since 1990, there has been a steady increase in the proportion of boys and girls that brush their teeth two or more times a day. Among boys, the proportion has risen from 48% in 1990 to 66% in 2010. Among girls, the proportion has increased from 70% in 1990 to 81% in 2010 (Figure 10.2). Greatest improvements are found among 11-year old boys and girls and 13-year old boys. Gender differences are apparent at all six time points, however these have reduced with time.

Figure 10.1:
BRUSH TEETH AT LEAST TWICE A DAY

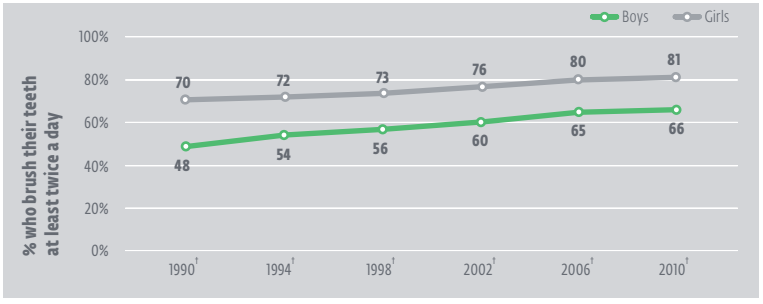
HBSC Scotland
2010 Survey



† Significant gender difference (p<0.01)

Figure 10.2:
BRUSH TEETH AT LEAST TWICE A DAY 1990 – 2010

HBSC Scotland
1990 – 2010 Surveys



† Significant gender difference (p<0.01)

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11

WELL-BEING

- 87% of young people are satisfied with their life, 44% are very happy, 22% never feel left out of things, 17% always feel confident, 21% rate their health as excellent
- 29% of young people have multiple health complaints and 55% have used medicine in the previous month
- Boys fare better than girls on all seven measures of well-being
- Life satisfaction, confidence, self-rated health and happiness are higher among younger age groups, while multiple health complaints and medicine use are lower
- Happiness, confidence and never feeling left out increased between 1994 and 2006, while multiple health complaints decreased. Between 2006 and 2010, however, boys' and girls' happiness and girls' confidence have decreased, while there has been no change in proportions never feeling left out or having multiple health complaints

INTRODUCTION

Adolescence is a critical developmental period with long-term implications for health and well-being of the individual. Good emotional and physical well-being enables young people to deal with the challenges of this time and eases the transition through adolescence (Petersen et al., 1997). In the context of HBSC, a positive well-being perspective is considered fundamental to good quality of life. Happiness and confidence in childhood are associated with social competence and good coping skills which in turn lead to more positive outcomes in adulthood (Morgan et al, 2008).

The Scottish Government's policy and action plan *Towards a Mentally Flourishing Scotland* (Scottish Government, 2009) targets the mental health of infants, children and young people as one of its four priority areas. It focuses on inequalities, improving skills and knowledge of front-line staff, disseminating the evidence base for mental health improvement, and developing national indicators for children and young people's mental well-being and mental health problems. Good health and well-being also forms the core of the *Curriculum for Excellence* and is identified as being central to effective learning and preparation for successful independent living (Scottish Executive, 2004).

Key protective factors for positive mental health have been systematically reviewed and a set of essential 'developmental assets' has been identified which are crucial to young people's healthy development (Search Institute, 2008). These include a sense of parent/ family connectedness and school connectedness, including social support from at least one caring adult. Having good family communication is important to adolescent life satisfaction (Levin and Currie, 2010). Supportive peer relations are also very important during the course of adolescence (Currie et al, 2008). Friendships help young people to adjust to new situations and face stressful life events, both of which are challenges to well-being (Schneider, 2000). Support from peers is linked to higher self-esteem and an absence of depression and isolation (Berndt, 1996). Emotional and mental health problems among young people have been associated with increased substance use (Schwinn et al., 2010), eating disorders (Courtney et al., 2008), poor eating and lack of exercise (Andersen et al., 2006a). Mental illness may also impact on physical health, either through a lowered immune system, or engagement in behaviours which lead to physical illness.

Subjective health complaints are common among adolescents (King et al., 1996) and include somatic symptoms such as headaches or stomach aches as well as psychological symptoms such as nervousness or irritability. Experiencing subjective health complaints has been associated with negative experiences at school (Torsheim and Wold, 2001), lower academic performance (Krilov et al., 1998) and increased medicine use (Hansen et al., 2003). Furthermore, gender differences and socio-economic inequalities exist in relation to adolescent mental well-being and subjective health in Scotland (Levin et al., 2009) and internationally (Levin et al., in press; Ravens-Sieberer et al., 2009).

Young people commonly use medicine for complaints such as headache, stomach ache, difficulties in getting to sleep, and nervousness (Hansen et al., 2003; Holstein et al., 2003). Use of medicines for headache and stomach ache has been shown to increase with age among girls. Boys' medicine use for getting to sleep and nervousness has shown to decrease (Andersen et al, 2006b). Although medicines are usually associated with an intention to treat and prevent illness, the potential for them to be used in a harmful way also exists. Medicine use in adolescence may continue into early adulthood (Andersen et al., 2009).

HBSC FINDINGS

There are several indicators of young people's physical and mental well-being within the HBSC survey. These include happiness, life satisfaction, self-confidence, self-rated health, feelings of helplessness and feeling left out. The HBSC survey also collects information about medicine use and frequency of somatic symptoms.

Figure 11.1:
REPORT HIGH LIFE SATISFACTION

HBSC Scotland
2010 Survey

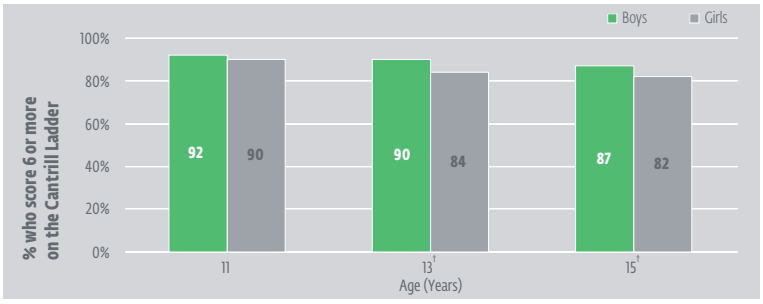


Figure 11.2:
REPORT HIGH LIFE SATISFACTION 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys

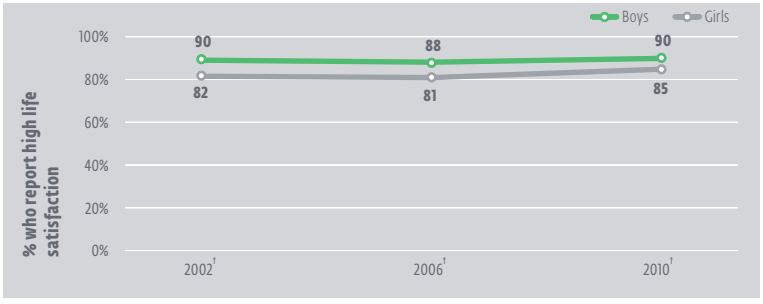


Figure 11.3:
FEEL VERY HAPPY

HBSC Scotland
2010 Survey

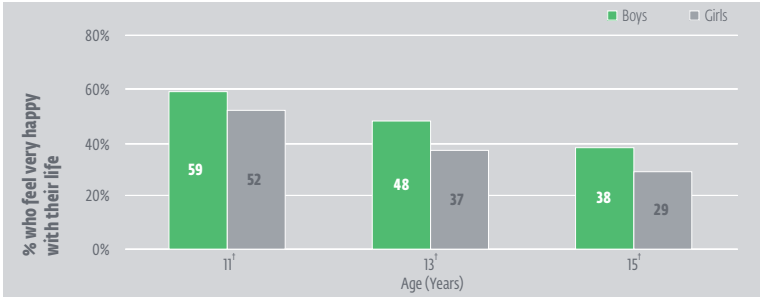


Figure 11.4:
FEEL VERY HAPPY 1994 – 2010

HBSC Scotland
1994 – 2010 Surveys

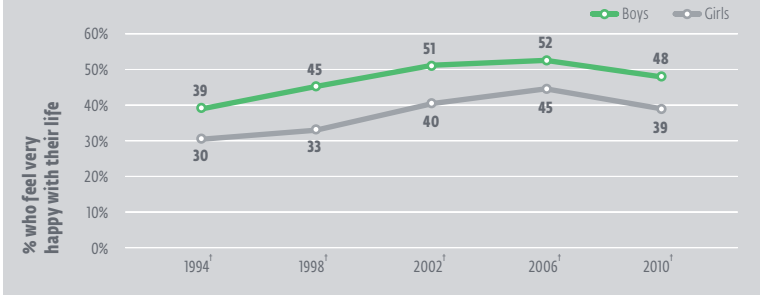
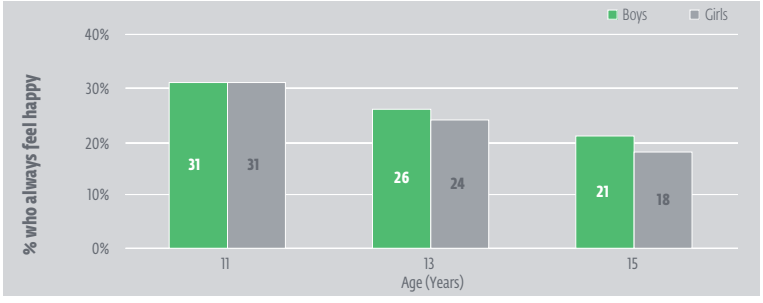


Figure 11.5:
ALWAYS FEEL HAPPY

HBSC Scotland
2010 Survey



LIFE SATISFACTION

Young people were shown a picture of a ladder and given the following description and question: *Here is a picture of a ladder – the top of the ladder is the best possible life for you and the bottom is the worst possible life – in general where on the ladder do you feel you stand at the moment?* In this adapted version of the Cantril Ladder (Cantril, 1965), a score of six or more was defined as high life satisfaction.

Eighty seven percent (87%) of young people are highly satisfied with their life (90% of boys; 85% of girls). Life satisfaction decreases between ages 11 and 13 for girls and between 11 and 15 for boys. While there is no gender difference at age 11, boys have higher life satisfaction at ages 13 and 15. (Figure 11.1). No significant change in life satisfaction was observed for either boys or girls between 2002 and 2010 (Figure 11.2).

HAPPINESS

Forty four percent (44%) of young people feel very happy about their lives. Fifty five percent (55%) of 11-year olds feel very happy, with a greater proportion of boys (59%) than girls (52%) (Figure 11.3). The proportion of young people who feel very happy is lower for 13-year olds (42%) and lower still for 15-year olds (33%).

The HBSC study in Scotland has included a measure of happiness since 1994. For the first time the proportion of young people who are happy with their lives has decreased (Figure 11.4). 13-year old boys and girls reported the greatest reduction in happiness between 2006 and 2010.

For the first time, in the 2010 HBSC Scotland survey, young people were asked how often they feel happy. A quarter of young people reported always feeling happy (26% of boys and 24% of girls). As with extent of happiness, frequency of feeling happy is highest for 11-year olds (31%) and lowest for 15-year olds (19%) (Figure 11.5). However, unlike extent of happiness, there is no gender difference in frequency at any age.

SELF-CONFIDENCE

Seventeen percent (17%) of young people always feel confident in themselves, with twice as many boys (23%) as girls (11%). Confidence is greatest amongst 11-year olds (23%) and lowest among 15-year olds (13%). The gender difference is greatest at 13 and 15, with more than twice as many boys as girls always feeling confident (Figure 11.6). Although only a minority of young people always feel confident, a further 39% report that they often feel confident (40% of 11-year olds, 39% of 13-year olds and 37% of 15-year olds).

The HBSC study in Scotland has included a measure of confidence since 1994. Confidence among girls was significantly greater in 2006 than in 1994 (Figure 11.7). However, this has fallen again so that the same proportions of both boys and girls report feeling always confident in 2010 as in 1994.

FEELING LEFT OUT

One in five (22%) young people report that they never feel left out of things (27% of boys; 17% of girls). The proportion reporting that they never feel left out does not change with age for either boys or girls, and at all ages boys are less likely to feel left out than girls (Figure 11.8).

Feeling left out was first included as an item in the Scottish HBSC questionnaire in 1998. Since then, never feeling left out has increased from 22% of boys to 27% in 2010 and from 14% of girls to 17% (Figure 11.9).

Figure 11.6:
ALWAYS FEEL CONFIDENT

HBSC Scotland
2010 Survey

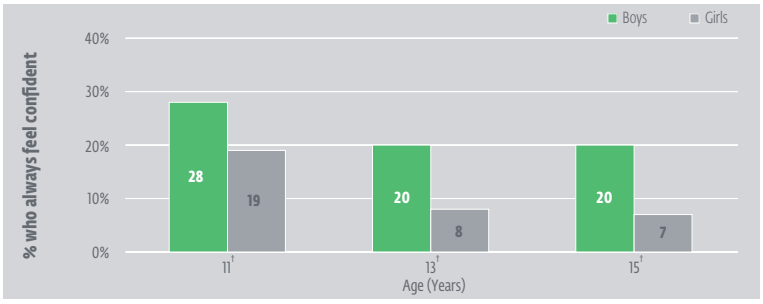


Figure 11.7:
ALWAYS FEEL CONFIDENT 1994 – 2010

HBSC Scotland
1994 – 2010 Surveys

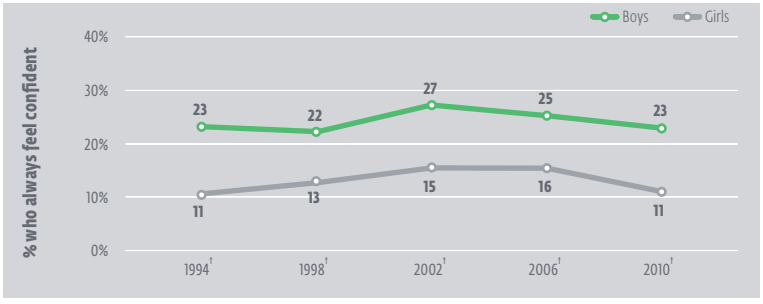


Figure 11.8:
NEVER FEEL LEFT OUT

HBSC Scotland
2010 Survey

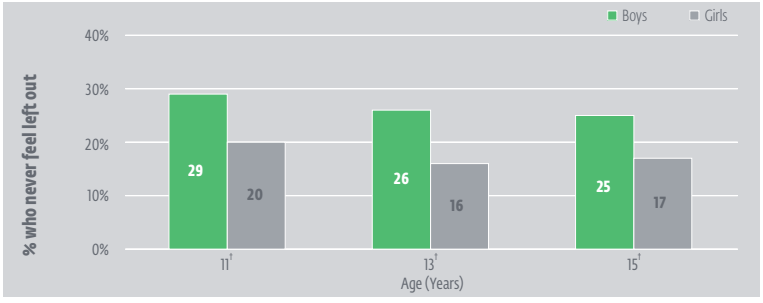
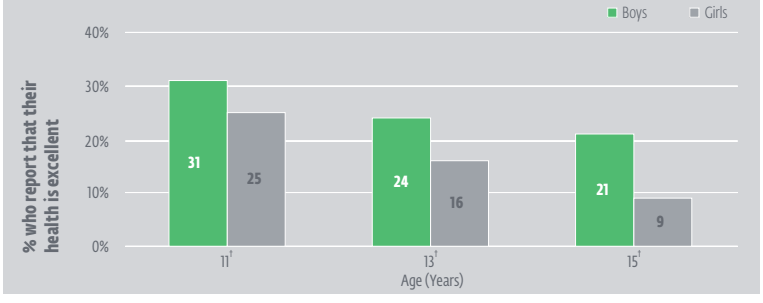


Figure 11.9:
NEVER FEEL LEFT OUT 1998 – 2010

HBSC Scotland
1998 – 2010 Surveys

Figure 11.10:
REPORT EXCELLENT HEALTH

HBSC Scotland
2010 Survey



SELF-RATED HEALTH

Young people's appraisal of their health is thought to be shaped by their overall sense of functioning, including both physical and non-physical health dimensions (Vingilis et al., 2002). Poor subjective health is associated with depression in adolescence and young adulthood (Vasquez and Blanco, 2006; Garber et al., 1991). Within adult populations subjective indicators of health are strongly related to use of healthcare services, mortality and morbidity (Kelly and Baker, 2000; Mossey and Shapiro, 1982).

One in five young people (21%) in Scotland report their health as excellent (25% of boys and 17% of girls). A further 58% describe their health as good. Boys are generally more positive about their health, with a widening gender gap as age increases. Both boys and girls are more positive about their health at younger ages (Figure 11.10).

Self-rated health data has been collected since 1994. However, the question and optional responses changed in 2002 making trend comparisons only possible from this time point. Self-rated health has not changed between 2002 and 2010 for either boys or girls (Figure 11.11).

HEALTH COMPLAINTS

Young people were asked how often in the last six months they had suffered from a variety of symptoms. Fifteen percent (15%) report experiencing headaches, 11% dizziness, 9% stomach ache and 9% backache more than weekly, while 13% feel low, 23% are irritable, 15% are nervous and 23% have difficulty getting to sleep. Compared with 11-year olds, greater proportions of 15-year olds experience headaches or backache, feel low or irritable more than once a week (Figure 11.12). Larger proportions of girls than boys experience all symptoms other than backache, and gender differences are particularly apparent for stomach ache (12% of girls; 6% of boys), headache (19% of girls; 12% of boys), nervousness (19% of girls; 11% of boys) and feeling low (15% of girls; 10% of boys). Gender differences are greatest at age 15 where, for example, 12% of boys have headaches and 11% feel low, compared with 26% and 21% of girls respectively.

Having multiple health complaints is defined as having 2 or more symptoms more than once a week. Twenty nine percent (29%) of young people have multiple health complaints. The proportion with multiple health complaints is greatest for 15-year olds (35%) and smallest for 11-year olds (22%) for both boys and girls, and rises with age more steeply for girls than boys, so that the gender difference increases with age (Figure 11.13).

The proportions of both girls and boys reporting multiple health complaints fell between 1994 and 2006 with little change thereafter (Figure 11.14).

MEDICINE USE

Young people were asked about their use of medicine or tablets for symptoms: headache, stomach ache, nervousness, sleeping difficulties and 'other' symptoms. Fifty five percent (55%) of young people had used medicine in the previous month. The most common symptom for which young people took medicines in the last month was headaches (37% of 11-year olds, 48% of 13-year olds and 54% of 15-year olds) (Figure 11.15). More girls than boys took medicines in the last month for headaches (40% of boys; 53% of girls), stomach-ache (16% of boys; 40% of girls) or 'another symptom not listed' (14% of boys; 19% of girls). Gender differences in the use of headache and stomach ache medicine are greatest at age 15 where 44% and 16% of boys respectively use medicine for headache and stomach ache, compared with 64% and 51% of girls.

Medicine use items were first added to the HBSC Scotland survey in 2006. The results for 2010 were similar to those in 2006, the only exception being a greater proportion of 15-year olds experiencing stomach ache in 2010 (34%) than in 2006 (27%). Medicine use for 'another symptom not listed' decreased from 21% in 2006 to 16% in 2010.

Figure 11.11:
REPORT EXCELLENT HEALTH 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys

† Significant gender difference (p<0.01)

Figure 11.12:
HEALTH COMPLAINTS

HBSC Scotland
2010 Survey

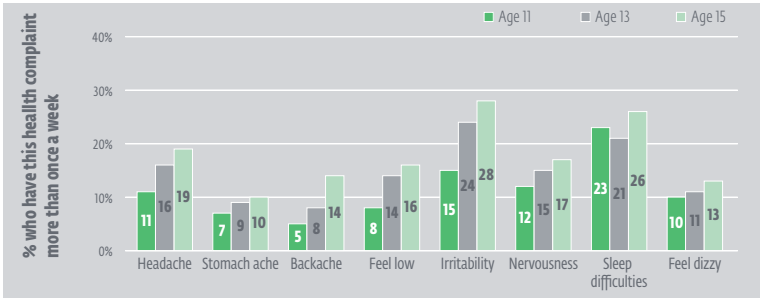
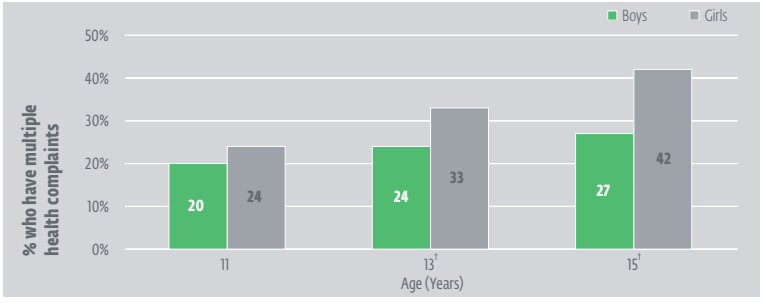


Figure 11.13:
MULTIPLE HEALTH COMPLAINTS

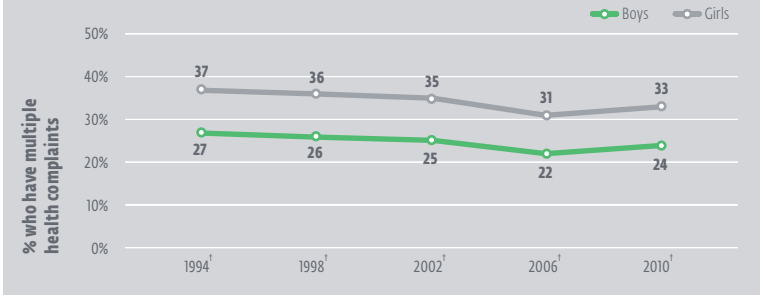
HBSC Scotland
2010 Survey



† Significant gender difference (p<0.01)

Figure 11.14:
MULTIPLE HEALTH COMPLAINTS 1994 – 2010

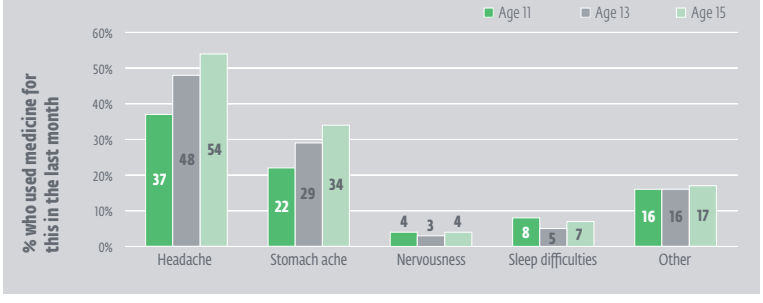
HBSC Scotland
1994 – 2010 Surveys



† Significant gender difference (p<0.01)

Figure 11.15:
MEDICINE USE

HBSC Scotland
2010 Survey



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12

SUBSTANCE USE

- Approximately one in five young people have tried smoking and 9% of girls and 8% of boys report that they smoke at present
- At age 15, 59% of current smokers report that they smoke every day
- Smoking behaviour among young people increased in the 1990's but smoking rates have since fallen to those of 1990
- The gender gap in smoking that appeared in the late 90s, with girls smoking more than boys is no longer apparent
- One in ten 13-year olds and more than one in four 15-year olds drink alcohol at least once a week
- Boys are most likely to drink beer, while girls prefer spirits and alcopops
- Weekly drinking among young people increased in the 1990's but weekly drinking rates have since returned to those of 1990
- 19% of 15-year olds and 4% of 13-year olds have used cannabis
- There was a considerable drop in cannabis use among 15-year olds between 2002 and 2010, observed among former, experimental, regular and heavy users

INTRODUCTION

Substance use (use of tobacco, alcohol and illicit drugs) among young people is a significant public health concern in Scotland. Rates of regular smoking among girls, and regular drinking, drunkenness and use of cannabis among both boys and girls in the UK are among the highest in Europe (Currie et al., 2008). Substance use during adolescence can carry over into adulthood, and lead to possible problems of dependence (Viner and Taylor, 2007).

As well as important health risks associated with substance use, such as risky sexual behaviour (Tapert et al., 2001) and poorer mental health (Lien et al., 2009), substance use is likely to have broader impacts on society. These include increases in healthcare costs, risk of infectious diseases, crime and antisocial behaviour. In addition, substance use has been associated with poorer academic achievement (Fergusson et al., 2003). The family environment may exert protective effects against substance use through positive family relationships, communication (Kuntsche and Silbereisen, 2004) and parental monitoring (Piko and Kovacs, 2010). Conversely, substance use among family members may lead to greater use among adolescents (Kokkevi et al., 2007).

Policy continues to be largely focussed on smoking, drinking and drug use as separate issues, while research shows that these are often inter-related. Regular or recent use of one substance is strongly associated with regular or recent use of other substances (BMRB, 2007).

TOBACCO

Smoking remains the largest single cause of preventable disease and premature death in Scotland (NHS Health Scotland and ASH Scotland, 2003). Children and adolescents who smoke are less physically fit and have more respiratory illnesses than their non-smoking peers, as well as hastened decline in lung function and increased coughing and wheezing (Centers for Disease Control and Prevention, 2004). Individual factors such as perceptions of smoking by parents and peers are strongly linked to adolescent smoking onset (Otten et al., 2009). The recent national policy document, *Scotland's Future is Smoke Free: a Smoking Prevention Plan* (Scottish Government, 2008a) reflects increasing concern about the public health impact and costs of tobacco smoking. Smoking prevention messages have had a high profile in Scotland, aided by the introduction of *The Smoking, Health and Social Care (Scotland) Act 2005* (Scottish Executive, 2005), banning smoking in enclosed public places. Previous research has shown associations between mandatory national bans on smoking and lower smoking prevalence (Schnohr et al., 2008). Recommendations have also been made aimed at making cigarettes less affordable, accessible and attractive to children and young people (Scottish Government, 2008a). Furthermore, the Tobacco and Primary Medical Services (Scotland) Act 2010 (Scottish Government, 2010) aims to reduce tobacco use by under 18s by reducing young people's exposure to tobacco advertising and marketing and reducing availability of tobacco products.

ALCOHOL

Alcohol misuse is a serious health and social issue in Scotland, recognised by the launch of the recent framework for action, *Changing Scotland's Relationship with Alcohol* (Scottish Government, 2009). Drinking during adolescence has been associated with various physical and emotional problems (Tomlinson et al., 2004). Furthermore, adolescent alcohol consumption increases the risk of heavy drinking and alcohol dependence into adulthood (Andersen et al., 2003). Such behaviour can lead to numerous health problems, such as chronic liver disease, heart disease, stroke, depression, unintentional injuries and death (Naimi et al., 2003). Drinking and drunkenness remain higher among boys than girls; however the gender gap has declined, with levels among girls reaching those of boys in some countries (Simons-Morton et al., 2009). Alcohol use is influenced by several factors such as family norms, peer influences, personal preferences, and environmental factors (Petraitis et al., 1998; Kirby et al., 2008). Sensation seeking has also been associated with the frequency of alcohol use and the amount of alcohol consumed (Hittner and Swickert, 2006).

Figure 12.1:
EVER SMOKED TOBACCO

HBSC Scotland
2010 Survey

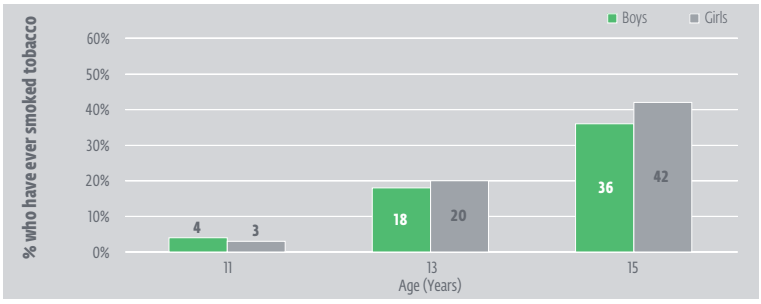


Figure 12.2:
CURRENT SMOKING

HBSC Scotland
2010 Survey

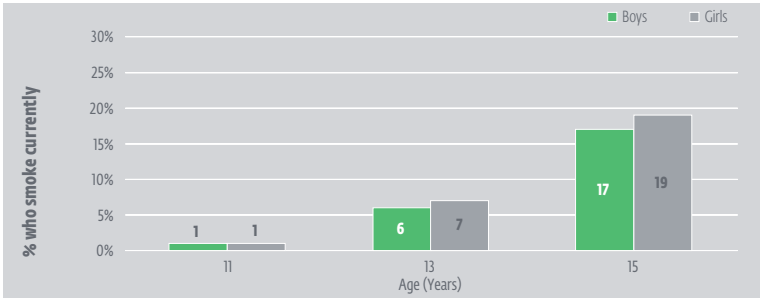


Figure 12.3:
SMOKE TOBACCO DAILY

HBSC Scotland
2010 Survey

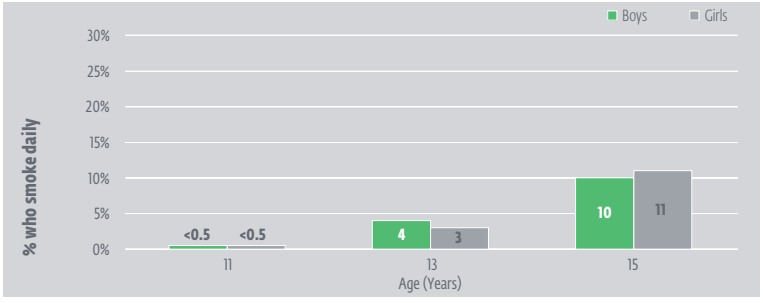
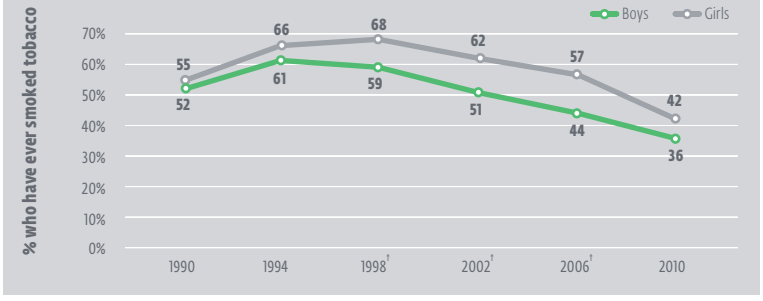


Figure 12.4:
EVER SMOKED TOBACCO: 15-YEAR OLDS 1990 – 2010

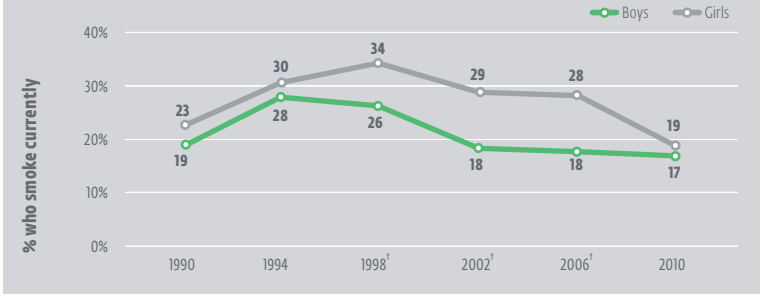
HBSC Scotland
1990 – 2010 Surveys



† Significant gender difference (p<0.01)

Figure 12.5:
CURRENT SMOKING: 15-YEAR OLDS 1990 – 2010

HBSC Scotland
1990 – 2010 Surveys



† Significant gender difference (p<0.01)

CANNABIS

Despite being illegal, cannabis is the most widely used substance among adolescents after tobacco and alcohol (BMRB, 2007). The Scottish Government's recent policy document *'The Road to Recovery: A New Approach to Tackling Scotland's Drug Problem'* (Scottish Government, 2008b) aims to prevent drug use in the longer term, especially through education for young people in schools. Cannabis use among young people is associated with a number of health concerns including increased risk of injuries, chronic diseases, depression and other mental health problems (Kalant, 2004).

Higher cannabis use has been associated with such factors as high levels of neighbourhood instability and economic deprivation (McVie and Norris, 2006), increased time spent with substance using peers (Best et al., 2005) and low parental supervision (McKegany et al., 2004). Cross nationally, going out less frequently in the evenings with friends, has been associated with adolescents having fewer opportunities to obtain and use cannabis (Kuntsche et al., 2010).

HBSC FINDINGS

Data are collected in the HBSC survey on whether young people have ever smoked, if they currently smoke[1] and how often. Questions measuring different aspects of alcohol use are also included and relate to frequency and types of alcohol consumed, the age of first drinking and getting drunk. Young people were also asked if they had used cannabis ever, in the last 30 days and in the last year and if so how often they have used it. Only 13 and 15-year olds participating in the HBSC survey were asked about their use of cannabis.

EVER SMOKED

Around one in five young people (21%) have tried smoking (19% of boys and 22% of girls), and proportions are greater among older age groups; 3% of 11-year olds report they have ever smoked compared with 19% of 13-year olds and 40% of 15-year olds (Figure 12.1). Boys and girls are equally likely to report having ever smoked at each age.

CURRENT SMOKING

Almost one in ten young people (9%) smoke at present (9% of girls and 8% of boys), with older age groups being more likely to be current smokers; 1% of 11-year olds are current smokers compared with 7% of 13-year olds and 18% of 15-year olds (Figure 12.2). There are no gender differences in prevalence of current smoking.

DAILY SMOKING

Daily smoking is often used as a definition of regular smoking among adults. Among 11- 15-year olds, only 5% are daily smokers. This proportion is greater at older ages (Figure 12.3). At age 15, 10% of boys and 11% of girls smoke daily. This represents 59% of those 15-year olds who are classified as 'current smokers'. There is no gender difference in daily smoking at any age.

Prevalence of ever, current and daily smoking among 15-year olds increased in the 1990's, but has since declined among both sexes (Figures 12.4, 12.5 and 12.6). In 2010 a similar prevalence of current and daily smoking is reported among boys and girls as in 1990, and prevalence for ever having smoked is lower than reported in 1990. Since 2006, prevalence of current smoking and daily smoking has not changed among boys, but is lower among girls (Figure 12.5). In 2010, 19% of girls are current smokers compared with 28% in 2006, and 11% of girls are daily smokers compared with 19% in 2006.

Figure 12.6:
DAILY SMOKING: 15-YEAR OLDS 1990 – 2010

HBSC Scotland
1990 – 2010 Surveys

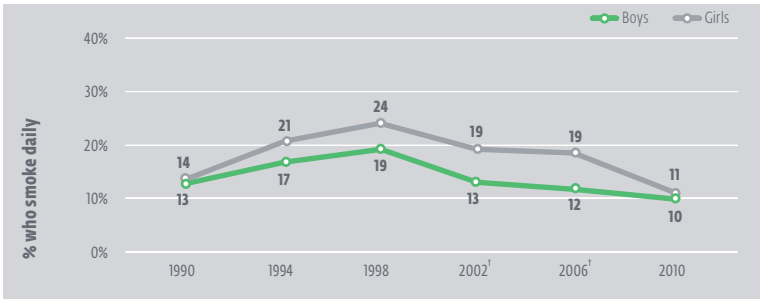


Figure 12.7:
DRINK ALCOHOL WEEKLY

HBSC Scotland
2010 Survey

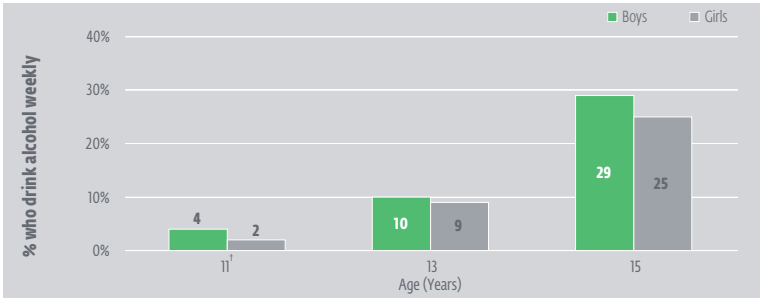


Figure 12.8:
WEEKLY DRINKING: 15-YEAR OLDS 1990 – 2010

HBSC Scotland
1990 – 2010 Surveys

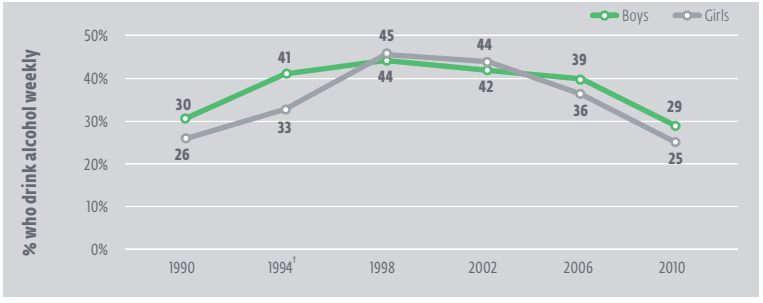


Figure 12.9:
TYPES OF ALCOHOL DRUNK WEEKLY BY 15-YEAR OLDS

HBSC Scotland
2010 Survey

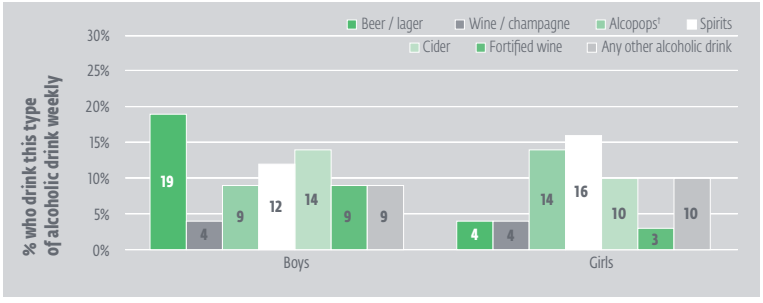
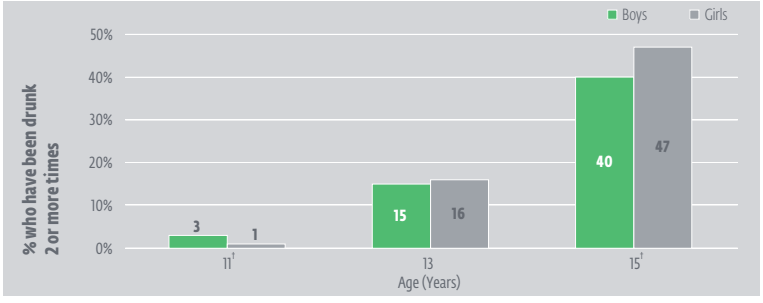


Figure 12.10:
BEEN DRUNK 2 OR MORE TIMES

HBSC Scotland
2010 Survey



WEEKLY DRINKING

Weekly drinking is reported among even the youngest children in the survey. At age 11, 3% of young people report drinking alcohol every week (4% of boys and 2% of girls) (Figure 12.7). One in ten 13-year olds (10%) and more than a quarter of 15-year olds (27%) are weekly drinkers. Among 13 and 15-year olds, there is no gender difference in weekly drinking.

In all six surveys since 1990, young people have been asked about their alcohol consumption frequency[2]. The highest rates of weekly drinking were found in 1998 (45%of girls and 44% of boys). Reporting of weekly drinking in 2010 is similar to that in 1990, with a particularly large decline since 2006 among both boys and girls (29% of boys in 2010 compared with 39% in 2006 and 25% of girls in 2010 compared with 36% in 2006) (Figure 12.8).

TYPES OF ALCOHOL DRINKS

Young people were asked to report how frequently they drink each of seven listed alcoholic drinks. They were instructed to include those times when they only drink a small amount. Beer is the alcoholic drink most commonly consumed at least once a week by 15-year old boys, whereas, for 15-year old girls, spirits and alcopops are the preferred drinks (Figure 12.9). Boys are almost 5 times more likely to drink beer weekly than girls. Girls are 1.5 times more likely to drink alcopops.

DRUNKENNESS

Overall, a fifth of young people (20%) have been drunk on at least two occasions. Prevalence of drunkenness is much higher among older adolescents; 43% of 15-year olds report having been drunk at least twice compared with 15% of 13-year olds and 2% of 11-year olds (Figure 12.10). At age 15, girls are more likely than boys to report drunkenness (47% of girls compared with 40% of boys).

Reporting of drunkenness among 15-year olds increased in the 1990s and then subsequently declined (Figure 12.11). Among boys, prevalence in 2010 (40%) is similar to that in 1990 (44%). Among girls, rates of drunkenness have declined slightly since the late 1990s, but have not changed since 2006 (48%), and remain higher in 2010 (47%) than in 1990 (36%).

FREQUENCY OF CANNABIS USE

Nineteen percent (19%) of 15-year olds and 4% of 13-year olds have used cannabis at least once in their lives (Figure 12.12). Boys are more likely to have ever used cannabis than girls. Sixteen percent (16%) of 15-year olds and 3% of 13-year olds reported cannabis use within the previous year (Figure 12.13), with 15-year old boys being more likely to have used cannabis in the previous year than 15-year old girls (19% and 13% respectively). Nine percent (9%) of 15-year olds used cannabis in the previous month, compared to just 2% of 13-year olds. Among 15-year olds, boys are more likely than girls to report cannabis use in the last month (12% of boys and 6% of girls).

Between 2002 and 2010, there has been a decrease in lifetime cannabis use among 15-year olds, from 39% to 23% among boys and from 35% to 15% among girls (Figure 12.4). Use of cannabis in the previous year has also decreased since 2002, from 31% to 19% among boys, and from 30% to 13% among girls (Figures 12.15).

CANNABIS USER GROUPS AMONG 15-YEAR OLDS

Six percent (6%) of 15-year olds are classified as 'experimental' cannabis users (once or twice in the past 12 months), 7% as 'regular' users (between 3 and 39 times in past 12 months) and 2% as 'heavy' users (40 times or more in past 12 months) (Figure 12.16). A small number (3%) report using cannabis, but not in the previous 12 months and were therefore classified as 'former' users. Boys are more likely to be heavy users, but there is no gender difference among other user groups. The proportion of young people in each category of cannabis use is lower than in 2002 (Figure 12.17).

Figure 12.11:
BEEN DRUNK 2 OR MORE TIMES: 15-YEAR OLDS 1990 – 2010

HBSC Scotland
1990 – 2010 Surveys

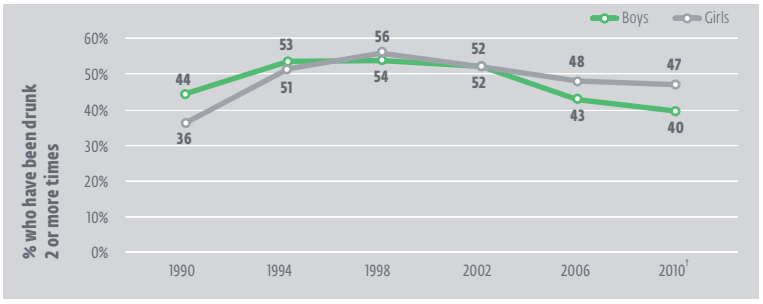


Figure 12.12:
EVER USED CANNABIS

HBSC Scotland
2010 Survey

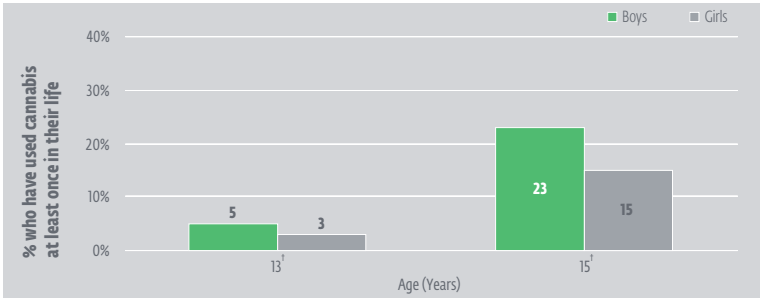


Figure 12.13:
USED CANNABIS IN PAST 12 MONTHS

HBSC Scotland
2010 Survey

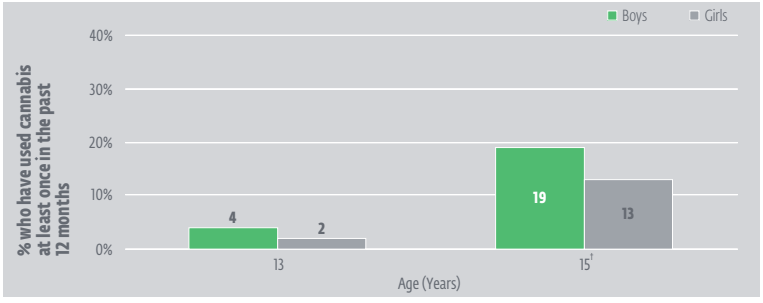


Figure 12.14:
EVER USED CANNABIS: 15-YEAR OLDS 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys

Figure 12.15:
USED CANNABIS IN PAST 12 MONTHS: 15-YEAR OLDS 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys

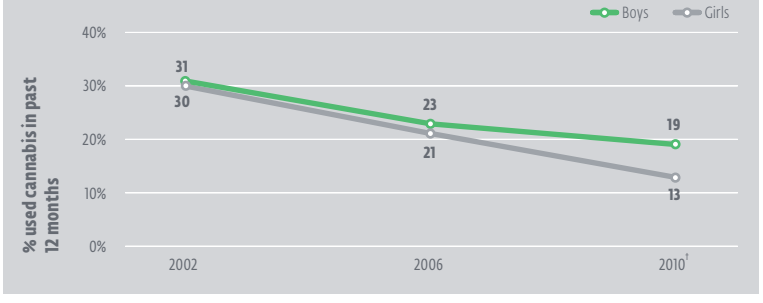


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Figure 12.16:
CANNABIS USER GROUPS: 15-YEAR OLDS

HBSC Scotland
2010 Survey

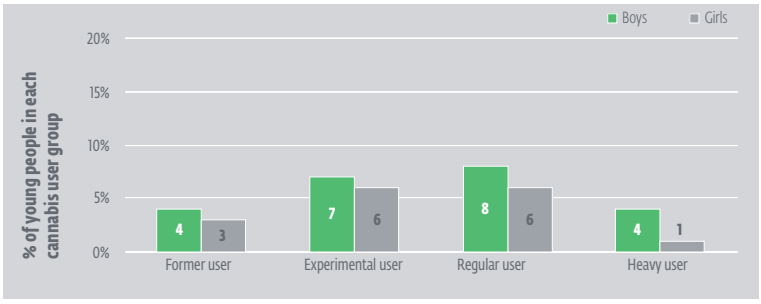
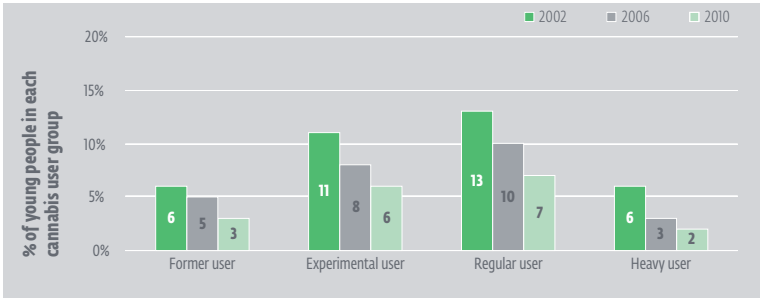


Figure 12.17:
CANNABIS USER GROUPS: 15-YEAR OLDS 2002 – 2010

HBSC Scotland
2002-2010 Survey



NOTES

1. Young people were asked "How often do you smoke tobacco at present?" Those who responded 'I do not smoke' were coded as not currently smoking tobacco. All other responses: smoking less than weekly, weekly or daily were coded as current smokers.
2. The list of drinks provided has evolved as preferences for alcoholic drink have changed; for example, the introduction of alcopops. For each survey, the proportion who drink weekly corresponds to those young people who consume any alcoholic drink (from the list provided) at least once a week.

13

SEXUAL HEALTH

- Friends and school rank first and second as primary sources of information on sexual matters for both boys and girls
- Compared with 2006, boys are more likely to source information on sexual matters from the internet and less likely to get information from school.
- Approximately three quarters of 15-year olds report that it is easiest to discuss personal and sexual matters with friends
- Almost a third of 15-year olds say that they have had sexual intercourse, with girls (35%) more likely to report sexual intercourse than boys (27%)
- The proportion of 15-year olds who used a condom during last intercourse increased between 2002 and 2006, from 70% to 79%, but has since dropped to 72% in 2010

INTRODUCTION

Sexual health has been defined as the complete physical, emotional, mental and social well-being of individuals with regards to their sexual behaviour (Berkeley and Ross, 2003). Adolescence is a key period in the development of personal relationships and sexual behaviour. During these years, thoughts and feelings about sexual behaviour emerge as a result of developing relationships, curiosity and sexually active peers. Information available to young people on sexual health can come from the home, school and peers as well as from mass media, health services and community-based programmes. As such, communication is an important facilitator in gaining accurate knowledge about prevention of sexually transmitted infections (STIs) and promotion of sexual health (Sivaram et al., 2005).

Key markers of risky sexual behaviour during adolescence include early initiation, high numbers of sexual partners and inconsistent contraception use. Early sexual activity can have consequences for young people's health and well-being, especially if it begins before they are sufficiently physically and mentally mature to cope with it (Godeau at al., 2008), and has been associated with adverse health outcomes such as STIs and unplanned pregnancies (Godeau et al., 2008), poor mental health (Sabia and Rees, 2008), and lower academic performance (Sabia, 2007).

In 2006, Scotland had one of the highest rates of early sexual activity among 15-year olds compared with 33 other countries in Europe and Canada (Currie et al., 2008). Furthermore, the diagnosis of STIs in Scotland increased between 2000 and 2005 but has since stabilised. (Health Protection Scotland, 2009). The national sexual health strategy Respect and Responsibility (Scottish Executive, 2005) recognises the importance of young people and their sexual health needs. It identifies a number of actions with the aim of providing evidence-based, age-appropriate Sex and Relationships Education (SRE) as well as access to drop-in services. As such, a number of sex education programmes for teachers, school nurses and youth workers, which focus on communication techniques and development of personal skills have been developed and delivered. This includes the SHARE (Sexual Health and Relationships: Safe, Happy and Responsible) programme in Scotland (Scottish Government, 2008). The family is also a primary source of socialisation for adolescents and can exert an influence on sexual attitudes and behaviours (Ogle et al., 2008). In addition, perceptions of peer sexual behaviours is also associated with the intention to have sex, early sexual intercourse and subsequent sexual intercourse frequency (Buhi and Goodson, 2007).

HBSC FINDINGS

HBSC collects data from 15-year olds (S4) about their sources of information about sexual matters (data collected since 1990, although optional responses have changed over time so that 2010 findings are only strictly comparable with those of 2002 and 2006) and with whom they find it easiest to talk to about sexual matters (data collected since 1990). There are also questions about sexual intercourse (data collected in some schools since 1990, and across the whole sample since 1998), and use of condoms and other contraception (data collected since 2002).

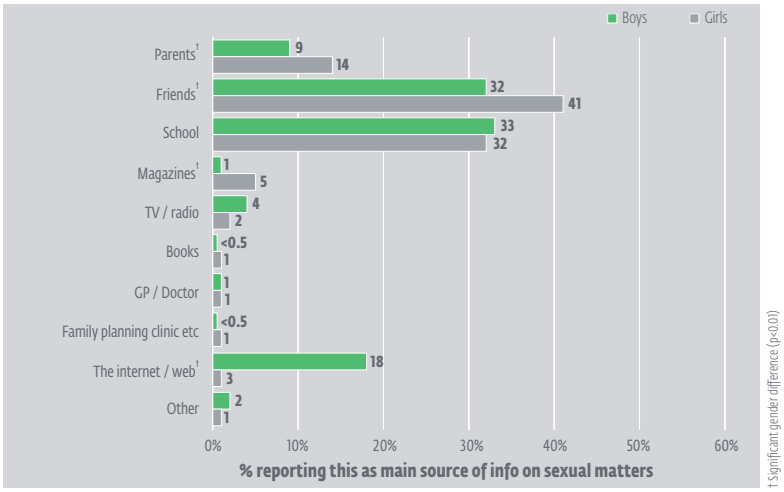
SOURCE OF INFORMATION ABOUT SEXUAL MATTERS

S4 pupils were asked where they obtained most of their information about sexual matters. Friends (37%) and school (32%) are the most popular out of the ten suggested sources (Figure 13.1). There are some gender differences in the proportion accessing each source. Girls are more likely than boys to get information from friends (41% compared with 32%), parents (14% compared with 9%) or magazines (5% compared with 1%). Boys are more likely to get information from the internet; 18% compared with 3% of girls. In fact, among boys, the internet is the third most common source, whereas among girls, parents are, after friends and school.

The biggest change in source of information among boys is in use of the internet, from 4% in 2002 to 18% in 2010 (Figure 13.2). The proportion using friends, magazines or TV/radio as their main source decreased between 2002 and 2006, while the proportion that reported school a main source increased from 29% in 2002 to 49% in 2006, falling back to 33% in 2010. Among girls, there was no substantive change between 2002 and 2010 in the proportion getting information about sexual matters from the internet (Figure 13.3). The proportion reporting school as their main source of information

Figure 13.1:
MAIN SOURCE OF INFORMATION ON SEXUAL MATTERS

HBSC Scotland
2010 Survey



† Significant gender difference (p<0.01)

Figure 13.2:
BOYS' MAIN SOURCE OF INFORMATION ON SEXUAL MATTERS 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys

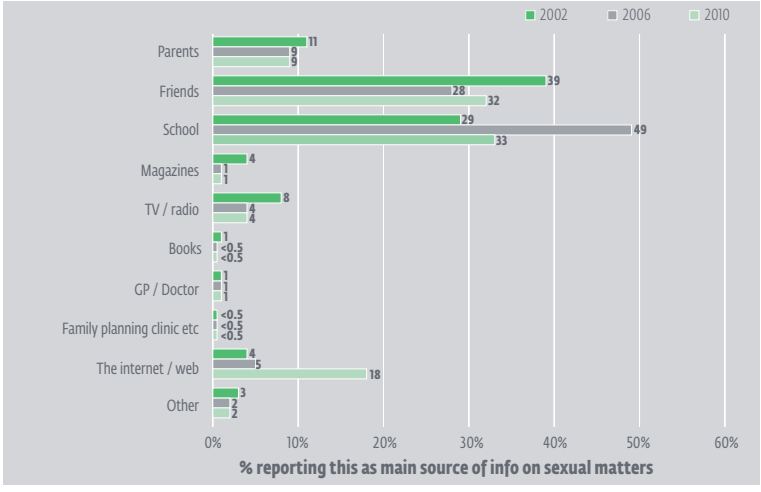
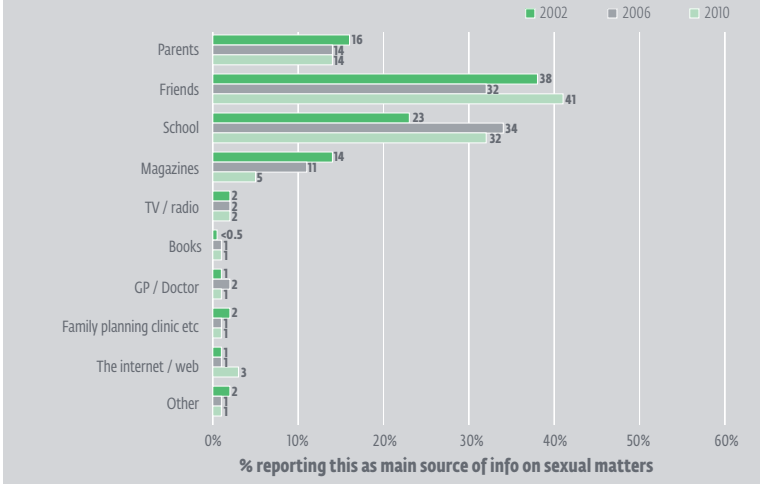


Figure 13.3:
GIRLS' MAIN SOURCE OF INFORMATION ON SEXUAL MATTERS 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys



increased between 2002 and 2006, from 23% to 34%, but unlike boys' reports, this did not change thereafter. Friends as a source saw a decrease between 2002 and 2006, from 38% to 32%, followed by an increase to 41% in 2010, while magazines saw a consistent reduction between 2002 and 2010, as the main source of information.

PERSON WITH WHOM SEXUAL MATTERS ARE DISCUSSED

When asked who they find it easiest to discuss personal and sexual matters with, 74% of 15-year olds choose friends over parents (15%), brother or sister (5%), teacher (1%) or 'other' (4%) (Figure 13.4). Boys and girls respond in a similar way, although girls are more likely than boys to say they find friends (78% compared with 71%) or a teacher (2% compared with <0.5%) easiest to discuss sexual matters with. There has been no substantive change since 2006.

SEXUAL INTERCOURSE

The proportion of 15-year olds who have had sexual intercourse has remained at around a third between 1998 and 2010. This proportion has not changed over time for either boys or girls, and in 2010, 31% of 15-year olds report having had sexual intercourse, with girls more likely to report sexual activity (35%) than boys (27%) (Figure 13.5).

CONTRACEPTION

Only those who responded that they had had sexual intercourse were included in analysis of contraception use data. Seventy four percent (74%) of boys and 70% of girls who report having had sexual intercourse used a condom (with or without the contraceptive pill) on the last occasion (Table 13.1). Around one in five girls (22%) and 13% of boys report the use of birth control pills. Around 9% of 15-year olds report using both a condom and birth control pills at last intercourse (11% of girls and 6% of boys). However, 19% report that they used neither a condom nor birth control pills (20% of girls and 19% of boys). A minority of young people reported using other methods such as contraceptive implant.

Fifteen year olds in 2010 are less likely to use a condom than in 2006 when 85% of boys and 74% of girls reported using one on the last occasion that they had sexual intercourse. This reduction is mainly observed in the combined use of condom and contraceptive pill, a decrease from 14% in 2006 to 9% in 2010. As well as a reduction in this dual protection there has also been a rise in using neither the contraceptive pill nor a condom at last sexual intercourse, from 14% in 2006 to 19% in 2010[1].

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NOTES

1 This is only significant at the 0.05 level – see Chapter 1 Introduction and Methods

Figure 13.4:
PERSON IT IS EASIEST TO DISCUSS PERSONAL AND SEXUAL MATTERS WITH

HBSC Scotland
2010 Survey

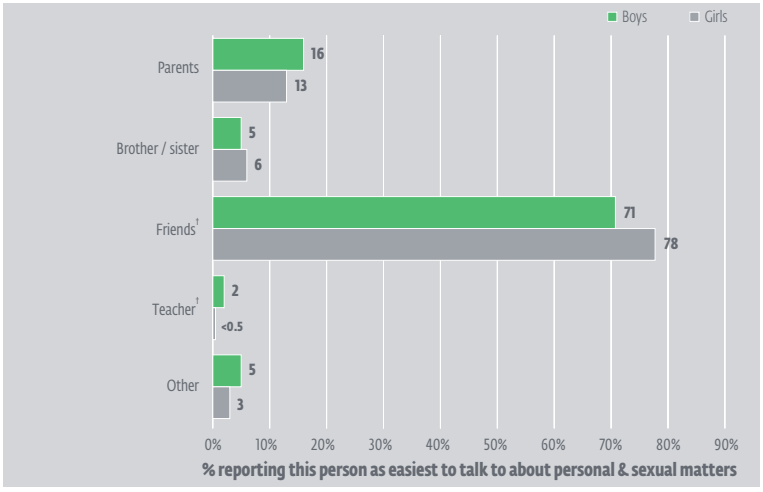


Figure 13.5:
SEXUAL BEHAVIOUR: HAD SEXUAL INTERCOURSE 1998 – 2010

HBSC Scotland
1998– 2010 Surveys

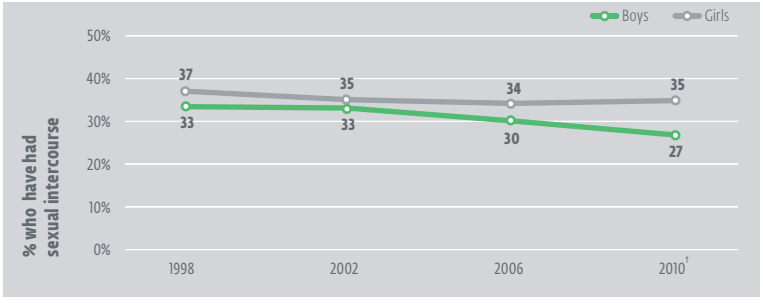


Table 13.1:
CONTRACEPTION USE

	2002			2006			2010		
Contraceptive used	**Boy** (n=165)	**Girl** (n=178)	**Total** (n=343)	**Boy** (n=253)	**Girl** (n=304)	**Total** (n=557)	**Boy** (n=246)	**Girl** (n=360)	**Total** (n=606)
Condom	65%	48%	**56%**	73%	58%	**65%**	69%	59%	**63%**
Contraceptive pill	4%	7%	**6%**	2%	10%	**7%**	7%	11%	**9%**
Condom & pill	12%	16%	**14%**	12%	16%	**14%**	6%	11%	**9%**
Neither condom nor pill	19%	28%	**24%**	13%	15%	**14%**	19%	20%	**19%**

14

BULLYING AND FIGHTING

- 9% of young people have been bullied at least two or three times a month at school in the previous two months, although prevalence of bullying is lower among 15-year olds (6%)
- 5% of young people report having bullied others in the past couple of months (7% of boys; 2% of girls)
- The proportion of boys involved in a physical fight three or more times in the previous 12 months decreased between 2002 and 2010, from 23% to 17%
- Fighting is more prevalent among younger than older boys

INTRODUCTION

Bullying is a specific type of intentional and repeated aggression which involves an inequality of power between the victim and perpetrators. Bullying can be both physical (e.g. hitting or pushing) and verbal (e.g. name-calling, threats) (Olweus, 1993), and more recently has taken the form of cyber bullying (aggression expressed through personal computers or mobile phones) (Wang et al., 2009). Both bullying and victimisation are often persisting problems following from childhood into adolescence (Sourander et al., 2000). Young people being repeatedly bullied find it increasingly difficult to defend themselves, as the power relation between bully and victim becomes consolidated (Craig and McCuaig-Edge, 2008).

Bullying during adolescence has been associated with both physical and psychological health problems (Due et al., 2005), as well as increased medicine use, impaired academic performance, absenteeism from school (Due et al., 2007) and physical injury (Stein et al., 2007). As such, bullying is an important adolescent health concern (Molcho et al., 2009). Being a victim of bullying is also associated with negative consequences, such as low psychological well-being, poor social adjustment, psychological distress and physical unwellness (Rigby, 2003). Boys have been shown to display higher prevalence of bullying perpetration than girls, with bullying behaviour peaking towards the mid-school career (Goldbaum et al., 2007).

Peer relations are a commonly studied social determinant of bullying involvement and it has been suggested that interventions against bullying should be targeted at the peer-group level rather than at individual bullies and victims (Salmivalli, 2010). Parental support (e.g. understanding problems and worries, making them feel better when upset), have been shown to protect adolescents from bullying others, as well as being bullied (Wang et al., 2009). Indeed, negative associations between family communications and bullying behaviours suggest the importance of addressing family interactions in future bullying prevention efforts (Spriggs et al., 2007). Young people's relationship with school has also been associated with bullying involvement, with both bullies and victims reporting lower school attachment (Haynie et al., 2001). Schools therefore may have a role in supporting children's emotional well-being and minimising the presence of bullying (Freeman et al., 2009).

Fighting is a common indicator of physical violence among young people (Pickett et al. 2005) and may or may not be associated with bullying depending on whether there is a power imbalance between those involved. Nevertheless, it is an extreme form of aggression which can have negative impacts on young people's lives. Physical fighting among adolescents creates the potential for fight-related injuries and has been associated with participation in many other health risk behaviours (Sosin et al., 1995). Fights involving weapons are a major cause of serious injuries and deaths among young people across countries (Pickett et al., 2005).

HBSC FINDINGS

In the HBSC study, bullying is defined as instances when another student, or group of students, say or do nasty things or when a student is teased repeatedly in a way he or she does not like or when he or she is deliberately left out of things (Olweus, 1996). The HBSC survey asks young people to report how often they have been bullied at school and how often they have taken part in bullying others. Fighting is defined within the HBSC survey as being involved in a physical fight, but is not restricted to the school setting. Bullying and fighting data have been collected since 2002.

Figure 14.1:
BEEN BULLIED AT LEAST 2-3 TIMES A MONTH IN PAST COUPLE OF MONTHS

HBSC Scotland 2010 Survey

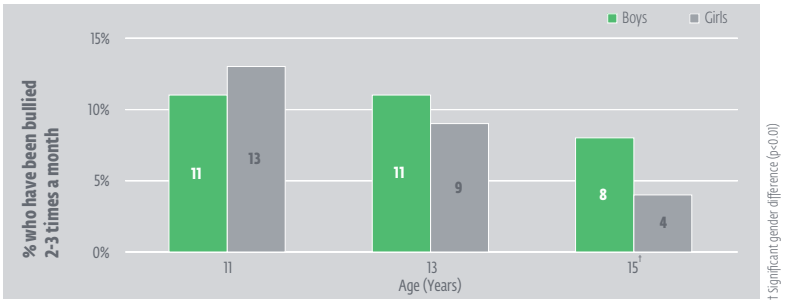


Figure 14.2:
BEEN BULLIED 2-3 TIMES A MONTH IN PAST COUPLE OF MONTHS 2002 – 2010

HBSC Scotland 2002 – 2010 Surveys

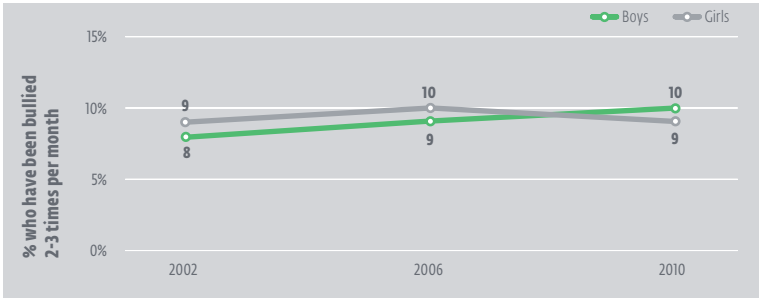


Figure 14.3:
BULLIED OTHERS AT LEAST 2-3 TIMES A MONTH IN PAST COUPLE OF MONTHS

HBSC Scotland 2010 Survey

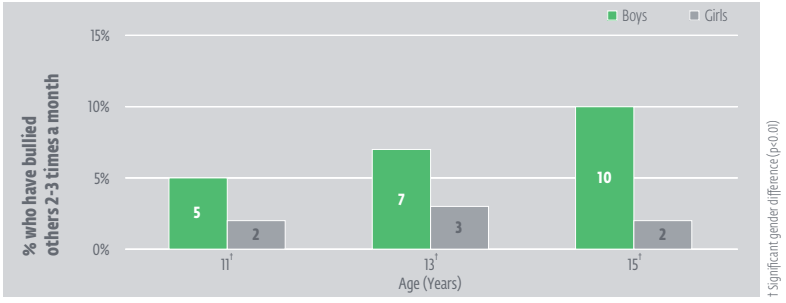
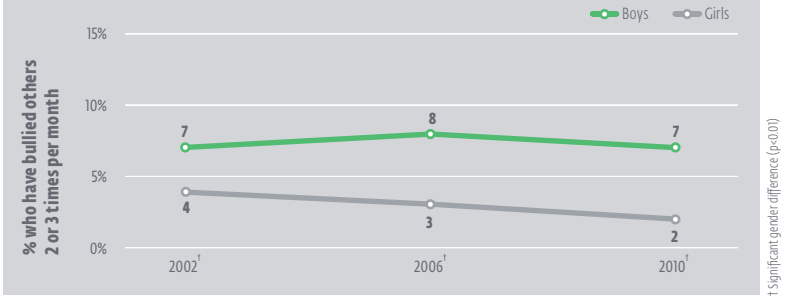


Figure 14.4:
BULLIED OTHERS AT LEAST 2-3 TIMES A MONTH 2002 – 2010

HBSC Scotland 2002 – 2010 Surveys



BULLYING AND BEING BULLIED

Approximately one in ten (9%) 11- 15-year olds report having been bullied at school at least two or three times a month in the previous two months (Figure 14.1). Girls and boys report similar exposure to frequent bullying at ages 11 and 13. However, while prevalence of being bullied does not differ by age among boys, there is a decrease among girls from 13% at age 11 to 4% at age 15. There has been no significant change in the prevalence of being bullied since 2002 (Figure 14.2) when 10% of 11 and 13-year olds and 6% of 15-year olds reported being bullied.

The proportion of young people who report bullying others (5%) is approximately half the proportion who report being bullied (9%). More boys than girls report frequently bullying others at each age, and the proportion of bullies increases with age among boys but not girls (Figure 14.3). The prevalence of bullying others has not changed for either girls or boys between 2002 and 2010 (Figure 14.4).

FIGHTING

Five percent (5%) of girls and 17% of boys report that they have been involved in a physical fight three or more times in the previous 12 months. The proportion of girls involved in a fight remains constant across all three age groups but for boys this decreases from 22% at age 11 to 15% at ages 13 and 15 (Figure 14.5). Between 2002 and 2010, fighting prevalence declined among boys but has not changed among girls (Figure 14.6).

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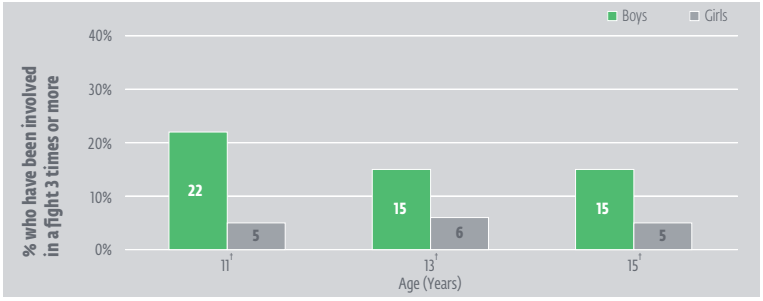
Figure 14.5:
INVOLVED IN A PHYSICAL FIGHT 3 TIMES OR MORE LAST YEAR

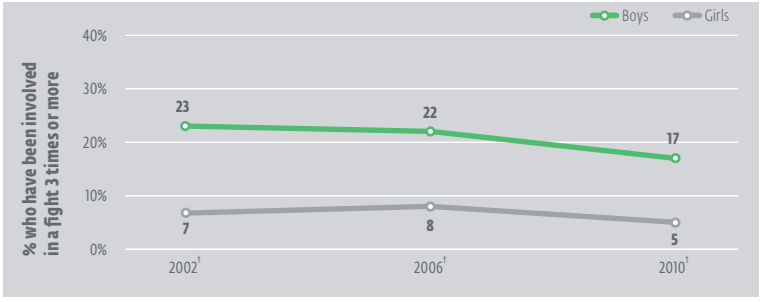
HBSC Scotland
2010 Survey



† Significant gender difference (p<0.01)

Figure 14.6:
INVOLVED IN A PHYSICAL FIGHT 3 TIMES OR MORE LAST YEAR 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys



† Significant gender difference (p<0.01)

15

INJURIES

- Almost half of young people (47%) have received an injury requiring medical attention in the past 12 months
- Boys are more likely to be injured than girls

INTRODUCTION

Injury is a significant risk to children and adolescents on a global scale. In industrialised countries it is the number one cause of deaths among adolescents. According to the World Health Organisation (WHO), the leading causes of injury death among children and adolescents are road traffic accidents, drowning, fire-related burns, self-harm and violence (WHO, 2008). However, the vast majority of injury deaths occur in low and middle-income countries (WHO, 2008). Within countries, associations have also been found between socio-economic status (SES) and type of adolescent injury (Simpson et al., 2005). In general, lower SES is associated with increased risk for hospitalised and fighting injury, whereas higher SES is associated with increased risk for sport or recreational injury (Simpson et al., 2005).

Injuries may be unintentional (e.g. road traffic accidents, falls, burns) or intentional (e.g. self-harm, suicide). Most non-fatal injuries among young people occur either within the home or at a sporting facility, often while engaging in a sporting activity, with boys reporting higher levels of injury than girls (Molcho et al., 2006).

Risk-taking behaviour has been identified as a leading determinant of injury among adolescents (Pickett et al., 2005). Indeed, the high prevalence of adolescent injury confirms its importance as a health problem (Pickett et al., 2005). Supportive social climates are thought to protect adolescents from engaging in certain risk-taking behaviours (e.g. drunkenness, non-use of seatbelt, drug use), and hence the occurrence of some forms of injury (Pickett et al., 2006). However, once risky behaviours have been adopted, this protective effect no longer exists.

HBSC FINDINGS

The HBSC study asks young people about their experience of injuries requiring medical attention during the previous 12 months. This data has been collected since 2002.

MEDICALLY ATTENDED INJURIES

Nearly half of young people (47%) suffered at least one medically treated injury in the past 12 months (53% of boys and 42% of girls). There is little variation in reported injuries across the three age groups (Figure 15.1). More boys than girls, however, have been injured at all three ages. There has been no change in the prevalence of injuries between 2002 and 2010 (Figure 15.2).

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Figure 15.1:
INJURED AT LEAST ONCE IN PAST 12 MONTHS

HBSC Scotland
2010 Survey

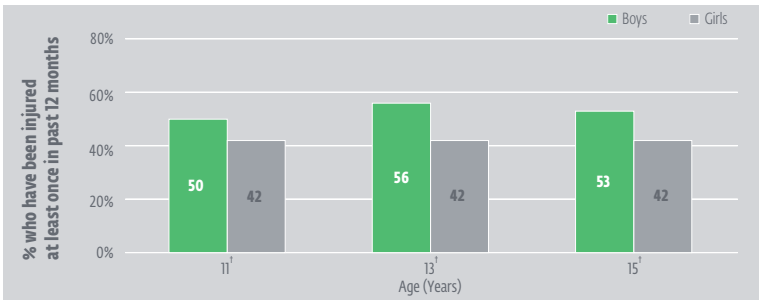
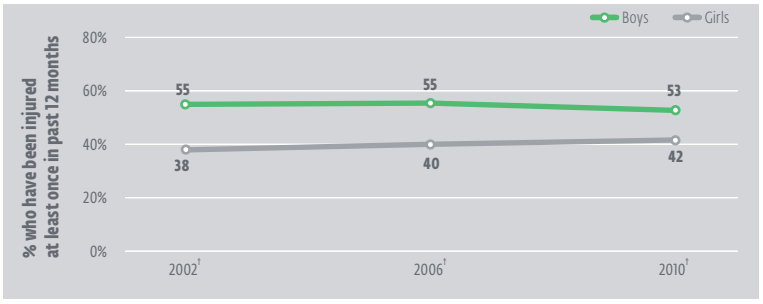


Figure 15.2:
INJURED AT LEAST ONCE IN PAST 12 MONTHS 2002 – 2010

HBSC Scotland
2002 – 2010 Surveys



APPENDIX

The following Appendix describes the questions included in the 2010 HBSC survey in Scotland. This does not replicate the full survey but lists only items presented in the 2010 HBSC Scotland National Report.

CHAPTER 2: FAMILY LIFE

FAMILY STRUCTURE

All families are different (for example, not everyone lives with both their parents, sometimes people live with just one parent, or they have two homes or live with two families) and we would like to know about yours. Please answer this first question for the home **where you live all or most of the time** and tick the people who live there. (Mother / Father / Stepmother (or father's partner) / Stepfather (or mother's partner) / Grandmother / Grandfather / I live in a foster home or children's home / Someone or somewhere else)

PARENTAL EMPLOYMENT AND FAMILY SOCIO-ECONOMIC STATUS

Does your father have a job? *(Yes / No / Don't know / Don't have or don't see father)*
If **YES**, please say in what sort of place he works (for example: hospital, bank, restaurant).
Please write down exactly what job he does there (for example: teacher, bus driver)
If **NO**, why does your father not have a job? (Please tick the circle that best describes the situation) *(He is sick or retired or a student / He is looking for a job / He takes care of others, or is full-time in the home / I don't know)*

Does your mother have a job? *(Yes / No / Don't know / Don't have or don't see mother)*
If **YES**, please say in what sort of place she works (for example: hospital, bank, restaurant).
Please write down exactly what job she does there (for example: teacher, bus driver)
If **NO**, why does your mother not have a job? (Please tick the circle that best describes the situation) *(She is sick or retired or a student / She is looking for a job / She takes care of others, or is full-time in the home / I don't know)*

From these responses paternal and maternal SES were coded and a family SES was created, using whichever of mother and father SES was highest.

FAMILY AFFLUENCE

Scores were calculated by summing the responses to the following survey items:

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

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

During the past 12 months, how many times did you travel away on holiday with your family? *(Not at all (=0) / Once (=1) / Twice (=2) / More than twice (=2)).*

How many computers (PCs, Macs or laptops) does your family own? *(None (=0)/ One (=1)/Two (=2)/More than two (=2)).*

The children surveyed were assigned low, medium or high FAS classification where FAS 1 (score = 0–3) indicates low affluence; FAS 2 (score = 4, 5) indicates middle affluence; and FAS 3 (score = 6, 7) indicates high affluence.

PERCEIVED WEALTH

How well off do you think your family is? *(Very well off / Quite well off / Average / Not very well off / Not at all well off)*

COMMUNICATION BETWEEN PARENTS AND ADOLESCENTS

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

CHAPTER 3: THE SCHOOL ENVIRONMENT

SATISFACTION WITH SCHOOL

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

ACADEMIC ACHIEVEMENT

In your opinion, what does your class teacher(s) think about your school performance compared to your classmates? *(Very good / Good / Average / Below average)*

PRESSURE OF SCHOOLWORK

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

CLASSMATE SUPPORT

Most of the pupils in my class(es) are kind and helpful. *(Strongly agree / Agree a bit / Neither agree nor disagree / Disagree / Strongly disagree)*

CHAPTER 4: PEER RELATIONS

NUMBER OF CLOSE FRIENDS
At present, how many **close** male and female friends do you have? Males/Females. *(None / One / Two / Three or more)*

PEER CONTACT FREQUENCY
How many days a week do you usually spend time with friends right after school? *(0 days / 1 day / 2 days / 3 days / 4 days / 5 days)*

How many evenings a week do you usually spend out with your friends? *(0 evenings / 1 evening / 2 evenings / 3 evenings / 4 evenings / 5 evenings / 6 evenings / 7 evenings)*

COMMUNICATION WITH BEST FRIEND
How easy is it for you to talk to the following person about things that really bother you? Best friend. *(Very easy / Easy / Difficult / Very difficult / Don't have or don't see this person)*

ELECTRONIC MEDIA CONTACT
How often do you talk to your friend(s) on the phone or send them text messages or have contact through the internet? *(Hardly ever or never/1 or 2 days a week/3 or 4 days a week/5 or 6 days a week/Every day)*

CHAPTER 5: NEIGHBOURHOOD ENVIRONMENT

FEEL SAFE IN LOCAL AREA
Generally speaking, I feel safe in the area where I live ... *(Always / Most of the time / Sometimes / Rarely or never)*

LOCAL AREA IS A GOOD PLACE TO LIVE
Do you think that the area in which you live is a good place to live? *(Yes, it's really good / Yes, it's good / It's OK / It's not very good / No, it's not good at all)*

GENERAL PERCEPTIONS OF LOCAL AREA
Please say how you feel about these statements about the area where you live. People say "hello" and often stop to talk to each other in the street / It is safe for younger children to play outside during the day / You can trust people around here / There are good places to spend your free time (e.g. leisure centres, parks, shops) / I could ask for help or a favour from neighbours / Most people around here would try to take advantage of you if they got the chance. *(Agree a lot / Agree a bit / Neither agree nor disagree / Disagree a bit / Disagree a lot)*

USE OF LOCAL GREENSPACE
Thinking of the summer months, out of school hours **how often** do you usually pass through or spend time in any of the following places **in your local area?** Parks, play areas, public gardens, woods, playing fields or sports pitches, golf courses, beaches, canals, rivers or by lochs or other types of natural open space. *(Less than once a month / About once a month / 2 to 3 times a month / 1 to 2 times a week / 3 to 4 times a week / 5 to 6 times a month / Every day)*

Thinking of the summer months, out of school hours **how much time** overall in a week do you usually spend in the following places **in your local area?** Parks, play areas, public gardens, woods, playing fields or sports pitches, golf courses, beaches, canals, rivers or by lochs or other types of natural open space. *(None / Half an hour or less per week / Between half to one hour per week / Between 1 to 2 hours per week / Between 2 to 4 hours per week / Between 4 to 6 hours per week / 7 or more hours per week)*

Frequency of greenspace use was categorised as: Infrequent user *(<once a month)*, occasional user *(1 to 3 times a month)*, frequent user *(at least once a week)*.

Duration of greenspace use was categorised as: Light user *(<1 hour a week)*, moderate user *(1-4 hours a week)*, heavy user *(>4 hours a week)*.

CHAPTER 6: EATING HABITS

FAMILY MEALS
How many **days a week** do you usually eat a meal with one or both of your parents? *(Every day / 4 to 6 days a week / 2 to 3 days a week / Once a week / Hardly ever or never)*

BREAKFAST CONSUMPTION
How often do you usually have **breakfast** *(more than a glass of milk or fruit juice)*? Weekdays. *(I never have breakfast during weekdays / One day / Two days / Three days / Four days / Five days)*

LUNCH ON SCHOOL DAYS
On **most** school days, what do you do for lunch? *(School lunches in the dining room or canteen / Packed lunch in school / Go home for lunch / Buy lunch from local shop, café or van / I don't eat lunch / Other)*

CONSUMPTION OF FOODS
How many **times a week** do you usually eat the following things? Fruit / Vegetables /Sweets or chocolate / potato crisps / Chips or fried potatoes. *(Never / Less than once a week / Once a week / 2-4 days a week / 5-6 days a week / Once a day, every day / Every day, more than once)*

How many **times a week** do you usually drink the following things? Coke or other soft drinks that contain sugar/Diet coke or diet soft drinks. *(Never / Less than once a week / Once a week / 2-4 days a week / 5-6 days a week / Once a day, every day / Every day, more than once)*

CHAPTER 7: PHYSICAL ACTIVITY AND SEDENTARY BEHAVIOUR

MODERATE TO VIGOROUS PHYSICAL ACTIVITY

Physical activity is any activity that increases your heart rate and makes you get out of breath some of the time.

Physical activity can be done in sports, school activities, playing with friends, or walking to school.

Some examples of physical activity are running, walking quickly, cycling, dancing, skateboarding, swimming, football, and gymnastics.

For the next question, add up all the time you spend in physical activity each day.

MEETING SCOTTISH GOVERNMENT PHYSICAL ACTIVITY GUIDELINES

Over the **past 7 days**, on how many days were you physically active for a total of at least **60 minutes** per day? *(0 days / 1 day / 2 days / 3 days / 4 days / 5 days / 6 days / 7 days)*

LEISURE TIME VIGOROUS PHYSICAL ACTIVITY

Outside school hours: How **often** do you usually exercise in your free time so much that you get out of breath or sweat? *(Every day / 4 to 6 times a week / 2 to 3 times a week / Once a week / Once a month / Less than once a month / Never)*

Outside school hours: How many **hours a week** do you usually exercise in your free time so much that you get out of breath or sweat? *(None / About half an hour / About 1 hour / About 2 to 3 hours / About 4 to 6 hours / 7 hours or more)*

TRAVEL TO SCHOOL

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

TRAVEL TIME TO SCHOOL

How long does it usually take you to travel to school from your home? *(Less than 5 minutes / 5-15 minutes / 15-30 minutes / 30 minutes to 1 hour / More than 1 hour)*

TIME SPENT WATCHING TELEVISION

About how many **hours a day** do you usually watch television (including videos and DVDs) in your free time? Weekdays/ Weekend. *(None at all / About half an hour a day / About 1 hour a day / About 2 hours a day / About 3 hours a day / About 4 hours a day / About 5 hours a day / About 6 hours a day / About 7 or more hours a day)*

PLAYING COMPUTER GAMES

About how many **hours a day** do you usually play games on a computer or games console (Playstation, Xbox, GameCube etc.) in your free time? Weekdays/Weekend. *(None at all / About half an hour a day / About 1 hour a day / About 2 hours a day / About 3 hours a day / About 4 hours a day / About 5 hours a day / About 6 hours a day / About 7 or more hours a day)*

USING A COMPUTER FOR PURPOSES OTHER THAN PLAYING GAMES

About how many **hours a day** do you usually use a computer for chatting on-line, internet, emailing, homework etc. in your free time? Weekdays/Weekend. *(None at all / About half an hour a day / About 1 hour a day / About 2 hours a day / About 3 hours a day / About 4 hours a day / About 5 hours a day / About 6 hours a day / About 7 or more hours a day)*

CHAPTER 8: WEIGHT CONTROL BEHAVIOUR

CURRENT WEIGHT CONTROL BEHAVIOUR

At present are you on a diet or doing something else to lose weight? *(No, my weight is fine / No, but I should lose some weight / No, because I need to put on weight / Yes)*

CHAPTER 9: BODY IMAGE AND BODY MASS INDEX

BODY SIZE

Do you think your body is..... *(Much too thin / A bit too thin / About the right size / A bit too fat / Much too fat)*

REPORTING GOOD LOOKS

Do you think you are..... *(Very good looking / Quite good looking / About average / Not very good looking / Not at all good looking / I don't think about my looks)*

BODY MASS INDEX (BMI)

How much do you weigh? *(I weigh .....kilograms / I weigh .....stones .....pounds / I don't know what I weigh)*

How tall are you? *(I am .....metres .....centimetres tall / I am .....feet ..... inches tall / I don't know what height I am)*

CHAPTER 10: TOOTH BRUSHING

TOOTH BRUSHING AT LEAST TWICE A DAY

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

CHAPTER 11: WELL-BEING

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

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

HAPPINESS
In general, how do you feel about your life at present? *(I feel very happy / I feel quite happy / I don't feel very happy / I am not happy at all)*

How often do you feel happy? *(Never / Hardly ever / Sometimes / Often / Always)*

SELF CONFIDENCE
How often do you feel confident in yourself? *(Never / Hardly ever / Sometimes / Often / Always)*

FEELING LEFT OUT
How often to you feel left out of things? *(Never / Hardly ever / Sometimes / Often / Always)*

HEALTH COMPLAINTS
In the last **6 months**, how often have you had the following ...? Headache / Stomach-ache / Back ache / Feeling low / Irritability or bad temper / Feeling nervous / Difficulties in getting to sleep/ Feeling dizzy *(About every day / More than once a week / About every week / About every month / Hardly ever or never)*

Multiple health complaints are defined as having 2 or more symptoms more than once a week.

MEDICINE USE
During the **last month** have you taken any **medicine or tablets** for the following? Headache / Stomach-ache / Difficulties in getting to sleep / Nervousness / Something else (please say what) *(No / Yes, once / Yes, more than once)*

CHAPTER 12: SUBSTANCE USE

TOBACCO
Have you ever smoked tobacco? (At least one cigarette, cigar or pipe) *(Yes/No)*

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

CANNABIS
Have you ever taken cannabis.... In your life/In the last 12 months/In the last 30 days. *(Never / Once or twice / 3 to 5 times / 6 to 9 times / 10 to 19 times / 20 to 39 times / 40 times or more)*

Cannabis user groups among 15-year olds were defined as: 'Experimental users' had used cannabis once or twice in the past 12 months. 'Regular users' had used cannabis 3-39 times in past 12 months. 'Heavy users' had used cannabis 40 times or more in past 12 months. 'Former users' reported having used cannabis before but not in the previous 12 months.

ALCOHOL
At present, how often do you drink anything alcoholic, such as beer, wine or spirits? Try to include even those times when you only drink a small amount. Beer or lager/Wine or champagne/Alcopops (like Smirnoff Ice, Bacardi Breezer, WKD) / Spirits (like whisky, vodka) / Cider/Fortified (strong) wine like sherry, martini, port, Buckfast/Any other drink that contains alcohol. *(Every day / Every week / Every month / Hardly ever / Never)*

Have you ever had so much alcohol that you were really drunk? *(No, never / Yes, once / Yes, 2-3 times / Yes, 4-10 times / Yes, more than 10 times)*

CHAPTER 13: SEXUAL HEALTH

SOURCE OF INFORMATION ABOUT SEXUAL MATTERS
Where do you get **most** of your information about sexual matters? *(Parents / Friends / School / Magazines / TV or Radio / Books / GP or Doctor / Brook Advisory or Family Planning or other such clinics or centres / The internet or web/Other)*

PERSON WITH WHOM SEXUAL MATTERS ARE DISCUSSED
It is easiest to discuss personal and sexual matters with my.... *(Parents / Brother or sister / Friends / Teacher / Other)*

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

CONTRACEPTION
The last time you had sexual intercourse, what method(s) did you or your partner use to prevent pregnancy? I have never had sexual intercourse / No method was used to prevent pregnancy/Birth control pills (the pill) / Condoms / Withdrawal / Emergency contraception ('morning after' pill) / Some other method / Not sure. *(Yes / No)*

The last time you had sexual intercourse, did you or your partner use a condom? *(I have never had sexual intercourse / Yes / No)*

CHAPTER 14: BULLYING AND FIGHTING

BULLYING AND BEING BULLIED
We say a pupil is **being bullied** when another pupil, or group of pupils, say or do nasty and unpleasant things to him or her. It is also bullying when a pupil is teased repeatedly in a way he or she does not like or when he or she is deliberately left out of things. But it is **not bullying** when two pupils of about the same strength or power argue or fight. It is also not bullying when a pupil is teased in a friendly and playful way.

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

How often have you taken part in bullying another pupil(s) at school in the past couple of months? *(I haven't bullied another pupil(s) at school in the past couple of months / It has only happened once or twice / 2 or 3 times a month / About once a week / Several times a week)*

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

CHAPTER 15: INJURIES

MEDICALLY ATTENDED INJURY
Many young people get hurt or injured from activities such as playing sports or fighting with others at different places such as the street or home. Injuries can include being poisoned or burned. Injuries do not include illnesses such as Measles or the Flu. The following question is about injuries you may have had during the past 12 months.

During the past 12 months, how many times were you injured and had to be treated by a doctor or nurse? *(I was not injured in the past 12 months / 1 time / 2 times / 3 times / 4 times or more)*

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