HBSC Briefing Paper 12
March 2007
HBSC is the Health Behaviour in School-Aged Children: WHO Collaborative Cross-National Study

Family structure and relationships and health among schoolchildren

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Introduction[1]

For adolescents, as well as younger children, the family represents a vitally important setting for physical, emotional and social development. It is the context in which social behaviour and attitudes are formed. The influence of the family continues throughout adolescence and indeed through the life course in varying degrees (Pedersen et al, 2004a). Patterns of adolescent health have been shown to be associated with family factors such as quality of relationships and family composition (King et al, 1996; Nic Gabhainn and Francois, 2000; Settertobulte, 2000; Griesbach et al, 2003).

This briefing paper describes the health and well-being of 11–15 year olds in Scotland in the context of the family using data from the 2001/02 Health Behaviour in School-aged Children: World Health Organisation Cross-national Collaborative survey (HBSC). Comparisons are also made with the other 34 HBSC countries. Details of HBSC survey methodology, including the family and health questions, are detailed in the Technical Appendix along with a map and a list of participating HBSC countries.

The composition of the family unit has undergone significant change in recent decades due to wide-ranging social, cultural and historical developments (Pedersen et al, 2004a) and varies across Europe (Iacovu, 2004). HBSC attempts to capture some of the complexities of contemporary family life by studying family structures and relationships and revealing the variety of ways in which adolescents and their families are living across Europe and North America.

Family structure

Young people were asked who they lived with in their main or only home[2]. On average 78% of young people across all HBSC countries report living with both their parents (Figure 1.1). However, there is considerable variation ranging from 60% in the USA to 93% in Malta. Scotland has one of the lower rates of both parent families at 70%. Figure 1.1 shows data from Scotland, England and Wales as well as a further four countries, one from each quartile of the range.

Summary of main findings

- **Fewer young people in Scotland live with both parents (70%) and more live in single parent households and step families compared to many other European countries.**
- **Health outcomes among adolescents are related to family structure and to quality of communication with their mother and father**
- **Young people who have good communication with their mother and/or father are generally less likely to report low life satisfaction, smoking or drunkenness than their peers who have poor communication with their parents.**

Thirteen percent of adolescents across the HBSC countries live in single parent families and 8% live in step families. Scotland has higher rates of both these family types with 17% of adolescents living in single parent families and 12% in step families. In general, step families are more common in northern and north-western European countries than in eastern and southern Europe. Single parent families are less common in southern Europe than elsewhere.

A small percentage of young people reported living with adults other than their parent(s). These 'other' types of family structure included extended family members, foster parents and care homes.

The relationships between family structure and various health outcomes, namely life satisfaction, smoking and drunkenness, are now explored.

Life satisfaction and family structure

Young people were asked to rate their own life satisfaction. Although most young people are satisfied with their lives there is variation according to gender and family structure. Adolescents living with both parents are less likely to report low life satisfaction (Figure 1.2). There is no gender difference in life satisfaction among 11 year olds in Scotland but, at ages 13 and 15, girls are more likely than boys to report low life satisfaction. A similar gender pattern is seen across all HBSC countries (Torsheim et al, 2004).

1 Chapter on 'Family' by M Pedersen, MC Granado Alcon, CM Rodriguez and R Smith in *Young People's Health in Context* pp 26-40.

2 Children were asked about where they lived all or most of the time (their main home) and, if applicable, a second home (where they lived some of the time) – see Technical Appendix for details

Figure 1.1: Family Structure

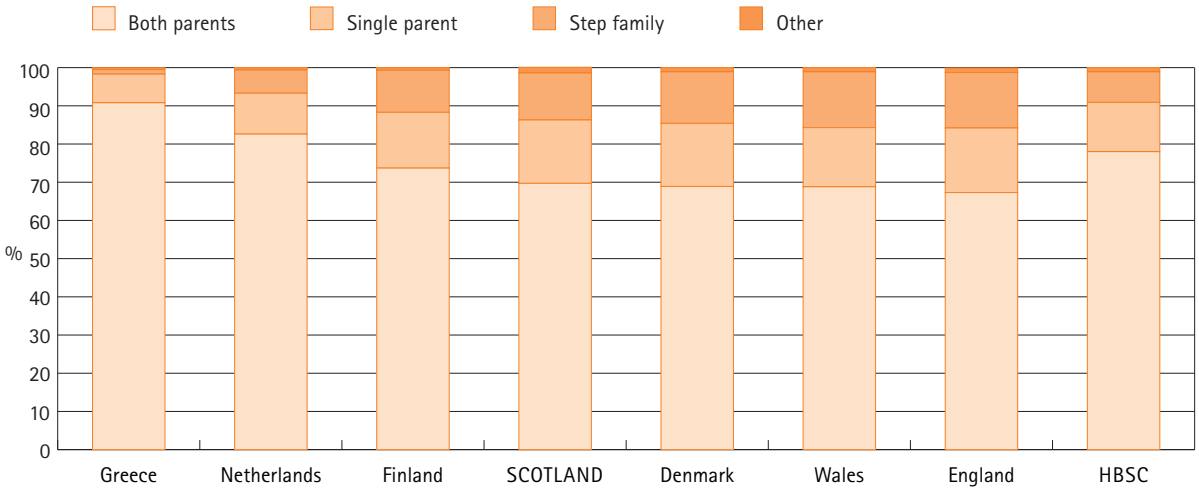


Figure 1.2: Low life satisfaction and family structure

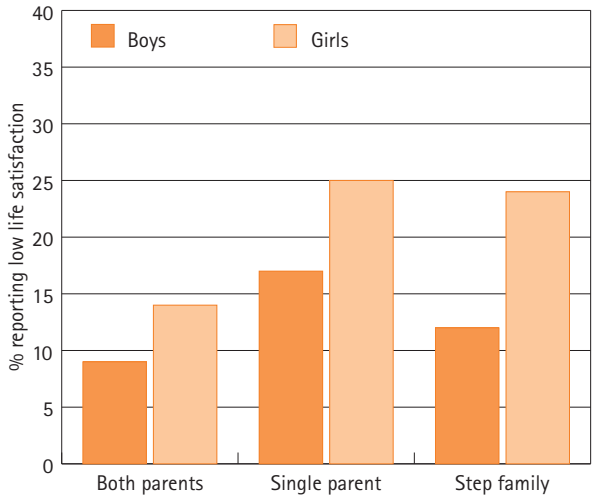
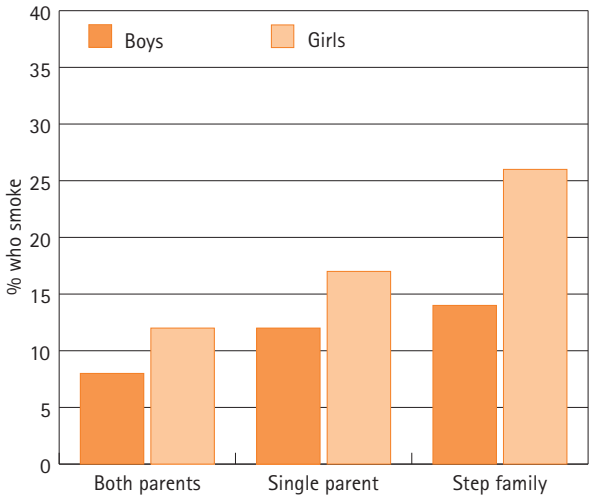


Figure 1.3: Smoking and family structure



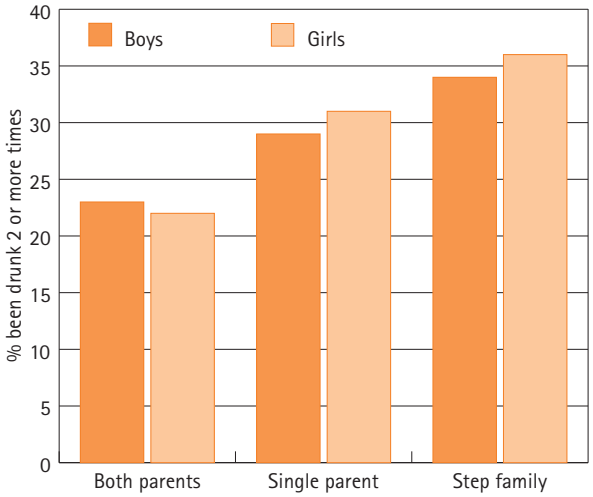
Smoking and family structure

Family structure has been previously linked to the likelihood of engaging in risk behaviours, such as smoking (Griesbach et al, 2003), and this briefing paper confirms these earlier findings. Young people who live with both parents are less likely to smoke[3] than their peers who live in a single parent family or step family (Fig. 1.3). For each family type, smoking is more common among girls. Within step families, girls are almost twice as likely to smoke as boys.

Drunkenness and family structure

Being drunk on two or more occasions is reported by 23% of young people living with both parents and by a significantly higher 30% and 35% respectively of those living in a single parent or step family. Rates of drunkenness are very similar for boys and girls across all family types (Figure 1.4).

Figure 1.4: Drunkenness and family structure



3 here smoking is defined as currently smoking at all.

Figure 2.1: **Young people finding it easy to talk to their mother**

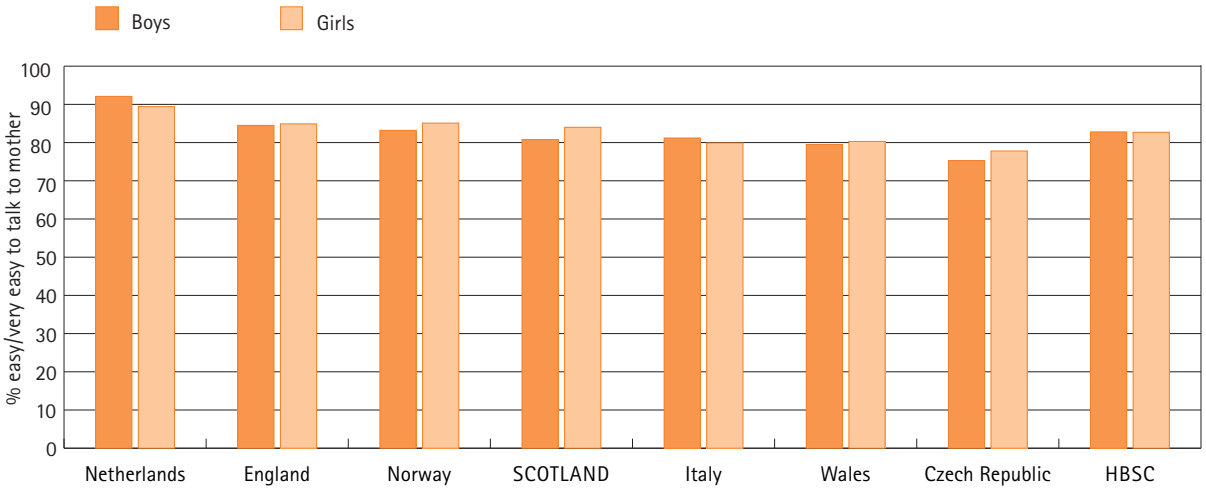


Figure 2.2: **Young people finding it easy to talk to their father**

Communication with parents

Ease of communication with both mother and father is examined as one aspect of a supportive parental relationship which may have a protective effect on the lives of young people (Pedersen et al, 2004b). Previous research suggests that positive relationships with parents decrease the likelihood of young people engaging in risk behaviour (Griesbach et al, 2003; McArdle et al, 2002), and are associated with positive health outcomes (Garnefski and Diekstra, 1997; Swarr and Richards, 1996).

Young people were asked to say whether they found it easy or difficult to talk to their mother and to their father[4]. In Scotland and all other HBSC countries young people generally find it easier to talk to their mothers than to their fathers (Figures 2.1 and 2.2.). Boys and girls find it equally easy to talk to their mothers. However, girls find it more difficult than boys to talk to their fathers. These gender patterns hold true for all countries (Pedersen et al, 2004a).

Ease of communication with mothers and fathers declines with age, among both boys and girls. However, the decline is more marked for girls especially in relation to talking to their fathers. For example, among girls in Scotland, 63% of 11 year olds, 52% of 13 year olds and 44% of 15 year olds find it easy to talk to their father.

Life satisfaction and communication with parents

Previous research has indicated that positive mental well-being among adolescents is associated with good communication with parents (King et al, 1996). We now examine the relationship between communication with parents and reported life satisfaction.

In Scotland, boys who find it difficult to talk to their parents are twice as likely to report low life satisfaction as those who find it easy.

4 Those who reported that they did not have or see their mother/father were excluded from the analysis

However, the greatest effect of poor communication on life satisfaction is seen amongst girls; one in three girls who find it difficult to talk to their mothers report low life satisfaction (Figure 2.3). These patterns are also seen for each of the three age groups when analysed separately.

Smoking and communication with parents

In Scotland boys and girls who find it difficult to talk to their mother or father are about twice as likely to report smoking than those who find communication with their parents easy (Figure 2.4). Girls who have poor communication with their mother are at a high risk of smoking.

Drunkenness and communication with parents

Much like smoking, drunkenness is more common among boys and girls who find it difficult to talk to their parents, in particular their mother (Figure 2.5). However, the impact of communication on drunkenness is not as great as it is on smoking.

Discussion

Family structure is associated with adolescent health outcomes. However, research suggests that it is not structure per se that is important, but the complex family processes and interactions between family members (Houseknecht and Hango, 2006; Martinez & Forgatch, 2002) as well as material disadvantage experienced by some family types (Spencer, 2005). In relation to adolescent substance use, one European study found that quality of family life is a more robust barrier to drug taking than living with both parents, attachment to mother being particularly important (McArdle et al, 2002). It is well known that family conflict has negative effects on childrens' health outcomes and it is found to be a key predictor of poor psychological well-being and behavioural problems among young people (Amato and Keith, 1991; Grynch and Fincham, 1990). Family processes that protect children from high levels of stress result in the best health outcomes (Barrett and Turner, 2006) and have their foundation in good parent-child relations and communication. This paper finds that good communication with mother and with father is associated with positive outcomes in relation to smoking, drunkenness and life satisfaction among Scottish adolescents. This is a consistent pattern for both boys and girls and with respect to both parents. We are currently undertaking further work exploring the inter-relationships between family structure, parent-child communication and health behaviours to tease out the importance of these different influences on young people's well-being.

Figure 2.3: Low life satisfaction and communication with parents

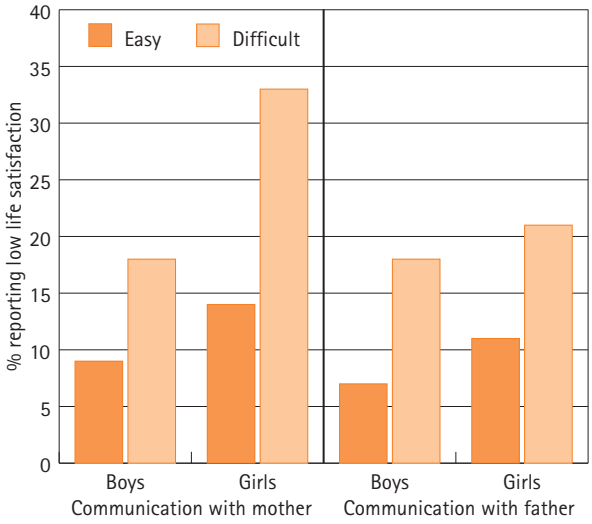


Figure 2.4: Smoking and communication with parents

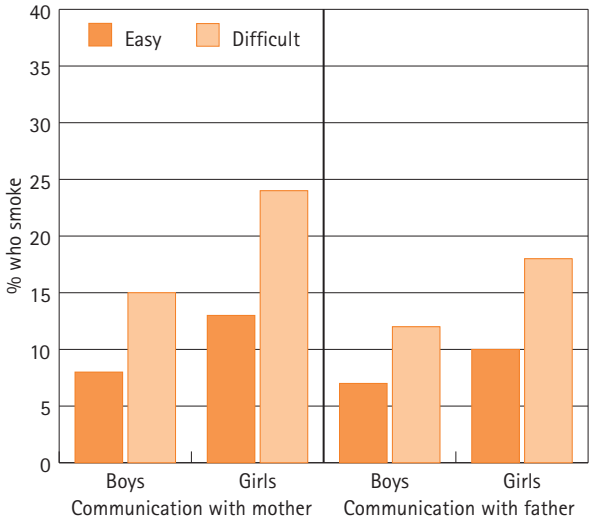
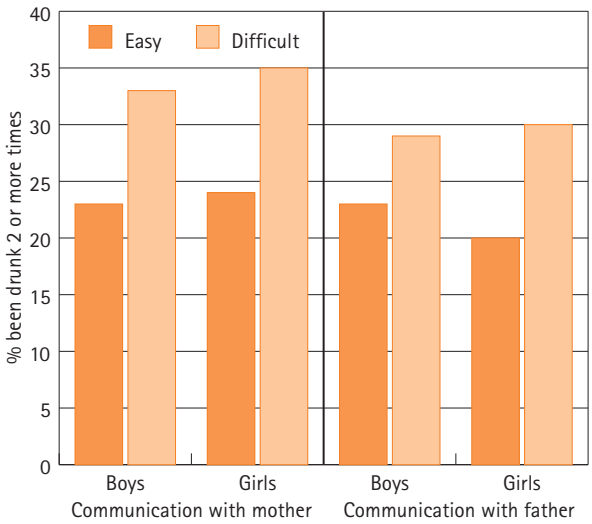


Figure 2.5: Drunkenness and communication with parents



TECHNICAL APPENDIX

Scotland, along with 34 other countries in Europe and North America, participated in the 2001/2002 Health Behaviour in School-Aged Children (HBSC): WHO Collaborative Cross-National Survey (Currie, Todd and Smith, 2003: HBSC Briefing Paper 1). Previous surveys were conducted in 1989/90, 1993/94 and 1997/98 and findings from these have been published in a series of international and Scottish reports and briefing papers listed at the end of this document and can be found at **www.education.ed.ac.uk/cahru/ publications/hbsc.html**. Key findings from the 2001/2 cross-national survey have been published in an international report *Young People's Health in Context* (Currie et al, 2004).

The 2002 HBSC survey in Scotland

The 2002 HBSC survey was carried out in 198 schools across Scotland. Pupils from mixed ability classes anonymously completed questionnaires 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. On completion of fieldwork, national data files were prepared using the standard documentation procedures of the HBSC International Protocol 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. Results from the 2001/02 HBSC international survey represent more than 160,000 young people in 34 countries. Further details can be found in *Young People's Health in Context* (Currie et al, 2004).

Measures used in this briefing paper

Family structure – For the 2001/02 survey HBSC pioneered a new question on family structure to enable children to describe not only who they live with in their main home but also in a 'second home' where they may live, for example, with a step-family. This question was developed to be sensitive to the complexity of family arrangements in which many young people live, and to try to capture information on these for comparative data analyses.

Family relationship – The quality of parent–child relations was measured using a question on communication with parents. How easy is it for you to talk to the following persons about things that really bother you? Father/Mother. *(Very easy/ Easy/ Difficult/ Very difficult/ Don't have or don't see this person).* Two percent of young people reported that they did not have or see their mother and 12% reported that they did not have or see their father. These young people were not included in the parent-child communication analyses.

Life satisfaction was measured using an adapted version of the Cantril ladder (Cantril, 1965). Respondents are asked to rate how they feel about their life at present, ranging from 0 'worst possible life' to 10 'best possible life'. Low life satisfaction is defined as a score of 5 or lower.

Smoking was measured using a single item: 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)*

Drunkenness was measured using the following item: Have you ever had so much alcohol that you were really drunk? *(Never / once / 2-3 times / 4-10 times / more than ten times).*

Map of countries participating in 2001/2 HBSC study

Countries participating in the 2001/2 HBSC study

Austria	Finland	Lithuania	Scotland
Belgium (Flemish)	France	Macedonia, tfyr	Slovak Republic
Belgium (French)	Germany	Malta	Slovenia
Canada	Greece	Netherlands	Spain
Croatia	Greenland	Norway	Sweden
Czech Republic	Hungary	Poland	Switzerland
Denmark	Israel	Portugal	Ukraine
England	Italy	Rep. of Ireland	USA
Estonia	Latvia	Russia	Wales

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.

Acknowledgement is made to all members of the international HBSC research network who prepared the HBSC protocol and collected national data, and to the support of the WHO Regional Office for Europe.

The cross-national information presented here has been extracted from Chapters 2, 3 and 4 of *Young People's Health in Context* (Currie et al, 2004). The following authors are gratefully acknowledged: Michael Pedersen, Maria Carmen Granado Alcon, Carmen Moreno Rodriguez and Rebecca Smith (Family and Family and Health).

We are grateful to Celia Gardner, Health Improvement Programme Manager: Early Years of NHS Health Scotland for her comments on earlier drafts of this paper.

The HBSC study in Scotland is funded by NHS Health Scotland.

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.

HBSC Briefing Papers from this and earlier surveys include:

Briefing Paper 1. Introduction, background and dissemination of the 2002 HBSC survey in Scotland

Briefing Paper 2. Mental well-being among schoolchildren in Scotland: age and gender patterns, trends and cross-national comparisons.

Briefing Paper 3. Gender Matters: Physical activity patterns of schoolchildren in Scotland.

Briefing Paper 4. Mental-health and well-being in the context of school: Young people in Scotland.

Briefing Paper 5: How are Scotland's young people doing? A cross-national perspective on physical and emotional well-being.

Briefing Paper 6: How are Scotland's young people doing? A cross-national perspective on health-related risk.

Briefing Paper 7: How are Scotland's young people doing? A cross-national perspective on physical activity, TV viewing, eating habits, body image and oral hygiene.

Briefing Paper 8: Bullying and fighting among schoolchildren in Scotland: age and gender patterns, trends and cross-national comparisons.

Briefing Paper 9: Social Context of Bullying Behaviours.

Briefing Paper 10: Bullying: Health, Well-being and Risk Behaviours.

References

Amato PR and Keith B (1991). Parental divorce and the well-being of children: a meta-analysis. Psychological Bulletin 110, 26-46.

Barrett and Turner J (2006). Family structure and substance use problems in adolescence and early adulthood: examining explanations for the relationship. Addiction, 101, 109-120.

Cantril H (1965). The pattern of human concern. Rutgers University Press.

Currie C, Roberts C, Morgan A, Smith R, Settertobulte W, Samdal O, Rasmussen V. (2004). Young People's Health in Context; Health Behaviour in School-Aged Children: WHO Cross-National Study (HBSC), International Report from the 2001/02 survey, WHO, Copenhagen.

Garnefski N, Diekstra R (1997). Adolescents from one parent, stepparent and intact families; emotional problems and suicide attempts Journal of Adolescence, 20, 201-208.

Griesbach D, Amos A, Currie C (2003). Adolescent smoking and family structure in Europe. Social Science and Medicine, 56, 41-52.

Grynch JH and Fincham FD (1990). Marital conflict and children's adjustment: a cognitive-contextual framework. Psychological Bulletin 108, 267-290.

Houseknecht SK and Hango DW (2006). The impact of marital conflict and disruption on children's health. Youth & Society, 38, 58-89.

Iacovou M (2004). Patterns of family living. Ch2 in Social Europe: Living Standards and Welfare States.pp 21-45. (Eds. R Berthoud and M Iacovou). Edward Elgar. Cheltenham, UK. 2004.

King et al (2006). The health of youth: a cross national survey. Copenhagen, WHO regional Office for Europe, 1996 (WHO Regional Publications, European Series, No 69; http://www.hbsc.org/publications/reports.html, accessed 9 February 2007).

Martinez, CR and Forgatch MS (2002). Adjusting to change: linking family structure transitions with parenting and boys' adjustment. Journal of Family Psychology, 16, 107-117.

McArdle P et al (2002). European adolescent substance use: the roles of family structure, function and gender. Addiction, 97, 329-336.

Nic Gabhainn S, Francios Y. Substance use. In: Currie C et al, eds Health and health behaviour among young people. Copenhagen, WHO regional Office for Europe, 2002: 97-114 (Health Policy for Children and Adolescents, No. 1; http://www.hbsc.org/publications/reports.html, accessed 9 February 2007).

Pedersen M, Granado Alcon MC, Moreno Rodriguez and Smith R (2004a). Family. In: Currie et al Young People's Health in Context; Health Behaviour in School-Aged Children: WHO Cross-National Study (HBSC), International Report from the 2001/02 survey, WHO, Copenhagen.

Pedersen M, Granado Alcon MC, Moreno Rodriguez and Smith R (2004b). Family and Health In: Currie et al Young People's Health in Context; Health Behaviour in School-Aged Children: WHO Cross-National Study (HBSC), International Report from the 2001/02 survey, WHO, Copenhagen.

Settertobulte W. Family and peer relations. In Currie C et al, eds Health and health behaviour among young people. Copenhagen, WHO regional Office for Europe, 2002: 39-48 (Health Policy for Children and Adolescents, No. 1; http://www.hbsc.org/publications/reports.html, accessed 9 February 2007).

Spencer N (2005). Does material disadvantage explain the increased risk of adverse health, educational and behavioural outcomes among children in lone parent households in Britain? A cross sectional study. Journal of Epidemiology and Community Health, 59, 152-157.

Swarr AE, RichardsM (1996). Longitudinal effects of adolescent girls' pubertal development, perceptions of pubertal timing, and parental relations on eating problems. Developmental Psychology, 32, 636-646.

Torsheim T, Valimaa R and Danielson M (2004). Health and well-being. In: Currie et al Young People's Health in Context; Health Behaviour in School-Aged Children: WHO Cross-National Study (HBSC), International Report from the 2001/02 survey, WHO, Copenhagen.

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