



HBSC Briefing Paper 2

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

Mental well-being among schoolchildren in Scotland: age and gender patterns, trends and cross-national comparisons

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Introduction

The mental well-being of adolescents is a priority issue for families, schools, and communities and therefore for the professionals working to support them and promote their mental health. In early to mid-adolescence, represented in school years by the end of primary school and the early years of secondary school, there are many new pressures and challenges for young people. They need to deal with considerable change in their lives at this time: growing academic expectations; changing social relationships with family and peers; physical and emotional changes associated with maturation. They also need to cope with the pressures of looking ahead and planning their lives in the face of various barriers and opportunities. As a recent review¹ of the health of young people in Scotland reveals, there is an increase in 'malaise' symptoms, such as irritability, nervousness and sleeping problems between 11 and 15 years and in this age group girls suffer poorer mental health than boys². Other research reports that adolescent boys have higher positive self-esteem, lower negative self-image, and less unhappiness than girls³.

Using data from the 2001/2 Health Behaviour in School-Aged Children (HBSC): WHO Collaborative Cross-National Study in Scotland⁴, this paper focuses on positive aspects of mental well-being: general happiness, life satisfaction, body image and confidence, and examines gender patterns and differences between age groups. Using data from earlier HBSC surveys, some trends in positive mental well-being are presented, as are cross-national comparisons using the 1997/98 survey data. (Cross-national comparisons from the 2001/2002 survey will be reported at a later date.)

While this is paper largely descriptive and 'scene-setting', future briefing papers will examine the personal and social environmental factors that affect mental well-being during adolescence, and the implications for policy and practice.

Main findings

- ~ The mental well-being of boys is better than that of girls on all measures
- ~ Overall, children in primary school have better mental well-being than those in secondary school
- ~ Trend data indicates an improvement in mental well-being of schoolchildren in Scotland since the mid 1990s
- ~ Cross-national comparisons in 1997/98 place Scotland's schoolchildren above the average in terms of happiness but low on confidence and perceptions of their appearance

Details of the 2002 Survey in Scotland

The 2002 HBSC Survey in Scotland involved pupils from mixed ability classes completing a questionnaire anonymously in the classroom. The sample was nationally representative and included pupils from Primary 7 (11-year-olds, n=1743), Secondary 2 (13-year-olds, n=1512) and Secondary 4 (15-year-olds, n=1149) giving a total sample of 4,404.

Happiness

While the school years may be popularly represented as the 'best time in your life', the happiness of young people can be diminished by the stresses and strains of the transition from childhood to young adulthood. This is shown in the data presented below on perceived happiness among 11-, 13- and 15-year-old boys and girls.

Young people were asked "In general, how do you feel about your life at present?" and were given the choice of four responses: I feel very happy/ I feel quite happy/ I don't feel very happy/ I'm not happy at all.

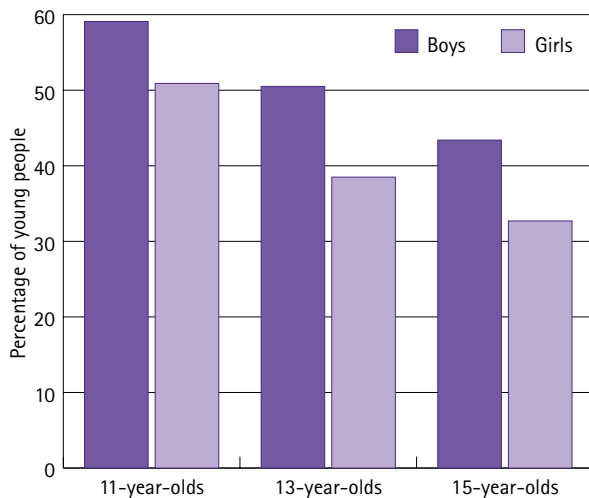
Statistics

When the difference between two percentages is significant asterisks are used in the text to denote the level of statistical significance as follows: * $p < 0.05$ significant difference ** $p < 0.01$ highly significant difference *** $p < 0.001$ very highly significant difference

Taking the three age groups together, almost half (45.9%) of the young people report that they are very happy, 44.7% report that they are quite happy, 7.6% report that they are not very happy and 1.9% report that they are not happy at all. Boys are significantly (***) more likely to report that they are very happy, 51.2% of them compared with 40.4% of girls.

Happiness declines very significantly (***) with age: 55.3% of 11-year-olds are very happy compared to 44.4% of 13-year-olds and 38.1% of 15-year-olds. The greater decrease is between the ages of 11 and 13 years. At all three ages, boys are more likely to report being very happy than girls.

Figure 1: Proportion of Scottish schoolchildren that report that they are very happy



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Earlier HBSC surveys included the same question on happiness. Data from the three surveys show that between 1994 and 2002 there has been a very significant (***) increase in the proportion of young people that report that they are very happy. In 1994, 35.9% of young people reported that they were very happy; this proportion increased to 39.6% in 1998 and then 45.9% in 2002. As figures 2 and 3 show, the decline in reported happiness with age occurs for both genders in all three surveys.

Cross-national comparisons of happiness from the 1997/98 survey showed schoolchildren in Scotland to be positioned 10th out of 29 countries.

Life satisfaction

In the 2002 HBSC survey the Cantril Life Satisfaction Scale⁵ was used for the first time to measure positive well-being. The Cantril Scale is a 'ladder' on which young people rank their life satisfaction between zero, 'the worst possible life', and ten, 'the best possible life'.

Figure 2: Trends in the proportion of BOYS that report that they are very happy

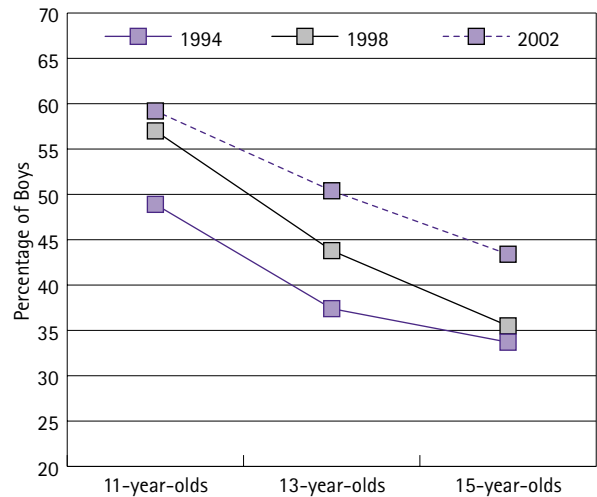
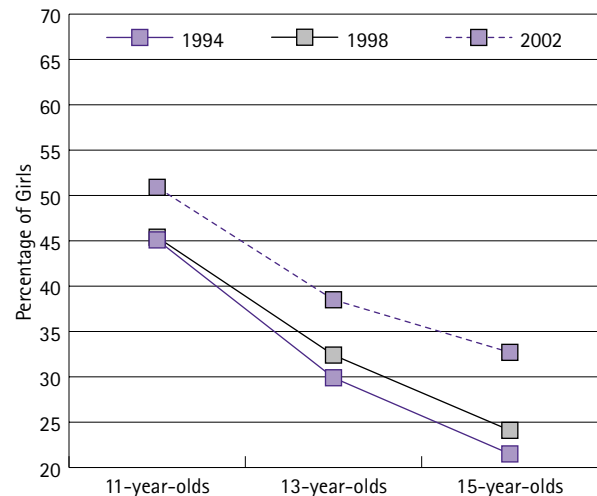


Figure 3: Trends in the proportion of GIRLS that report that they are very happy

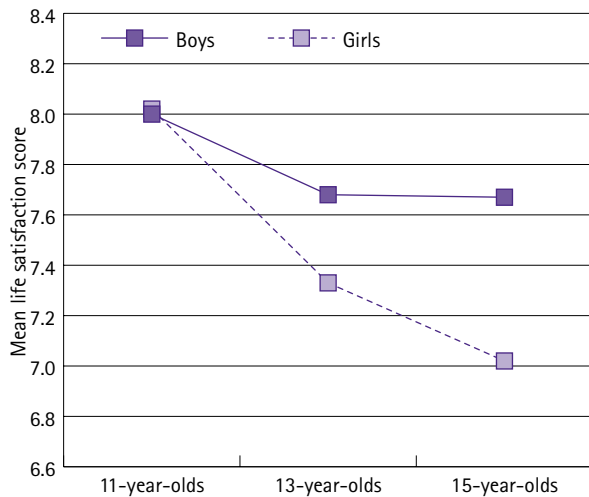


Health Behaviour in School-Aged Children: WHO Collaborative Cross-National 1993/94, 1997/98 and 2001/02 Surveys in Scotland

The average life satisfaction score for all the young people is 7.62 and nearly 80% position themselves on rung 7 or higher. As with happiness, 11-year-olds rate their satisfaction with life significantly higher than the 13- and 15-year-olds. The mean life satisfaction score at age 11 is 8.01, this falls to 7.50 at age 13 and to 7.35 at age 15.

There is no gender difference in the mean life satisfaction score of boys and girls at age 11 but at ages 13 and 15 the mean life satisfaction score for girls is very significantly (***) lower than the score for boys. The largest decrease in life satisfaction occurs between the ages of 11 and 13 for both boys and girls. Subsequently the life satisfaction score for boys remains stable whereas for girls the score decreases further between the ages of 13 and 15.

Figure 4: Mean life satisfaction scores by age and gender



Health Behaviour in School-Aged Children: WHO Collaborative Cross-National 2001/02 Survey in Scotland

Body Image

Young people become increasingly body conscious as they move through puberty. Feeling satisfied with their appearance contributes to happiness and confidence for both boys and girls⁶. However, many adolescents and in particular girls develop a highly critical view of their appearance. This can result in negative body image and low self-esteem⁷. Concerns about body size, especially among girls, can also lead to an excessive pre-occupation with dieting and weight control that can be damaging to well-being.

Perception of body size

To gauge perceptions of body size young people were asked "Do you think your body is....?" with the choice of responses: Much too thin/ A bit too thin/ About the right size/ A bit too fat/ Much too fat. The responses of Much too thin and A bit too thin have been combined into a 'Too thin' category, and the responses of Much too fat and A bit too fat into a 'Too fat' category.

Taking all three age groups together, just over half (52.4%) consider themselves to be about right, 14.1% consider themselves to be too thin, and the remaining 33.5% consider themselves to be too fat. However these figures disguise the very different perceptions of boys and girls. Sixty percent (60.1%) of boys view their bodysize as being about right, compared with only 44.4% of girls. Nearly a quarter of boys (23.1%) report they are too fat compared with almost twice as many (44.3%) of girls. Finally 16.8% of boys consider that their bodies are too thin compared with 11.3% of the girls.

With increasing age a higher proportion of boys view their bodies as too thin while a higher proportion of girls view their bodies as too fat. At the age of 15, more than half of the girls (52.3%) report that they are too fat. One of the most striking features of the graphs that follow is that at all ages, the majority of boys consider their body size to be 'about right', but by the age of 15, fewer than 2 in 5 girls feel this way about themselves.

Figure 5: Perception of body size: BOYS

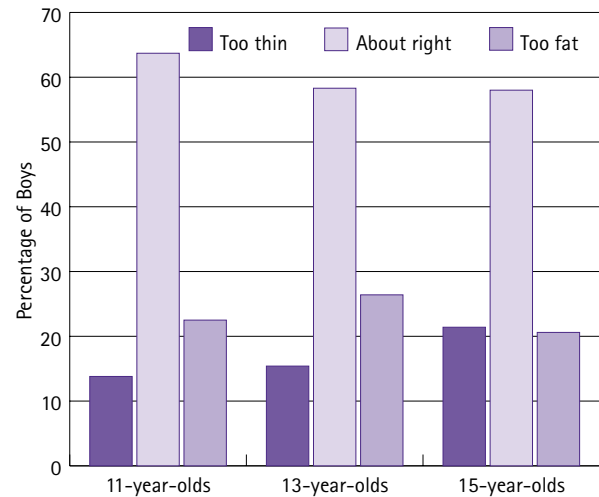
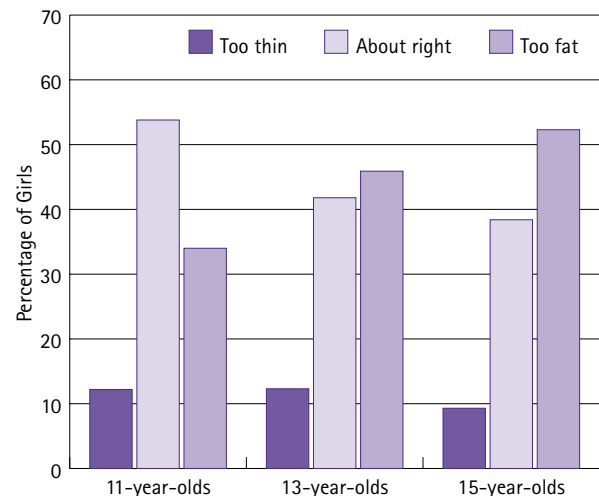


Figure 6: Perception of body size: GIRLS



Health Behaviour in School-Aged Children: WHO Collaborative Cross-National 2001/02 Survey in Scotland

Comparing perceptions of being too fat cross-nationally with the 1997/98 HBSC survey data showed that Scottish schoolchildren are among the least satisfied with their bodies at 8th position out of 29 countries.

Perception of looks

Previous HBSC research has shown that young people's perception of their physical appearance (looks) affects their confidence and self-esteem, their social relationships and general happiness⁶. Other Scottish research has reported that among 15-year-olds feeling unattractive was linked to depression¹.

The HBSC questionnaire asked young people "Do you think you are....?" with the choice of responses: Very good looking/ Quite good looking/ About average/ Not very good looking/ Not at all good looking/ I don't think about my looks. The responses of Very good looking and Quite good looking have been combined into a

'Good looking' category, and Not very good looking and Not at all good looking into a 'Not good looking' category.

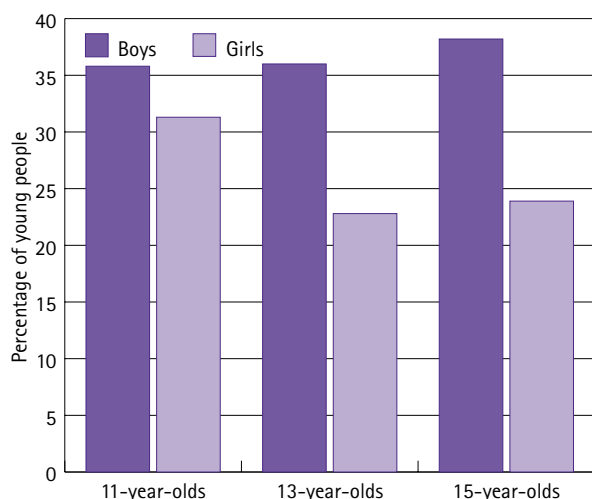
Nearly one third (31.3%) of all young people surveyed consider themselves to be good looking. A larger proportion (41.4%) believes their looks are about average. Nearly one in five (18.4%) report that they are not good looking and the remaining 8.9% do not think about their looks.

Boys are significantly (***) more likely to say they are good looking than girls, 36.6% boys compared to 25.9% girls, while 24.1% of girls report that they are not good looking compared with 12.9% of boys. The gender difference in perception of good looks exists at all three ages but is greater for 13- and 15-year-olds than it is for 11-year-olds.

The proportion of boys that consider that they are good looking remains constant across the three ages. At the same time there is an increase in the percentage of boys who believe their looks are about average and a decrease in those that report that they do not think about their looks

Among girls there is a difference between 11- and 13-year-olds in perception of looks with 31.3% of 11-year-old girls reporting that they are good looking but only 22.8% of 13-year-old girls doing so.

Figure 7: Gender differences in perception of own good looks



Health Behaviour in School-Aged Children: WHO Collaborative Cross-National 2001/02 Survey in Scotland

Cross-national comparisons from the 1997/98 survey showed that young people in Scotland are modest about their looks, being positioned 23rd out of 29 countries in terms of percentage who consider themselves good-looking.

Confidence

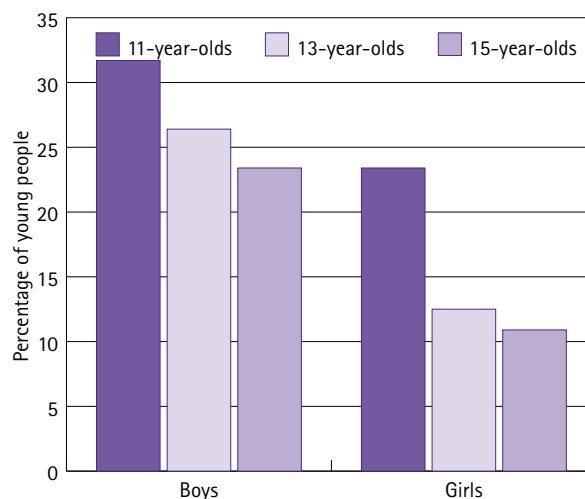
Confidence is a crucial aspect of well-being in the adolescent years and is strongly associated with social integration and perceptions of appearance⁶. Previous HBSC research has shown that confident adolescents are less likely to suffer from mental health problems such as depression, nervousness and irritability⁶. Patterns of confidence are described below for girls and boys at 11, 13 and 15.

The question asked was: "How often do you feel confident in yourself?" followed by the response categories Never/ Hardly ever/ Sometimes/ Often and Always.

At least one in five young people (21.5%) report that they always feel confident in themselves. There is a highly significant gender difference (***), however, among those who report that they always feel confident; the proportion of boys is 27.3% and the proportion of girls is 15.4%.

Between Primary 7 and Secondary 2 there is a highly significant decrease (***) in the proportion of young people that report that they always feel confident in themselves from 27.8% to 19.3%. There is no further decrease between Secondary 2 and Secondary 4. The decrease in confidence between Primary 7 and Secondary 2 holds for both boys and girls although the decrease among girls is greater.

Figure 8: Age differences in always feel confident

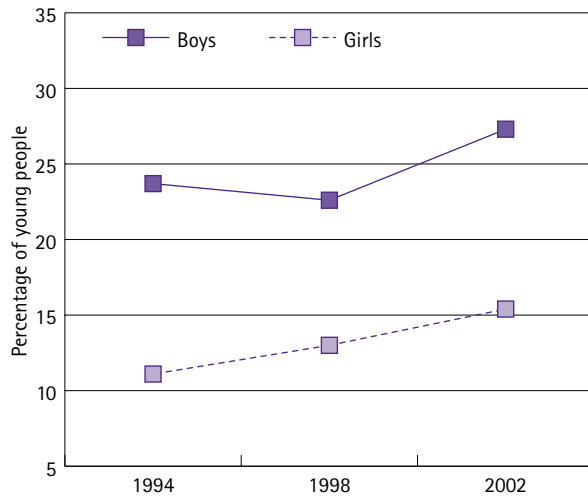


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The question about feeling confident was also asked in the 1994 and 1998 surveys.

The data from the three surveys suggest that the confidence levels of young people have improved since 1994. In 2002, a higher proportion of young people (27.3% of boys and 15.4% of girls) report that they are always confident compared with 1994 (23.7% of boys and 11.1% of girls). This change between 1994 and 2002 is highly significant (***)

Figure 9: Trends in always feeling confident



Health Behaviour in School-Aged Children: WHO Collaborative Cross-National 1993/94, 1997/98 and 2001/02 Surveys in Scotland

Cross-national comparisons of confidence, similar to body image, found young people in Scotland ranking low compared to other countries at 23rd out of 29.

Summary of HBSC findings on mental well-being

- A significantly higher proportion of boys (51.2%) than girls (40.4%) report that they are very happy; and more 11-year-olds (55.3%) than 15-year-olds (38.1%) report that they are very happy.
- Levels of reported happiness have increased in both boys and girls in Scotland between 1994 and 2002
- Life satisfaction is highest among 11-year-olds and at this age there is no gender difference; but life satisfaction declines with age and there is an increasing gender gap so that girls have a significantly lower score than boys at age 15.
- Boys have a more positive body image than girls
 - 60.1% of 15-year-old boys say their body size is 'about right', but more than half of the 15-year-old girls (52.3%) perceives themselves as too fat
 - a higher proportion of boys (36.6%) than girls (25.9%) report that they are good looking
- Boys' confidence levels are higher than girls' at all ages, however both boys' and girls' confidence declines between the ages of 11 and 13
- Confidence levels among both boys and girls have increased between 1994 and 2002 in Scotland
- Examination of 1997/98 cross-national patterns show that while young people in Scotland are above the average compared to 28 other countries in terms of happiness, they are relatively low on confidence and body image

Further statistical information

Further statistical information will be available in the form of tables to accompany each Briefing Paper and a technical report. These will be available on the HBSC page of the CAHRU website (www.education.ed.ac.uk/cahru/projects/hbse) or directly from CAHRU.

References

1. West P and Sweeting H (2002) *The health of young people in Scotland: quantitative dimensions*. Report for HEBS.
2. West P and Sweeting H (2003) Fifteen, female and stressed: changing patterns of psychological distress over time. *Journal of Child Psychology and Psychiatry*, 44, 399-411.
3. Bergman MM and Scott J (2001) Young adolescents' well-being and health risk behaviours: gender and socioeconomic differences. *Journal of Adolescence*, 24, 183-197.
4. Currie C, Samdal O, Boyce W and Smith R (eds.) (2001) *Health Behaviour in School-Aged Children: a WHO Cross-National Study (HBSC): Research Protocol for the 2001/2002 Survey*.
5. Cantril, H (1965). *The pattern of human concern*. Rutgers University Press.
6. King A, Wold B, Tudor-Smith C and Harel Y (1996) The Health of Youth: a Cross-National Survey. *The World Health Organisation European Series*, No. 69.
7. Williams JM and Currie C (2000) Self-esteem and physical development in early adolescence: pubertal timing and body image. *Journal of Early Adolescence*, 20, 129-149.

Acknowledgements

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HBSC publications and HBSC Information

See CAHRU website (www.education.ed.ac.uk/cahru/projects/hbse) and also the International Study website (www.hbse.org). CAHRU is the International Coordinating Centre of the HBSC Study.

Reports from earlier surveys include:

Todd J, Currie C E and Smith R (1999) *Health Behaviours of Scottish Schoolchildren: Technical Report 1: Smoking, Drinking and Drug use in the 1990s*

Todd J, Currie C E and Smith R (1999) *Health Behaviours of Scottish Schoolchildren: Technical Report 2: Sexual Health in the 1990s*

Todd J, Currie C E, Smith R and Small G (2000) *Health Behaviours of Scottish Schoolchildren: Technical Report 3: Eating and Activity Patterns in the 1990s*

Griesbach D and Currie C E (2001) *Health Behaviours of Scottish Schoolchildren: Report 7: Control of Adolescent Smoking in Scotland*

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