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HBSC is the Health Behaviour in School-Aged Children: WHO Collaborative Cross-National Study

How are Scotland's young people doing? A cross-national perspective on physical and emotional well-being

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How are we doing? Scotland in a cross-national perspective

- General Health**
- ~ By the age of 15, the proportion of girls who reported their health as fair or poor exceeded that of boys in every HBSC country.
 - ~ Among all 15 year old HBSC respondents, between 7.6% and 31.5% of boys and 12.8% and 63.1% of girls in each country reported their health to be fair or poor.
 - ~ In Scotland 15.9% of boys and 31.5% of girls aged 15 reported their health to be fair or poor.
- Bullying**
- ~ Reports of having been bullied at least two or three times a month over the past couple of months decline with age and among all HBSC 15 year olds ranged from 2.4% to 31.8% across countries.
 - ~ In Scotland, 4.9% of 15 year old boys and 6.3% of girls reported having been bullied at least two or three times a month over the past couple of months.
- Fighting**
- ~ There are clear cross-national gender differences in fighting three or more times a year with 11.8% of all HBSC boys and 3.4% of all girls reporting involvement in this behaviour.
 - ~ Of 15 year old respondents in Scotland, 18.1% of boys and 6.5% of girls reported involvement in three or more fights during the past year.
 - ~ Reports of multiple fights from pupils in Scotland exceeded HBSC averages for all age groups.
- Injuries**
- ~ Among all 15 year old HBSC respondents who reported at least one injury, 45.3% reported two or more injuries over the last year which required medical attention; 48.2% of boys and 41.7% of girls.
 - ~ At age 15, of those reporting injuries, 55.4% of boys and 50.0% of girls in Scotland reported two or more injuries over the past 12 months which required medical attention.
 - ~ Multiple injury rates in Scotland which required medical attention were exceeded in only two countries for boys and in four countries for girls.

Introduction

Scotland first participated in the *Health Behaviour in School-Aged Children (HBSC): a WHO Collaborative Cross-National Study* in 1986, along with 12 other countries. The most recent HBSC survey in 2001/2 was conducted in 35 countries, including Scotland.

HBSC makes a unique contribution to the study of young people's health through the collection of cross-national data in surveys conducted every four years using a common survey protocol.

This allows the measurement and tracking of aspects of adolescent health and health-related behaviours and their developmental and social contexts.¹

The report *Young People's Health in Context* begins the international dissemination of findings from the 2001/2 HBSC survey of more than 160,000 young people.² Data from the 2001/2 survey profile health and health-related behaviours within and between countries. This information will contribute to an evidence base for policy making at local, national and international levels.

Based upon chapters in *Young People's Health in Context*, this Briefing Paper compares Scotland with other HBSC countries. The focus is on physical and emotional well-being, with particular reference to reports of: general health status, bullying, fighting and injuries. It is recommended that readers consult the report in its entirety for both expanded details of results and pertinent literature.

Methods

In 2001/2, 35 countries drew national samples of 11, 13 and 15 year olds in accordance with the Study protocol.¹

In the main, fieldwork took place between the autumn of 2001 and the spring of 2002.² Approximately 1,500 respondents in each age group were targeted in every country. Pupils who were absent on the day of the survey were not followed up.

Data were collected by self-administered questionnaire. On completion of fieldwork, national data files were prepared using standard documentation and submitted to the HBSC International Data Bank at the University of Bergen, Norway. Data files were checked, cleaned and returned to countries for approval prior to their placement in the international file. Further details can be found in *Young People's Health in Context*.²

The final 2001/2 international data file is composed of data from: Austria, Belgium (Flemish and French speaking populations), Canada, Croatia, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Greece, Greenland, Hungary, Ireland, Israel, Italy, Latvia, Lithuania, FYR Macedonia, Malta, Netherlands, Norway, Poland, Portugal, Russia, Scotland, Slovenia, Spain, Sweden, Switzerland, Ukraine, the United States and Wales[†].

Presentation of Cross-National Results

Results from the 2001/02 survey represent more than 160,000 young people. Respondents were distributed fairly evenly with respect to gender and age. The mean age within each age group was 11.6, 13.6 and 15.6 years.²

The sample in Scotland was nationally representative, drawn from mixed ability classes of both state and independent schools and yielded responses from 4,404 young people in Primary 7 (11 year olds), Secondary 2 (13 year olds) and Secondary 4 (15 year olds).

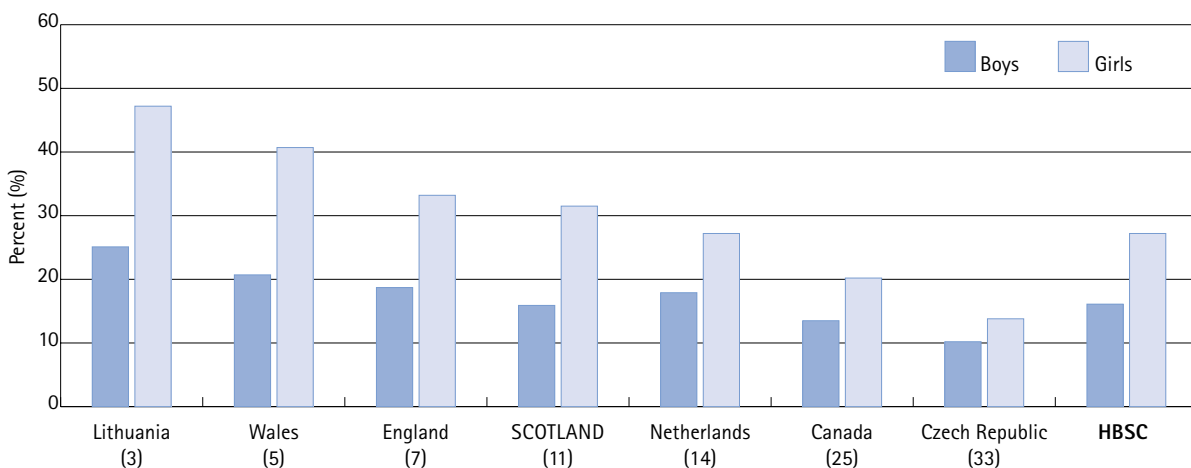
This Briefing Paper focuses on 15 year olds, although data on 11 and 13 year olds are presented. Comparisons are provided between Scotland, the entire HBSC survey and a subset of participating countries. Data from England and Wales are presented to show similarities and differences within the UK. A further four countries, one from each quartile, are also presented.[§]

Each figure illustrates the cross-national range of responses and the HBSC average. The ranking of each country, for boys and girls combined, is also shown in brackets. Ranks should be interpreted with caution and may reflect relatively small cross-national differences. A country may appear in one Figure but not another because of its relative international ranking.

Health & Well-being

In many parts of the world, adolescent mortality rates are low and relatively few young people seek medical attention for chronic illness or disease compared to older adult populations. For these reasons, traditional measures of mortality and morbidity, such as

Figure 1. Fair or poor general health as reported by 15 year olds.



Percent (%) reporting fair or poor general health

Age	Boys Scotland (HBSC average)	Girls Scotland (HBSC average)
11	16.7 (12.1)	14.9 (15.7)
13	19.1 (13.6)	23.6 (20.8)
15	15.9 (16.1)	31.5 (27.2)

Health Behaviour in School-Aged Children (HBSC): WHO Collaborative Cross-National 2001/2 Survey

† A regional sample was selected in Germany (Nordrhein-Westfalen, Berlin, Hessen and Sachsen). Separate studies were carried out in Flemish and French speaking populations in Belgium, England, Scotland and Wales. Due to the small size of the 11, 13 and 15 year old population in Greenland, a census was taken.²

§ Non-UK countries were ranked according to the responses from boys and girls combined. Countries ranked 3rd and 11th from the top and 3rd and 11th from the bottom of a cross-national comparison were used to represent the top two quartiles and the bottom two quartiles.

those used in adult populations, are less well suited for monitoring the health of young people.

Asking young people to report on their own health provides an evidence base which does not rely upon clinical diagnoses or reporting by parents or guardians. Subjective health assessments can, and often do, have measurable behavioural correlates relating to academic achievement, social involvement or physical activity, for example.

Self-reported general health status was measured using the commonly used question:

Would you say your health is...?

Response categories were: *Excellent; Good; Fair; or Poor.*

The proportion of young people who rated their health status as fair or poor varied considerably cross-nationally, as well as by age and gender.

Reports from boys showed less variation by age, both cross-nationally and within Scotland as compared to girls (Figure 1).

In 28 countries, more 11 year old girls reported fair or poor health as compared with their male peers. By age 13, this was the case in 33 countries. By the age of 15, it was apparent in every country.

The magnitude of the gender gap increased with age. Differences of 10% to 19% in reports of fair or poor health between girls and boys at age 11 were observed in four countries. At 13 years, this gap was observed in seven countries with a further two countries showing differences of between 20% and 29%. By 15 years, the 10% to 19% differential was noted in 14 countries with an additional three countries reporting gaps of between 20% to 29% and one country reporting a gap of greater than 30%. At age 15, the gender difference in Scotland was 15.6%.

Among all 15 year old HBSC respondents, between 7.6% and 31.5% of boys and 12.8% and 63.1% of girls reported their health to be fair or poor. In Scotland this was the case for 15.9% of boys and 31.5% of girls. Rates exceeded those reported in Scotland in eight countries for girls and in 13 countries for boys, including England and Wales in each case.

It is noteworthy that more girls than boys reported their health to be fair or poor by the age of 15 in every country. This is a common occurrence among adults as women often report poorer health than men. These data support the notion that this subjective health differential begins early in life and that it transcends cultural boundaries.

Bullying & fighting

Bullying and fighting are behaviours that can have an impact on health and well-being. Bullying and fighting are observed at international, national and local levels and are not confined to the young.

Bullying reflects an imbalance in interpersonal relationships and can involve verbal abuse or physical actions of a hostile intent. Bullying often involves a repetitive type of behaviour and reflects a perceived imbalance of power between the perpetrator and the

victim. A bully, either a boy or a girl, often chooses a victim who is smaller, younger or thought not to be as strong, either physically or psychologically, as themselves. The immediate effects of victimisation can include physical harm, anxiety and lowered self-esteem.

Physical fighting is another anti-social behaviour which can result in psychological as well as physical harm. As is the case with bullying and victimisation, researchers have shown that these behaviours can persist into adulthood.

Two items were used to measure bullying others and being bullied although only one is presented here.¹ Pupils were first presented with definitions to clarify conceptual issues.

We say a student is being bullied when another student, or a group of students, say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she doesn't like, or when they are deliberately left out of things. But it is not bullying when two students of about the same strength quarrel or fight. It is also not bullying when the teasing is done in a friendly and playful way.

How often have you been bullied at school in the past couple of months?

Response categories were: *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.*

Affirmative responses to the last three categories were combined to represent young people who reported having been bullied at least two or three times a month in the past couple of months.

Fighting was measured using a single question.

During the past 12 months, how many times were you in a physical fight?

Response categories were: *I have not been in a physical fight; 1 time; 2 times; 3 times; 4 times or more.*

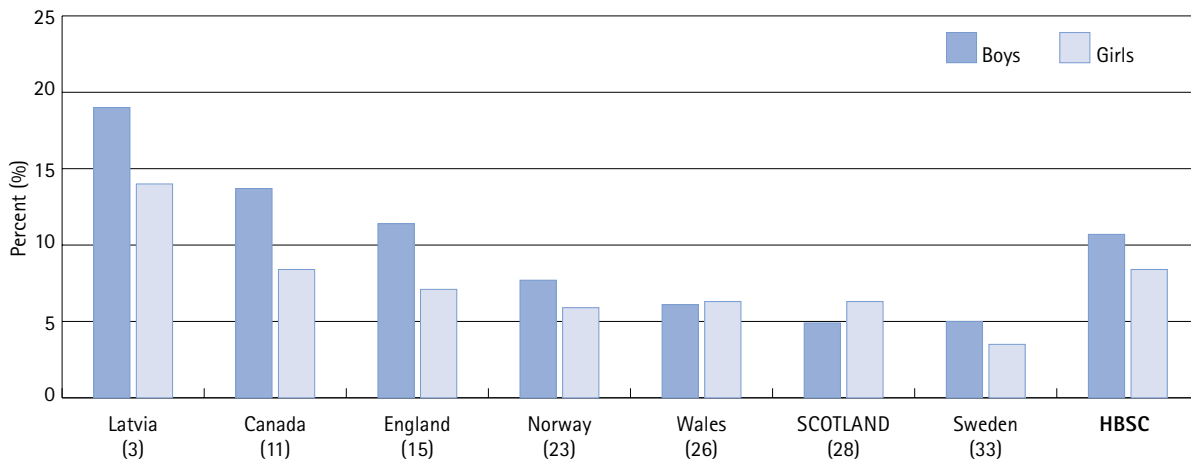
Affirmative responses to the last two categories were combined to represent young people who reported having been in a fight three or more times in the past 12 months.

As can be seen from Figures 2 and 3, reports of victimisation at school and fighting decline with age.

Among 15 year olds, reports of being bullied at least two or three times a month in the past couple of months vary markedly between countries (Figure 2). Cross-nationally, 9.5% of 15 year olds reported being bullied, ranging from 2.4% to 31.8%. No consistent gender differences were observed cross-nationally, although in six countries, including Scotland and Wales, 15 year old girls reported being bullied slightly more than their male peers.

Across all age groups, reports from pupils in Scotland were below the HBSC average. Among 15 year olds in Scotland, 5.6% reported having been bullied at least two or three times a month in the past couple of months, 4.9% of boys and 6.3% of girls.

Figure 2. Reports of having been bullied at least 2 to 3 times a month over the past couple of months among 15 year olds.

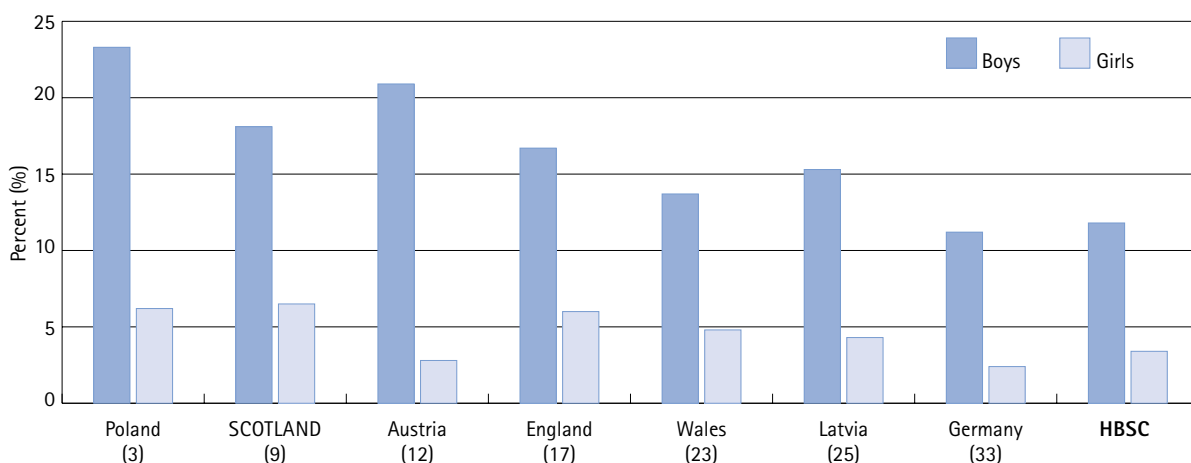


Percent (%) reporting having been bullied at least two to three times over the past couple of months

Age	Boys	Girls
	Scotland (HBSC average)	Scotland (HBSC average)
11	9.7 (16.4)	10.3 (12.8)
13	9.6 (15.4)	9.7 (12.4)
15	4.9 (10.7)	6.3 (8.4)

Health Behaviour in School-Aged Children (HBSC): WHO Collaborative Cross-National 2001/2 Survey

Figure 3. Reports of fighting three or more times over the past year among 15 year olds.



Percent (%) reporting fighting three or more times over the past year

Age	Boys	Girls
	Scotland (HBSC average)	Scotland (HBSC average)
11	29.2 (18.4)	8.6 (4.8)
13	22.2 (14.3)	6.7 (4.5)
15	18.1 (11.8)	6.5 (3.4)

Health Behaviour in School-Aged Children (HBSC): WHO Collaborative Cross-National 2001/2 Survey

Although this type of victimisation was reported less frequently in Scotland as compared to other countries, it nonetheless affects on average about one young person in each classroom among 15 year olds and more younger pupils. Efforts should continue to reduce bullying, particularly among younger pupils.

Unlike reports of having been bullied, reports of fighting reflect clear gender differences. Of all HBSC survey participants aged 15, between 4.1% and 18.1% in each country reported having been in a physical fight 3 or more times in the past year. Of these 15 year olds, 11.8% were boys and 3.4% were girls (Figure 3). In many countries, including England, Scotland and Wales, reported rates of frequent fighting among boys were at least twice those of girls.

Of 15 year old respondents in Scotland, 18.1% of boys and 6.5% of girls reported involvement in three or more fights during the past year. Figure 3 shows that reports of fighting are more common among 11 year olds. Between ages 11 and 15 years reporting declined by approximately 11% among boys and 2% among girls. Nonetheless, reports of multiple fights from pupils in Scotland exceeded the HBSC survey average in all age groups.

Both bullying and fighting can affect physical, mental and emotional well-being. They present challenges that transcend national boundaries. It has been shown that intervention policies and various school-based health promotion strategies have been efficacious in reducing the number of occurrences. In part, some of the success in reducing aggressive behaviours such as bullying and fighting stems from zero tolerance. Other approaches include

education, modelling conflict resolution and encouraging respect for others.^{3,4} An anti-bullying network is established in Scotland.^{5,6}

Injuries

The likelihood of injury increases as children enter adolescence. Injuries are a major cause of morbidity among young people and account for more than 70% of all deaths. Major causes of injuries to young people are their involvement in sporting-related activities as well as accidents in the home, school and in conjunction with road traffic.

Injuries were measured using a single previously validated item in the HBSC questionnaire. The item was preceded by a definition of what constitutes an injury requiring medical attention:

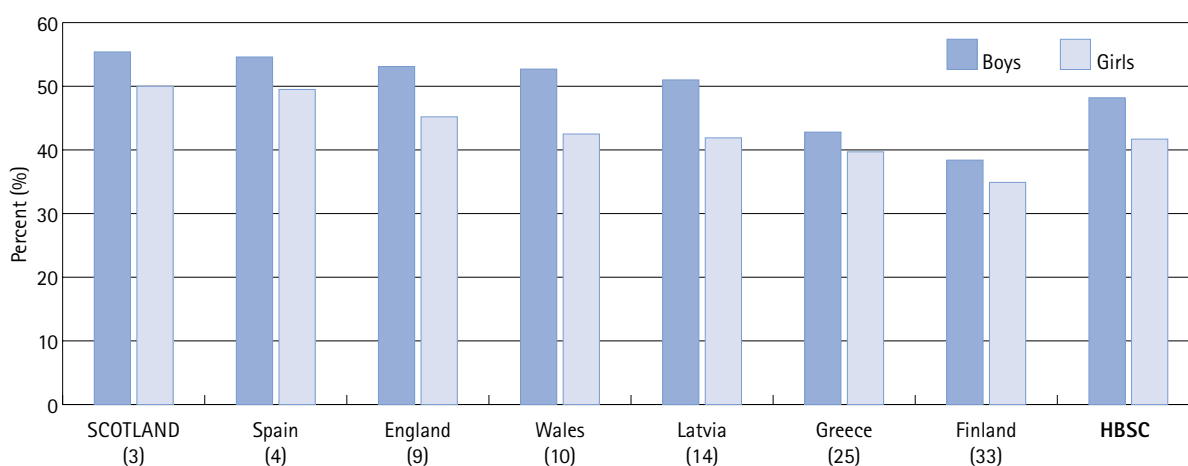
Many young people get hurt or injured from activities such as playing sports or fighting with others at different places such as the street or home. Injuries can include being poisoned or burned. Injuries do not include illnesses such as Measles or the Flu. The following question is about injuries you 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?

Response categories were: *I was not injured in the past 12 months; 1 time; 2 times; 3 times; 4 times or more.*

Positive responses to the last three categories were combined to reflect two or more injuries during the past 12 months which required medical attention.

Figure 4. Fifteen year olds who reported two or more injuries which required medical attention within the last year, among reports of any injury at all.



Percent (%) reporting two or more injuries over the past year, among reports of any injury at all

Age	Boys	Girls
	Scotland (HBSC average)	Scotland (HBSC average)
11	60.0 (49.7)	43.7 (41.7)
13	54.3 (48.9)	42.7 (40.8)
15	55.4 (48.2)	50.0 (41.7)

Cross-nationally, the proportion of 15 year olds that reported *any injury at all* which required medical attention was 43.9%, 50.8% of boys and 37.6% of girls, as compared with 54.3% of boys and 32.9% of girls in Scotland.

Multiple injuries, reported rates of two or more injuries among those HBSC 15 year olds reporting injuries over the past year, varied cross-nationally between 32.0% and 54.2%. The HBSC average was 45.3%, with boys reporting slightly higher rates than girls, 48.2% and 41.7% respectively.

As can be seen from Figure 4, rates reported in Scotland were above HBSC averages and varied somewhat by age and gender. Of those reporting injuries at age 15, 55.4% of boys and 50.0% of girls reported two or more injuries over the last 12 months which required medical attention. These rates were exceeded in only two countries for boys and in four countries for girls.

Although medical services, factors affecting decisions to seek medical attention, school policies and seasonal differences at the time of each national survey are likely to have affected the findings, the high level of cross-national reporting reflects the ubiquitous nature of injuries among young people. Educational and environmental strategies to reduce avoidable injuries should continue to target both young people and adults.⁴

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HBSC publications and HBSC information

Further information on the international report from the 2001/02 survey can be obtained from the International Study website www.hbsc.org. The International Coordinating Centre of the HBSC Study is the Child and Adolescent Health Research Unit (CAHRU), The University of Edinburgh.

Reports from this and earlier surveys include

Alexander LM, Currie C (2004). *HBSC Briefing Paper 4. Mental-health and well-being in the context of school: Young people in Scotland*. Child & Adolescent Health Research Unit (CAHRU), Edinburgh.

Alexander LM, Currie C and Todd J. (2003). *HBSC Briefing Paper 3. Gender Matters: Physical activity patterns of schoolchildren in Scotland*. Child & Adolescent Health Research Unit (CAHRU), Edinburgh.

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