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A Study on the Quality of Life Tool KIDSCREEN for children and adolescents in Ireland

**Results of the KIDSCREEN
National Survey 2005**

The National Children's Strategy
Research Series

A Study on the Quality of Life Tool KIDSCREEN for children and adolescents in Ireland

Results of the KIDSCREEN National Survey 2005

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and
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February 2008

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Acronyms used

DIF	Differential Item Functioning
DISABKIDS	Quality of life questionnaires for children with chronic conditions
EC	European Commission
EU	European Union
FAS	Family Affluence Scale
HBSC	Health Behaviour in School-aged Children
HRQoL	Health-related quality of life
HSE	Health Service Executive
KIDSCREEN	Screening for and promotion of health-related quality of life in children and adolescents
NCO	National Children's Office
OMC	Office of the Minister for Children
PAC	Programme of Action for Children
PISA	Programme of International Student Assessment
SoA	Statement of Agreement
SES	Socio-economic status
SONC	State of the Nation's Children
QoL	Quality of life
WHO	World Health Organization
WHOQoL	World Health Organization Quality of Life

Executive Summary

This study took place as part of the KIDSCREEN project, full details of which are given in Appendix 1. This project is a European-wide effort, covering 13 countries, to develop a standardised health-related quality of life instrument for children and adolescents.¹ The present study aimed to validate the KIDSCREEN-52 health-related quality of life instrument for children and adolescents in Ireland and to provide reference data on individual dimensions of the instrument. The instrument is a standardised generic cross-cultural instrument, which assesses children's opinions, attitudes and feelings about their perceived health. The findings from this study provide reference data that can be used for the purposes of preventive health and well-being, provision of care and treatment, and management of healthcare services. This information is of significant value to people working with young people in their capacity as educators, researchers, health providers, social workers, policy-makers, health service planners, managers and health promoters. It is also of interest to parents and children themselves.

The KIDSCREEN-52 instrument measures 10 health-related quality of life (HRQoL) dimensions, addressing the following main areas:

- **Physical well-being** (5 items): This explores the level of physical activity, energy and fitness of the child or adolescent.
- **Psychological well-being** (6 items): This examines the psychological well-being of the child/adolescent, including positive emotions and satisfaction with life.
- **Moods and emotions** (7 items): This covers how much the child/adolescent experiences depressive moods and emotions, and stressful feelings.
- **Self-perception** (5 items): This explores whether respondents perceive their bodily appearance positively or negatively; body image is explored by questions concerning satisfaction with looks as well as with clothes and other personal accessories.
- **Autonomy** (5 items): This looks at the respondent's opportunities to create social and leisure time.
- **Parent relations and home life** (6 items): This examines relationships with parents and the atmosphere at home.
- **Social support and peers** (6 items): This examines the nature of the respondent's relationships with other children/adolescents.
- **School environment** (6 items): This explores the perceptions of the child/adolescent about their cognitive capacity, learning and concentration, and their feelings at school.
- **Social acceptance/bullying** (3 items): This covers the aspect of feeling rejected by peers in school.
- **Financial resources** (3 items): This assesses respondents' perceptions of their financial resources.

The study was carried out with 1,265 children, aged 8-17 years, from 39 randomly selected schools throughout Ireland. It involved two short self-completion questionnaires, the first designed for children aged 8-11 and the second for adolescents aged 12-17. Ethics approval was received from the Faculty of Public Health Medicine, Royal College of Physicians. Data were entered according to the international KIDSCREEN protocol and statistically analysed using an SPSS database developed by the international KIDSCREEN Group.

¹ It is acknowledged that the term 'young person' is preferred by young people themselves. 'Adolescent' is used in this report as it is the term used by the international KIDSCREEN project.

The results of the study confirm that this instrument is reliable and valid for use in the Irish context. Reliability was tested using Cronbach's Alpha coefficients and internal consistency levels ranged from 0.76 (social acceptance) to 0.89 (financial support). Convergent and discriminant validity were tested using information on the physical and mental health of the children and adolescents, and, again, strong correlations were identified. In addition, the reference data are highly correlated with the overall European average, with differences of 1% or less in mean T-values.

Detailed information on individual dimensions of the instrument is presented in the report and where appropriate is reported by age (children and adolescents) and gender. The findings show that, on average, mean scores range from 70-80, with the highest HRQoL for social acceptance/bullying at 85.30 and the lowest for physical well-being at 67.02. In general, girls rated their overall HRQoL across the 10 dimensions as lower than that of boys. Boys reported higher levels across the following HRQoL dimensions: self-perception, school environment, physical well-being and autonomy. Both boys and girls rated social acceptance/bullying and parent relations as the highest two dimensions. Girls rated self-perception as the lowest of all HRQoL dimensions.

In summary, KIDSCREEN is an innovative project in research with children and young people. The data generated by this survey contribute greatly to our understanding of their lives and to our ability to measure their well-being. This type of research is central to progressing the implementation of a range of plans and strategies relating to the lives of children and young people in Ireland. These include the National Children's Strategy, the current Social Partnership Agreement (*Towards 2016*) and the WHO European Strategy on Child and Adolescent Health. KIDSCREEN complements other Irish research on children, including ESPAD, HBSC and PISA, and an item on self-esteem from KIDSCREEN has been included in Ireland's 2006 *State of the Nation's Children* report. This publication provides an important benchmark of key indicators of children's well-being in Ireland. In planning and delivering services and in policy-making relating to child and adolescent health, best practice needs to be informed by quality research that involves children and adolescents.

Recommendations

- It is recommended that KIDSCREEN be promoted for use in the evaluation of programmes aimed at improving the health-related quality of life of children and young people. Lodging of the data in the Irish Social Science Data Archive (ISSDA) is recommended to make the information accessible to a wide range of users.
- The KIDSCREEN tool can be used in multidisciplinary research and clinical monitoring, and its use in smaller scale research studies can be benchmarked against the national reference data. A handbook has been developed describing all relevant user information necessary for applying the KIDSCREEN questionnaires (KIDSCREEN Group Europe, 2006).
- Exploration of the use of the tool in out-of-school settings should be pursued.
- Ireland should continue as a partner in the KIDSCREEN Group Europe and the project should be allied to an appropriate academic institution.

**PART I:
BACKGROUND
AND CONTEXT**

1 Background to KIDSCREEN Project

The KIDSCREEN project is a European-wide effort to develop a standardised health-related quality of life (HRQoL) instrument for children and adolescents across 13 participating countries.² (Full details of the project are given in Appendix 1.) This cross-cultural project assesses children's opinions, attitudes and feelings about their perceived health. The project aims:

- to increase understanding of children's subjective health;
- to monitor health status over time;
- to assess public health interventions;
- to identify children and young people at risk.

The international KIDSCREEN project has taken place over 3 years (2001-2004), with 13 countries participating: Austria, Czech Republic, France, Germany, Greece, Hungary, Ireland, Poland, Spain, Sweden, Switzerland, the Netherlands and the United Kingdom. The project developed, tested and implemented the HRQoL instrument to assess the well-being and subjective health of healthy children and those who suffer from chronic conditions, aged between 8 and 18 years. In the development phase, literature reviews, expert consultation and children's focus groups were carried out in 13 European countries to identify dimensions and items of HRQoL. The survey/testing phase included representative surveys involving all project partners, together with assessments of the determinants of health. Implementation involves dissemination of the instrument accompanied by users' guides. A handbook has been developed describing all relevant user information necessary for applying the KIDSCREEN questionnaires (KIDSCREEN Group Europe, 2006).

The project approaches children's HRQoL from a holistic perspective. HRQoL is understood as a multidimensional construct covering physical, emotional, mental, social, cultural and behavioural components of well-being and function as perceived by the child or adolescent.

The subjective representation of health is a key element of monitoring the health status of a population. A HRQoL questionnaire can help to monitor on a routine basis the subjective health and well-being of children and adolescents, to screen for possible impairments in well-being and function in children and to identify social and behavioural determinants of health, such as socio-economic factors, health behaviours and acute and chronic health conditions. Tracking health-related quality of life in children and adolescents can identify subgroups with poor physical or mental health.

KIDSCREEN in Ireland

Ireland joined the KIDSCREEN project as a partner in 2002. The KIDSCREEN project was financed within the European Commission's 5th Framework Programme, 'Quality of Life and Management of Living Resources'. The European KIDSCREEN project had started in 2001, thus Ireland did not benefit from this grant. Nevertheless, Ireland did participate actively in the development of the instrument and the promotion of the project.

Participation of Ireland in the KIDSCREEN project took place via the Child Health Research Forum of the HSE Programme of Action for Children (PAC). KIDSCREEN provided an opportunity to develop the evidence base to support PAC's objectives in relation to promoting a strategic approach to research and getting evidence into practice. Since the survey was completed, reforms of the health services in Ireland have resulted in changes in the structure of PAC. The current work now falls within the remit of the HSE's Population Health Directorate and represents an important source of information for this directorate and for the newly established HSE Expert Advisory Group on Children.

² It is acknowledged that the term 'young person' is preferred by young people themselves. 'Adolescent' is used in this report as it is the term used by the international KIDSCREEN project.

The Child Health Research Forum is a network of people and agencies with an interest and expertise in the area of child health research. Led by HSE staff and provided with support from within the Forum, KIDSCREEN was piloted in primary and secondary schools in the then South-Eastern and Western Health Board areas. A key focus of the pilot was to examine the feasibility of using the instrument in a nation-wide Irish survey. Following a successful pilot, it was agreed that a national KIDSCREEN study would address a gap in research knowledge in relation to planning, monitoring and evaluating health prevention and care for children and adolescents. The study would also provide an opportunity for children and adolescents to put forward their own views on their health and well-being. Funding for the national study was secured from the National Children's Office Research Programme 2004.

The 2005 national KIDSCREEN study was implemented following international KIDSCREEN protocol, using the standardised generic cross-cultural KIDSCREEN questionnaires. The information generated from the questionnaires is presented in Chapters 4-16 of this report and is an important source of evidence for health service provision, policy and practice for children, both nationally and internationally. The data collected can be used for the purposes of preventive health and well-being, provision of care and treatment, and management of healthcare services.

2 Review of Literature

Understanding children's lives

Article 12 of the United Nations Convention on the Rights of the Child (1989) states: *'The child has a right to express an opinion and to have that opinion taken into account, in any matter or procedure affecting the child, in accordance with his or her age and maturity'* (UN, 1989). Respect for children as a global ideal has been affirmed by the UN Convention on the Rights of the Child, which Ireland ratified in 1992. The National Children's Strategy (2000) progressed the implementation of the Convention in Ireland and proposed a holistic way of thinking about children, as well as highlighting the need for research to ensure that *'children's lives will be better understood'* (Department of Health and Children, 2000a).

Children from a young age start to formulate ideas, beliefs and attitudes about their health and well-being. Understanding their perception of health and health issues is of vital importance to understanding how children and adolescents engage with their health and can result in both short-term and long-term population health gains. Children and adolescents need health services that are responsive and sophisticated to their needs and easy to access (Russell and Barker, 2005).

The World Health Organization has stated that *'the health of young people is significant for the well-being of this age group and also for future public health'* (WHO, 1993). The Irish strategic plan for adolescent health, *Get Connected*, identified a need for evidence-based research in the field of adolescent health. It focused on young people aged 12-18 and incorporated the views, experiences and insights of adolescents into the strategy, which was achieved through consultation with adolescents (Best Health for Children, 2000). The report dealt with issues such as inequalities, health-related lifestyle behaviours, issues of mental health and data collection. It was produced for use in service planning, alongside processes of consultation with adolescents, parents and service providers (voluntary and statutory) *'to ensure the agenda for adolescent health is as full and as vibrant as adolescence itself'*. *Get Connected* set a challenging agenda for the health services and for other agencies that have an influence on the health and well-being of young people.

Health-related quality of life (HRQoL)

Health is a complex concept with many components, although health is frequently assessed through classical health indicators derived from the biomedical model. The 2001 report *Health of our children* called for greater emphasis on prevention and health promotion in our approach to children's health (Department of Health and Children, 2001a). The World Health Organization's definition of health is: *'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'* (WHO, 1948). This definition holds an important expansion of the view of health, which is not only understood by somatic indicators, but also comprises how a person feels, psychologically and physically, and how he or she manages with other persons and copes with everyday life (Rosser, 1988; Spiker, 1990).

In recent years, HRQoL is increasingly gaining importance in the health field and is becoming a central research theme. HRQoL is a broad multidimensional concept and is relevant on many levels to almost all levels of human function (Evans *et al*, 1994). HRQoL has been introduced into epidemiology to provide a descriptor of perceived health in the population as a basis for planning, monitoring and evaluating health-related interventions. Research has shown that including HRQoL in child and adolescent health surveys is feasible. The KIDSCREEN project has developed this cross-cultural element to include the measurement of child and adolescent HRQoL.

Health-related quality of life in children and adolescents

While quality of life research in adults has progressed over recent years, health-related quality of life in children has not been extensively researched. The development of quality of life research

in children has occurred in three waves, starting back in the late 1980s and working up to the mid-1990s and later. The first wave was concerned with how to assess quality of life in children as a theoretical concept; the second wave consisted of constructing and developing quality of life measures for children; and the third wave concerns the application of these measures in clinical and epidemiological studies.

Research reflecting children's points of view about well-being (perception behaviour) is a developing area. An increasing number of generic questionnaires exist that assess HRQoL in children and adolescents. However, a number of difficulties have been noted, particularly doubts as to whether children are capable of reliably expressing opinions, attitudes and feelings about their HRQoL (Herjanic *et al*, 1975). Recent research, however, has shown that children *are* capable of reliably reporting on their own well-being and functioning *if* the questionnaire is appropriate to the child's age and cognitive level. Understanding the concept of HRQoL or valuing aspects of one's own health and well-being is determined by age, maturity and cognitive development (Bullinger and Ravens-Sieberer, 1995). In younger children, another impediment may be the child's difficulty with reading and writing. One shortcoming of the theoretical discussion and construction of questionnaires is that children are rarely asked to express their point of view. Increasing emphasis is being given to considering the child's point of view in constructing questionnaires as equally or more relevant than that of experts or the results of literature reviews.

Measuring health-related quality of life in children and adolescents

Prior to the KIDSCREEN project, no standardised instrument existed that could be applied with equal relevance in paediatric populations in different European populations. Subjective health is, however, increasingly used as a measure of health status in national health surveys (Nosikov and Gudex, 2003; WHO Euro, 1999) and in international studies measuring perceived health indicators, such as the WHO Cross-National Study: Health Behaviour in School-aged Children (HBSC) (Currie *et al*, 2000, Haugland *et al*, 2001). Over past years, there have been many significant developments and achievements in these areas in Ireland. The third round of the Irish HBSC has been completed. Results from the HBSC surveys have been used over the years to inform strategic development and service planning in adolescent health (Department of Health and Children, 2001b). Findings from the current National Longitudinal Study of Children in Ireland, which commenced in 2006, will address a significant gap in the Irish evidence base. In addition, the National Children's Office developed a national set of child well-being indicators in 2005 and these are proving significant in assessing how well Irish children are doing across all aspects of their lives (Hanafin and Brooks, 2005). Ireland's 2006 *State of the Nation's Children* report provides an important benchmark of key indicators of children's well-being in Ireland (OMC, 2006).

The history of research on health indicators shows that generic self-reported HRQoL instruments, while still in a developmental stage, have become a prime focus in the health field. A reasonably coherent notion of HRQoL underlies instruments available for children and adolescents (Rajmil *et al*, 2004). This change in emphasis — towards the inclusion of self-reported aspects of health — has its roots in the 1948 WHO definition of health, which caused a paradigm shift in the conceptualisation of health. (To remind the reader, the WHO definition states: *'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.'*) Although this definition has been criticised for its idealised view of health, it has been influential in stressing the psychological and social dimensions of the health concept, as well as in focusing on the value of self-reported health (Bullinger, 2003). Instruments to assess HRQoL have been developed mainly in the adult area. Attempts at construction of generic measures do exist in the children's area, but only a few instruments conform to the quality standards that had been set by international HRQoL assessment projects with regard to translation, psychometric testing and norming (Rosenbaum and Saigal, 1996; Landgraf *et al*, 1997). KIDSCREEN is focused on the new drive for self-reported HRQoL. The KIDSCREEN project, focused on a cross-cultural self-report HRQoL, brings about much needed changes in child and adolescent health fields at a European level, with a clear standardisation base.

When analysing the results of public health surveys that include HRQoL measures for children and adolescents, important determinants to take into account include children's perceptions of health on the physical, cultural and social environment (Evans *et al*, 1994); on social stressors (Engel and Hurrelmann, 1989); on health behaviours (Ravens-Sieberer *et al*, 2001); and on psycho-social processes, such as coping and social support (Landgraf *et al*, 1998). As a consequence, children and adolescents at risk in terms of their subjective health can be identified and appropriate responses designed.

School-based research

Since the WHO Ottawa Charter of 1986, the school has been identified as a setting for health and health promotion. It has also been identified as a positive and appropriate setting in which to reach children and adolescents for their opinions, attitudes, behaviours, knowledge and feelings about their perception of health. The WHO identified that '*a health-promoting school can be characterised as a school constantly strengthening its capacity as a healthy setting for living, learning and working*' (Gray *et al*, 1997). In Ireland, the National Health Promotion Strategy for the years 2000-2005 identified the school as an important setting for health promotion activities (Department of Health and Children, 2000b).

Schools are settings where the health of children and adolescents can be identified and where specific health issues can be addressed (St. Leger, 2004). In terms of research, the structure of the educational system provides a ready-made sampling frame in terms of age, sex, educational level, geographical area and so on.

If access can be obtained to whole school classes, then data can be rapidly obtained by means of self-administered questionnaires completed in the classroom; such procedures have obvious advantages over home visits or mail questionnaires (Oppenheim, 2003). Participation rates are high and costs per respondent are low. The school survey generates relevant contextual information on students, classes and schools. It can also generate contextual information on the students' households and the communities in which they live. School-based research provides direct comparison of groups and individuals in the classroom (Hopkins, 2003). With a promise of confidentiality, excellent results can be obtained from large numbers of school children with the use of pre-coded questionnaires and many other closed techniques (Oppenheim, 2003). Therefore, schools provide a setting that is primarily the most accessible for reaching children and adolescents.

However, school-based research does not reach children who are not in school. Other disadvantages of carrying out school-based research include limitations imposed on research schedules by the school timetable, school holidays and examinations. Absence of children due to illness or the loss of children who move away from an area during a research study may cause problems with data collection in schools. Children tend to write much slower than they can read, so from the researchers' point of view this can place greater demands on their time. Several fieldworkers may be needed in each classroom to help with spelling, to answer questions and to distribute and collect questionnaires (Oppenheim, 2003). Hopkins (2003) identified some disadvantages to classroom questionnaires, including: effectiveness depends very much on the reading ability and comprehension of the child; children may be fearful of answering candidly; and children will try to produce the 'right' answers.

All told, survey work with school children requires additional care in piloting and fieldwork to address the limitations outlined. Despite these limitations, schools were identified by the KIDSCREEN project as an effective setting to carry out the survey. Consulting children having taken into consideration the views identified above and following from the experience of the Irish pilot study, schools were deemed a feasible setting for obtaining the data and knowledge to identify the perceptions of Irish children and adolescents on their health and well-being.

Studying child and adolescent quality of life in Ireland

The KIDSCREEN instrument offers a means of contributing to a research base to bring about a framework for improving health, one which children and young people can identify with and one which professionals, academics and relevant agencies can implement.

A number of conclusions can be drawn from this literature review:

- As a society, we need to develop our understanding of children's lives.
- In planning and delivering services and in policy-making relating to child and adolescent health, best practice needs to be informed by quality research involving children and young people.
- Children's and young people's subjective measurement of health-related quality of life is valuable in public health policy and planning.
- We need to pay attention to our research methods with children and young people, and to match methods to settings in a way that maximises their voices and does not place undue pressure or responsibility on them.

3 Methodology

Using KIDSCREEN to measure health-related quality of life

The KIDSCREEN-52 instrument is a self-report measure suitable for administration in a range of settings (for full details, see *Appendix 1*). It is of a generic nature, applicable in different national and cultural contexts, complies with quality standards in instrument development and is practical, short and easy to use. The instrument results in a profile describing health-related quality of life (HRQoL). It was designed with the aim of contributing to a better understanding of perceived health in children and adolescents in Europe and thus to contribute to planning, implementing and evaluating innovations in the healthcare field. The instrument is available in English, German (Austrian, German and Swiss versions), Dutch, French, Spanish, Italian, Polish, Czech, Hungarian, Greek and Swedish. It can be used in representative surveys with children to obtain reference data.

In this study, the KIDSCREEN-52 instrument was used to ask Irish children and adolescents about their health-related quality of life. The international KIDSCREEN protocol was followed throughout the study (KIDSCREEN Group Europe, 2006). The instrument measures 10 HRQoL dimensions, which address the following main areas:

- **Physical well-being** (5 items): This explores the level of physical activity, energy and fitness of the child or adolescent.
- **Psychological well-being** (6 items): This examines the psychological well-being of the child/adolescent, including positive emotions and satisfaction with life.
- **Moods and emotions** (7 items): This covers how much the child/adolescent experiences depressive moods and emotions, and stressful feelings.
- **Self-perception** (5 items): This explores whether respondents perceive their bodily appearance positively or negatively; body image is explored by questions concerning satisfaction with looks as well as with clothes and other personal accessories.
- **Autonomy** (5 items): This looks at the respondent's opportunities to create social and leisure time.
- **Parent relations and home life** (6 items): This examines relationships with parents and the atmosphere at home.
- **Social support and peers** (6 items): This examines the nature of the respondent's relationships with other children/adolescents.
- **School environment** (6 items): This explores the perceptions of the child/adolescent about their cognitive capacity, learning and concentration, and their feelings at school.
- **Social acceptance/bullying** (3 items): This covers the aspect of feeling rejected by peers in school.
- **Financial resources** (3 items): This assesses respondents' perceptions of their financial resources.

Research process

Sample design

The initial goal was to sample 1,800 children and adolescents in Ireland, aged between 8 and 17 years. This sample size was considered necessary to detect a minimal important difference in HRQoL scores within each age strata for a group of children with special healthcare needs or a chronic condition ('a priori' estimation = 0.12), taking into account an alpha error of 0.05, power of 80%. A response rate of 70% was expected. The actual size of the Irish sample was 1,265 cases, which permits the estimation of, for example, a 10% prevalence rate with a 95% confidence interval of approximately +/-1.65%.

Fieldwork

The survey was carried out by fieldwork personnel who had been provided with detailed information materials on the KIDSCREEN project. A detailed interview instruction, including confidentiality

agreement, was formulated to guide the fieldworkers through the study process. The KIDSCREEN instrument used comprised two short, practical self-completion questionnaires, the first designed for children aged 8-11 and the second for adolescents aged 12-17.

Administration of the self-completion questionnaires for 8-17 year-olds took place in 39 randomly selected national primary and post-primary schools throughout Ireland. Introductions, information, consent, administration and collection of the child/adolescent questionnaires required approximately 30 minutes (or one class period), of which 15 minutes was spent completing the questionnaire. In one case, a teacher conducted the fieldwork.

Setting

The school setting was chosen as a safe and appropriate environment in which to conduct the research. To further protect the safety of the child and the researcher, school teachers were requested to be in attendance at the administration of the questionnaires. The limitation of this approach was the exclusion of those children and young people who were not attending school or who were absent from school. The KIDSCREEN instrument is designed for use in a range of other settings.

Consent

The KIDSCREEN project followed a strict process of securing consent from all those taking part. This process included School Principal consent forms, parent consent forms, child consent forms, fieldworker consent forms and data entry consent forms. Through this process, the KIDSCREEN project aimed to guarantee confidentiality and anonymity, and minimise risk to those choosing to participate in the project.

Table1: Summary of KIDSCREEN research process

Population/participants	School-going children, male and female, aged 8-17 years
Setting	Primary and post-primary schools
Sampling frame	Department of Education and Science School Listings
Sample	Clustered sample of pupils in a given class/year
Selection criteria	<i>Inclusion:</i> children (8-11 years), adolescents (12-17 years), female and male <i>Exclusion:</i> school/parent/child refusal to participate
Survey instrument	KIDSCREEN-52 questionnaire
Delivery/reminders	Postal delivery via School Principal, with letter and telephone reminders
Return	Questionnaires were collected by fieldworkers and returned directly to the collection centre
Consent	Written consent from School Principal, parent and child
Obtained sample	1,265 children and adolescents from 39 schools
Data quality/process	Data were entered according to the international KIDSCREEN protocol and statistically analysed using an SPSS database developed by the international KIDSCREEN Group
Ethical approval	Ethical approval was received from the Faculty of Public Health Medicine, Royal College of Physicians

Reliability and validity measures

Research questions from various international studies which were included in the KIDSCREEN survey include:

- Support from Others: Oslo Social Support Scale (Dalgard);
- Your Health and Treatment: Psychosomatic Complaints List (HBSC);
- How Do You Feel (Anchor items for both KIDSCREEN and DISABKIDS projects);
- The Paediatric Quality of Life (PedsQL) Measurement Model.

To assess the level of social support, the Oslo 3-Item Social Support Scale was adapted (Brevik and Dalgard, 1996). This scale contains one question about the number of people who can provide a sense of security and support to the child and two questions about emotional and instrumental support from those people. The HBSC psychosomatic complaints symptom checklist (Currie *et al*, 2001) is a self-administered brief screening instrument which asks children and adolescents about the frequency of occurrence of eight psychosomatic health complaints. Items are added together to generate an index of psychosomatic health complaints score. The symptom checklist was included as a screening instrument. The HBSC children's survey is a European WHO collaborative study.

The development of the KIDSCREEN dimensions was based on the probabilistic partial credit model, which belongs to the family of Rasch models of measurement analysis. Rasch models have a specific measurement property that provides a criterion for successful measurement in data analysis. The items of the KIDSCREEN fulfil the strong assumptions of the Rasch model (unidimensionality, homogeneity of items and persons, sufficiency of the sum score). To make the interpretation more applicable, the scores of the Rasch scales are transferred into T-values. For reliability and validity results, *see Appendix 2*.

Internal consistency

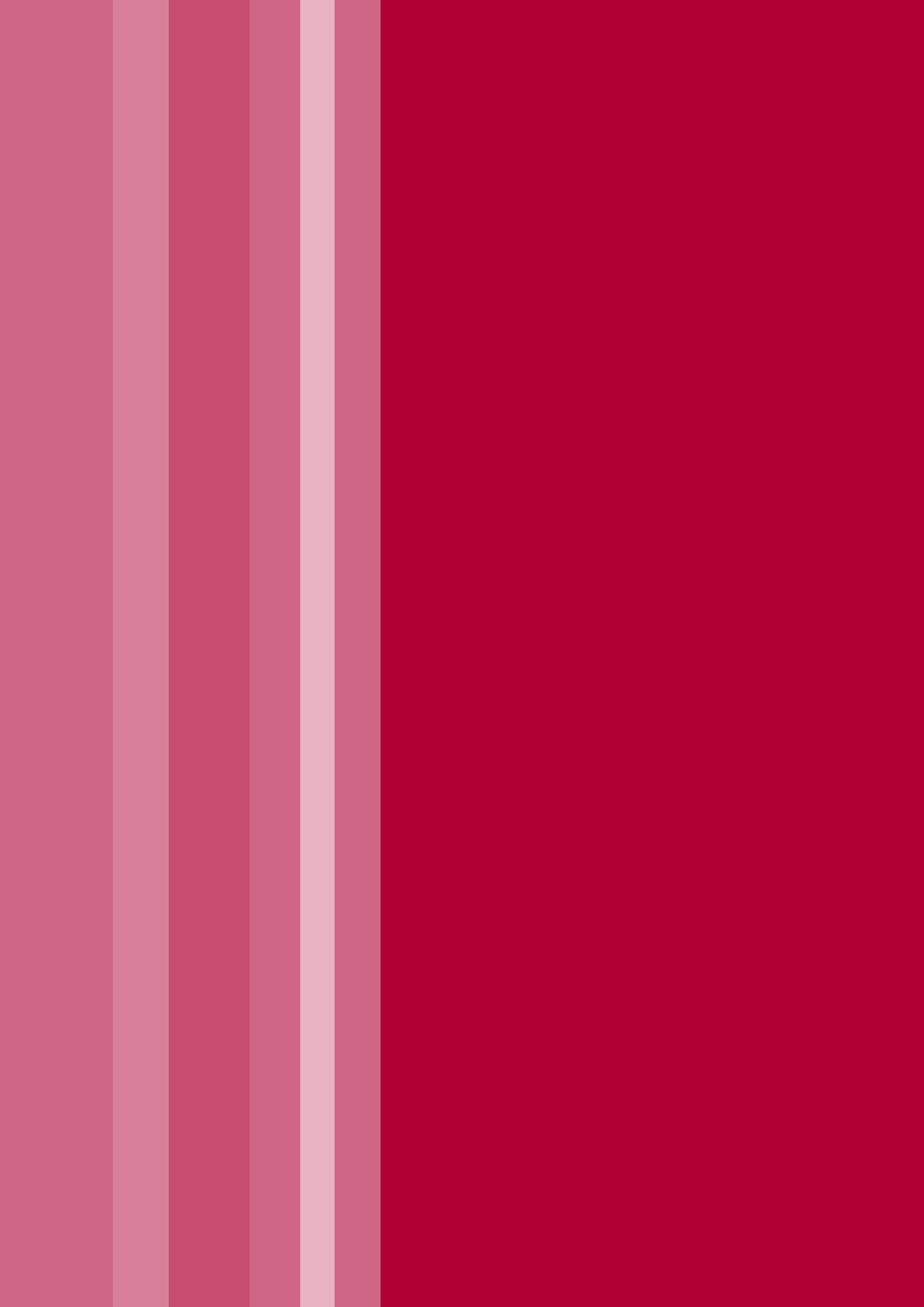
The internal consistency of the KIDSCREEN dimensions was calculated using Cronbach's Alpha. Alpha coefficients of 0.7 or higher were considered as acceptable, indicating a high reliability, with all items measuring the same underlying construct, which appears to be suitable to the Irish population. The national survey of the generic HRQoL module consists of 10 dimensions (*see above*) and showed a good psychometric performance, with reliability coefficients ranging from 0.70 to 0.89. For further details on Cronbach's Alpha by dimensions, *see Appendix 2*.

Interpretation of the KIDSCREEN dimensions

The scores achieved using KIDSCREEN-52 represent an empirical assessment of 8-17 year-olds' health-related quality of life from the respondents' point of view. For the interpretation of the KIDSCREEN scores, the content of the scales has to be considered (*see Table 2*). The basic information about the scales is given by their definitions. A 5-point Likert response scale is used in all dimensions. The 8-17 year-olds respond by indicating one point on the scale. Across most dimensions, the highest scale (i.e. 5) receives the highest score (representing, for example, 'extremely', 'always'), indicating better quality of life.

Table 2: Interpretation of scores of the KIDSCREEN-52 dimensions scales

Dimension	Low score	High score
Physical well-being	Physically exhausted, physically unwell, feeling unfit, having low energy	Physically fit, active, healthy, energetic
Psychological well-being	No pleasure in life, dissatisfaction with life	Happy, view life positively, satisfied with life, pleased, cheerful
Moods and emotions	Feels depressed, unhappy, feeling in bad mood	Feeling good, feeling in good mood
Self-perception	Negative body image, self-rejection, unhappy/dissatisfied with self, having low self-esteem, feeling uncomfortable with appearance	Self-confident, satisfied with self, positive body image, happy with self, having good self-esteem, comfortable with appearance
Autonomy	Restricted, oppressed, dependent	Feeling free to decide, independent, autonomous
Parent relations and home life	Feeling alone, overlooked, not appreciated, perceives parents unavailable/unfair	Feeling secure, supported and loved, feeling well understood/well-cared, perceives parents fair/available
Social support and peers	Feeling excluded, not accepted by peers, not supported by peers, not relying on peers	Feeling accepted, supported and included in peer group, relying on peers
School environment	Disliking school and/or teachers, negative feelings about school, not doing well	Feeling happy at school and doing well, enjoying school life
Social acceptance	Feeling tormented by peers, bullied, feeling rejected by peers	Not feeling bullied, feeling respected and accepted by peers
Financial resources	Feeling finances are restricting lifestyle, feeling financially disadvantaged	Feeling satisfied with financial resources, feeling well-off, enjoying financial resources



Part II: FINDINGS

4 Profile of Respondents

Presentation of findings

The following chapters detail the findings of the subjective health-related quality of life of 1,265 Irish school children, aged 8-17 years. The results of their perceptions of their health and well-being across 10 dimensions of health are reported in Chapters 5-16, in which basic descriptive data are presented. Detailed tables on dimensions by gender are presented in Appendix 3. All data results are rounded to the nearest percentage. The valid response for each question has been used (i.e. those who did not answer the question(s) in the questionnaire are excluded in all figures and tables).

This chapter presents the response rate obtained. It also looks at the respondents' demographic characteristics and socio-economic background.

Response rate

A response rate of 47.5% was obtained. This consisted of 39 schools completing 1,265 questionnaires (355 child questionnaires, 910 adolescent questionnaires).

Children and adolescents were selected using a clustered sampling design. The initial sampling unit was the school environment. The sampling framework consisted of primary and post-primary schools randomly selected from the Department of Education and Science School Listings. These schools were divided between the four Health Service Executive (HSE) areas and numbered. Census figures for 2002 broken down by county and by year of age were used to inform the spread of 8-17 year-olds across the country. The proportion of all 5-14 year-olds in the country within the HSE areas were found and the proportion of the overall sample needed within each health service region was calculated. A sample of 3,000 participants was taken to engage 1,000 children in primary school and 2,000 adolescents in post-primary school. To yield this number, a total of 80 schools (40 primary schools and 40 post-primary schools) was required. It was established that to achieve the required sample, 76 primary school classrooms (one each for 4th and 5th class) and 152 post-primary school classrooms (one each for 1st, 2nd, 3rd, 4th/5th year) were needed.

Schools were randomly selected — 15 primary schools (10 and 5 reserves) within each health service area and 15 post-primary schools (10 and 5 reserves) within each health service area.

Socio-demographic characteristics

The first set of questions in the KIDSCREEN questionnaires asked the children and adolescents about their perceived socio-demographic characteristics (*see Table 3*).

Table 3: Summary of socio-demographic characteristics of all respondents (8-17 year-olds)

Questionnaire 8-11 years	Questionnaire 12-17 years
Demographics <ul style="list-style-type: none">• 355 children• 48.5% were male• 51.5% were female• All students went to primary school, namely 3rd, 4th and 5th class• 91% were born in Ireland	Demographics <ul style="list-style-type: none">• 910 adolescents• 37.5% were male• 62.5% were female• All students went to secondary school, namely 1st, 2nd, 3rd, 4th and 5th year• 90% were born in Ireland
Socio-economic status <ul style="list-style-type: none">• When asked how well off they thought their families were, 30% responded 'very well off' and 9% 'not at all well off'• 56% owned 'two or more cars'• 66% had their own bedroom• 43% had been away on holiday 'once' in the past 12 months• 58% of families owned a computer	Socio-economic status <ul style="list-style-type: none">• When asked how well off they thought their families were, 16% responded 'very well off' and 1% 'not at all well off'• 69% owned 'two or more cars'• 81% had their own bedroom• 36% had been away on holiday 'once' in the past 12 months• 58% of families owned a computer

Core background variables were examined through use of the ISSP Guidelines (International Social Survey Programme). Of the 1,265 participants who took part in the study, 752 (59%) were female and 513 (41%) were male. Broken down by age groups, the participants consisted of 355 children (8-11 years) and 910 adolescents (12-17 years). The 355 children consisted of 183 (51.5%) female and 172 (48.5%) male. In the adolescent group, there was an over-representation of females to males: the 910 adolescents consisted of 569 (62.5%) female and 341 (37.5%) male.

A question was asked using the migration status derived from the PISA Study. The migration distribution showed 90% of respondents were born in Ireland. Similar results were produced for their parents' migration status, with 87% of mothers and 88% of fathers born in Ireland.

Long-term disability

90% of respondents did not have a long-term disability, illness or medical condition. Of the 10% who did, asthma was most frequently reported (5.3%, n = 67), followed by dyslexia (0.6%, n = 7), eczema (0.4%, n = 5) and diabetes (0.3%, n = 4).

Family Affluence Scale

Figure 1 shows the family affluence scale (FAS) for children, adolescents and for all 8-17 year-olds combined. The FAS was adopted from the HBSC survey since it was already provided in the languages of the KIDSCREEN participants and reference data are available. The aim of the FAS is to facilitate children and adolescents in describing their subjective socio-economic status using the following indicators:

- family car ownership;
- own bedroom;
- number of holidays with parents;
- family computer ownership.

A range is used to indicate low (0-3), medium (4-5) or high (6-7) family affluence, dependent on the responses to the indicators described.

As Figure 1 shows, high family affluence was reported by 32% of children, which was lower compared to that of adolescents (41%). Overall, the 8-17 year-old population was rated as having 15% (193) low family affluence, 46% (572) medium family affluence and 39% (484) high family affluence.

Figure 1: Family Affluence Scale (FAS)

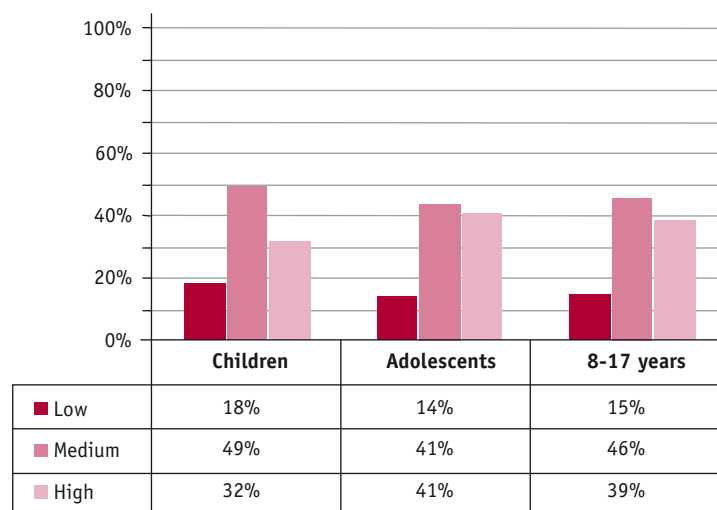
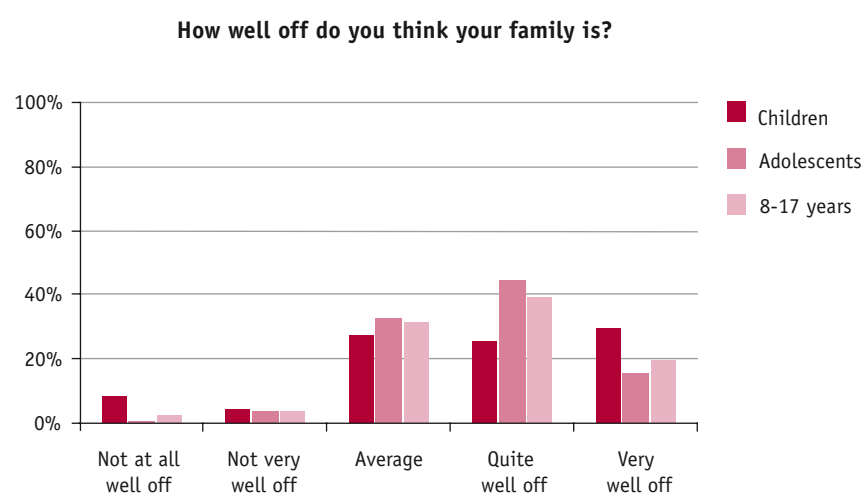


Figure 2 describes perceived family wealth. Adopted from the HBSC survey, it aims to measure young people's perceptions of their own family's socio-economic circumstances. The overall result shows that the majority (40% or 503) reported their families were 'quite well off' or 'average' (32% or 402), with 20% perceiving that they were 'very well off'. 30% of children, in comparison to 16% of adolescents, perceived their families to be 'very well off'. 3% (39) of all respondents thought their families were 'not at all well off'.

Figure 2: Perceived Family Wealth



Comparing perceptions of FAS over a number of years, Table 4 reveals that, overall, girls and boys (8-17 years) in the 2005 KIDSCREEN study perceived higher FAS in comparison to the 2002 HBSC survey (girls and boys 10-18 years).

Table 4: FAS — Results of HBS 1998, HBS 2002 and KIDSCREEN 2005

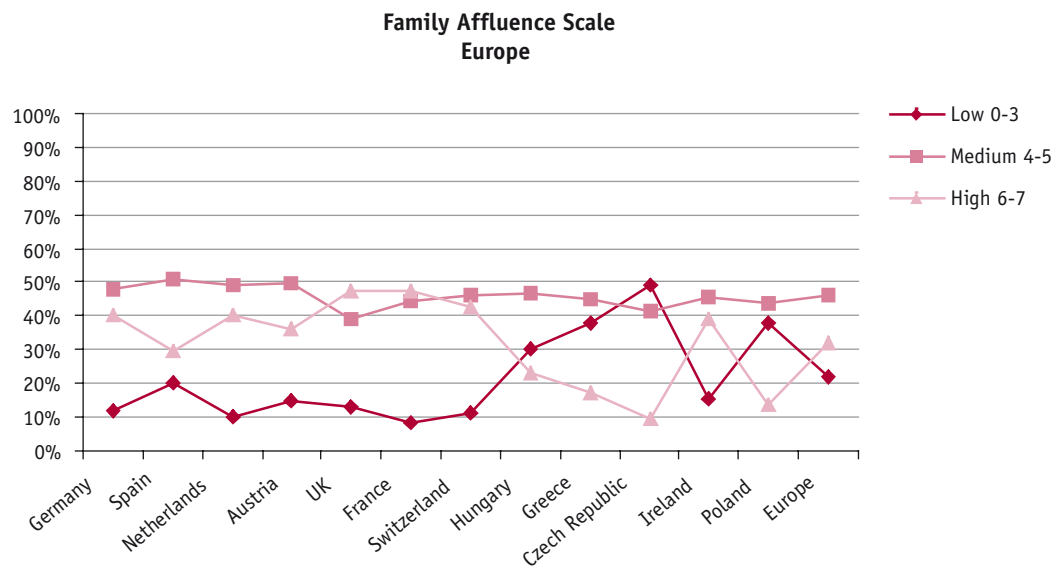
Family Affluence Scale	Boys HBS 1998	Boys HBS 2002	Boys (8-17 years) KIDSCREEN 2005	Girls HBS 1998	Girls HBS 2002	Girls (8-17 years) KIDSCREEN 2005
During the past 12 months, did not go on family holiday (in Ireland or abroad)	22.7%	21.9%	17.2%	26.4%	20.4%	15.9%
Do not have own bedroom	38.5%	30.0%	24.4%	36.9%	28.3%	21.3%
Family does not own a car, van or truck	6.9%	4.2%	3.7%	7.0%	5.1%	5.3%
Thinks family is 'quite' or 'very' well off	51.1%	55.9%	62.4%	42.5%	45.8%	59.2%

Looking at the family affluence scale across a number of European countries, extreme differences were evident (see Table 5 and Figure 3). For example, only 9.4% of Czech participants, compared to 47.6% of UK participants, perceived their FAS to be high. 49.2% of Czech participants, compared to 8.4% of French participants, perceived their FAS to be low. Irish participants' perceptions of FAS were 38.8% high (compared to the European average of 31.7%), 45.8% medium (European average, 46.2%) and 15.5% low (European average, 22.1%). Thus, Irish participants have a higher perception of their socio-economic status than the European average.

Table 5: FAS — European breakdown, by country

Country	Low 0-3 N (%)	Medium 4-5 N (%)	High 6-7 N (%)	Total
Germany	203 (11.6%)	844 (48.2%)	704 (40.2%)	1,751
Spain	180 (20.1%)	454 (50.6%)	263 (29.3%)	897
Netherlands	193 (10.2%)	934 (49.3%)	767 (40.5%)	1,894
Austria	219 (14.5%)	748 (49.6%)	541 (35.9%)	1,508
UK	246 (13.2%)	732 (39.2%)	888 (47.6%)	1,866
France	89 (8.4%)	467 (44.2%)	501 (47.4%)	1,057
Switzerland	192 (11.2%)	792 (46.3%)	726 (42.5%)	1,710
Hungary	967 (29.9%)	1,513 (46.8%)	750 (23.2%)	3,230
Greece	418 (37.6%)	500 (45.0%)	194 (17.4%)	1,112
Czech Republic	786 (49.2%)	661 (41.4%)	150 (9.4%)	1,597
Ireland	193 (15.5%)	572 (45.8%)	484 (38.8%)	1,249
Poland	645 (38.0%)	821 (43.8%)	233 (13.7%)	1,699
Sweden	–	–	–	–
European average	4,331 (22.1%)	9,038 (46.2%)	6,201 (31.7%)	19,570

Figure 3: FAS — European breakdown, by country



Healthcare source — Adolescents

Adolescents were asked two additional questions in relation to healthcare utilisation. The first question looked at sources of healthcare, such as access to a health centre/doctor. The second question asked whether they had a healthcare professional who could provide them with confidential advice about their health. Responses are shown in Table 6.

Table 6: Healthcare utilisation for adolescents

Healthcare utilisation	Yes	No
Do you have a usual source of healthcare (e.g. access to health centre/doctor)?	86%	12%
Do you have a healthcare professional who could provide you with confidential advice about your health should you need it?	70%	27%

5 Dimension 1: Physical well-being

Definition:

This dimension explores the level of physical activity of the child or adolescent in terms of their energy and fitness. The level of physical activity is examined with reference to their ability to get around the home and school, and to play or do physically demanding activities (e.g. sports) since any impairment will affect physical activity. The dimension also looks at the capacity of the child or adolescent to engage in lively or energetic play. In addition, the extent to which a child or adolescent feels unwell and complains of poor health is examined.

Respondents were asked 5 questions relating to their physical well-being as experienced in the week prior to completing the questionnaire. Overall, 95% of all respondents felt that their health was 'good', 'very good' or 'excellent' (see Table 7). More differentiated results of this dimension show that children display a significantly higher physical well-being than adolescents across the 5 items (see Tables 8 and 9). Children perceive their ability to run well and their energy levels as twice as good as the adolescent group.

Table 7 shows that 62% of **all respondents** stated that they have felt 'very' or 'extremely' fit and well, and 65% reported that they have been 'very' or 'extremely' physically active. 65% of all respondents stated that they have been 'very' or 'extremely' able to run well. 65% indicated that they have 'very often' or 'always' felt full of energy. A further 11% stated that they have felt 'not at all' or 'slightly' fit and well, and 13% have 'never' or 'seldom' felt full of energy.

Table 7: Physical well-being of all respondents (8-17 year-olds)

Age group 8-17 years Total = 1,265	Not at all	Slightly	Moderately	Very	Extremely
In general, how would you say your health is?*	1%	4%	29%	43%	23%
Have you felt fit and well?	2%	9%	27%	43%	19%
Have you been physically active (e.g. running, climbing, biking)?	4%	9%	22%	34%	31%
Have you been able to run well?	3%	8%	22%	39%	26%
Have you felt full of energy?***	1%	12%	32%	35%	20%

* Responses for this question are 'poor'; 'fair'; 'good'; 'very good'; 'excellent'.

** Responses for this question are 'never'; 'seldom'; 'quite often'; 'very often'; 'always'.

By gender, females perceived their physical well-being less positively than males. 58% of females, compared with 75% of males, perceived themselves to have been 'very' or 'extremely' physically active. 65% of females and 70% of males felt their health is 'very good' or 'excellent'. 50% of females and 61% of males reported that they have 'very often' or 'always' felt full of energy.

Table 8 highlights that the responses of the **children** favoured the higher end of the scale. 74% stated that they have felt 'very' or 'extremely' fit and well, and 77% reported that they have been 'very' or 'extremely' physically active. 81% of children stated that they have been 'very' or 'extremely' able to run well. 71% indicated that they have felt 'very' or 'extremely' full of energy. A further 9% stated they have felt 'not at all' or 'slightly' fit and well, and 6% have 'never' or 'seldom' felt full of energy.

Table 8: Physical well-being of children (8-11 year-olds)

Age group 8-11 years Total = 355	Not at all	Slightly	Moderately	Very	Extremely
In general, how would you say your health is?*	2%	2%	30%	37%	29%
Have you felt fit and well?	3%	6%	17%	43%	31%
Have you been physically active (e.g. running, climbing, biking)?	2%	5%	14%	38%	39%
Have you been able to run well?	2%	6%	8%	39%	42%
Have you felt full of energy?***	1%	5%	21%	36%	37%

* Responses for this question are 'poor'; 'fair'; 'good'; 'very good'; 'excellent'.

** Responses for this question are 'never'; 'seldom'; 'quite often'; 'very often'; 'always'.

Table 9 shows that **adolescents** reported a lower perception of physical well-being across all items compared to the younger age group. 57% stated that they have felt 'very' or 'extremely' fit and well, and 60% reported that they have been 'very' or 'extremely' physically active. 59% of adolescents stated that they have been 'very' or 'extremely' able to run well. 48% indicated that they have 'very often' or 'always' felt full of energy. A further 12% stated that they have felt 'not at all' or 'slightly' fit and well, and 16% have 'never' or 'seldom' felt full of energy.

Table 9: Physical well-being of adolescents (12-17 year-olds)

Age group 12-17 years Total = 910	Not at all	Slightly	Moderately	Very	Extremely
In general, how would you say your health is?*	0%	4%	28%	46%	21%
Have you felt fit and well?	2%	10%	31%	42%	15%
Have you been physically active (e.g. running, climbing, biking)?	5%	10%	26%	32%	28%
Have you been able to run well?	4%	9%	28%	39%	20%
Have you felt full of energy?***	2%	14%	36%	34%	14%

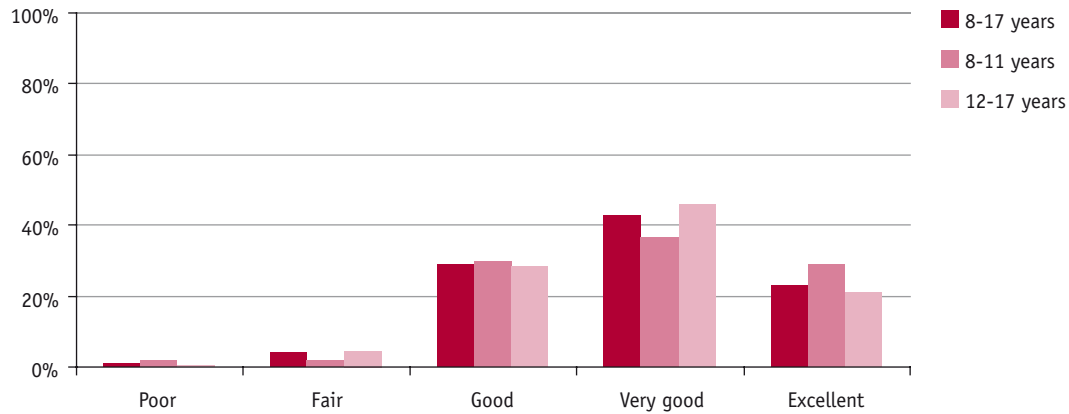
* Responses for this question are 'poor'; 'fair'; 'good'; 'very good'; 'excellent'.

** Responses for this question are 'never'; 'seldom'; 'quite often'; 'very often'; 'always'.

On perceived general health, in answer to the question 'In general, how would you say your health is?', 95% of all respondents felt their health was 'good', 'very good' or 'excellent' (see Figure 4). This is the same for children and adolescents, as well as for males and females.

Figure 4: Perceived general health

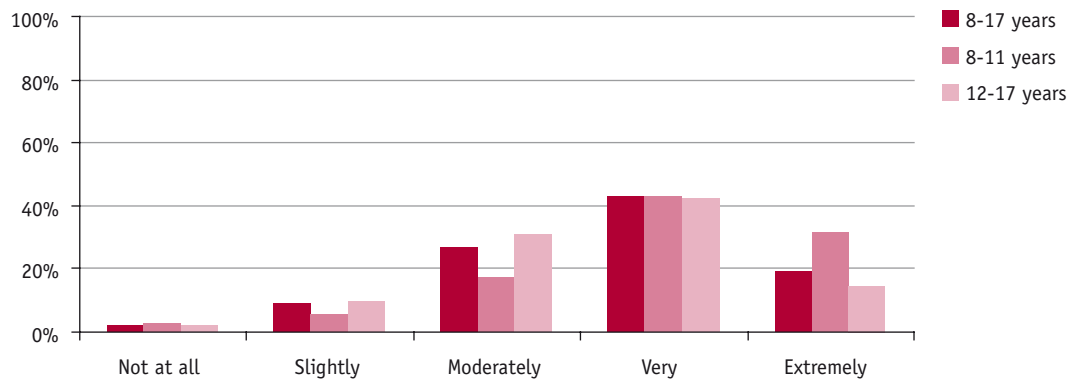
In general, how would you say your health is?



On perceived physical health, in answer to the question 'Have you felt fit and well?', 89% of all respondents reported they have felt 'moderately', 'very' or 'extremely' fit and well (see Figure 5). This breaks down into 91% for children and 89% for adolescents, and 93% for males and 87% for females. Females' perception of their physical health is lower than that of males.

Figure 5: Perceived physical health

Have you felt fit and well?



6 Dimension 2: Psychological well-being

Definition:

This dimension examines the psychological well-being of the child or adolescent, including positive emotions and satisfaction with life. It specifically reveals the positive perceptions and emotions experienced by the individual. The questions look at how much a child or adolescent experiences positive feelings, such as happiness, joy and cheerfulness. They also reflect the person's view of their satisfaction with life so far.

Respondents were asked 6 questions relating to their psychological well-being as experienced in the week prior to completing the questionnaire. The results across this dimension indicate that children perceive their psychological well-being more positively than adolescents.

Table 10 indicates that 75% of **all respondents** felt that their life has been 'very' or 'extremely' enjoyable. 86% of all respondents perceived that they have felt 'very' or 'extremely' pleased that they are alive, and 78% reported that they have 'very often' or 'always' had fun. At the other extreme, 8% stated that they have 'never' or 'seldom' felt cheerful and 8% revealed that they have 'not at all' or 'slightly' felt satisfied with their life.

Table 10: Psychological well-being of all respondents (8-17 year-olds)

Age group 8-17 years Total = 1,265	Never	Seldom	Quite often	Very often	Always
Has your life been enjoyable?*	1%	6%	17%	41%	34%
Have you felt pleased that you are alive?*	1%	4%	9%	27%	59%
Have you felt satisfied with your life?*	3%	5%	17%	38%	36%
Have you been in a good mood?	1%	7%	30%	45%	17%
Have you felt cheerful?	1%	8%	25%	46%	20%
Have you had fun?	1%	5%	16%	39%	39%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

By gender, perceptions among females and males are similar. 74% of females and 78% of males felt that their life has been 'very' or 'extremely' enjoyable. 84% of females and 89% of males perceived that they have felt 'very' or 'extremely' pleased to be alive and 77% of females and 82% of males reported that they have 'very often' or 'always' had fun. At the other extreme, 10% of females and 6% of males stated that they have 'never' or 'seldom' felt cheerful, while exactly the same percentages of both sexes revealed that they have 'not at all' or 'slightly' felt satisfied with their life.

Table 11 highlights that the responses of the **children** favoured the higher end of the scale. 84% of 8-11 year-olds felt that their lives have 'often' or 'always' been enjoyable. 90% perceived that they are 'very often' or 'extremely' pleased to be alive and 87% 'often' or 'always' had fun. At the other extreme, 5% have 'never' or 'seldom' felt cheerful and 9% have 'not at all' or 'slightly' felt satisfied with their life.

Table 11: Psychological well-being of children (8-11 year-olds)

Age group 8-11 years Total = 355	Never	Seldom	Quite often	Very often	Always
Has your life been enjoyable?*	1%	5%	9%	38%	46%
Have you felt pleased that you are alive?*	1%	3%	4%	20%	70%
Have you felt satisfied with your life?*	4%	5%	8%	40%	40%
Have you been in a good mood?	1%	4%	27%	45%	22%
Have you felt cheerful?	1%	4%	21%	44%	29%
Have you had fun?	0%	3%	8%	28%	59%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

Table 12 shows the perceptions of **adolescents** on their psychological well-being. 72% of 12-17 year-olds felt that their lives have 'often' or 'always' been enjoyable. 83% perceived that they are 'very often' or 'extremely' pleased to be alive and 74% 'often' or 'always' had fun. At the other extreme, 9% have 'never' or 'seldom' felt cheerful and 8% have 'not at all' or 'slightly' felt satisfied with their life.

Table 12: Psychological well-being of adolescents (12-17 year-olds)

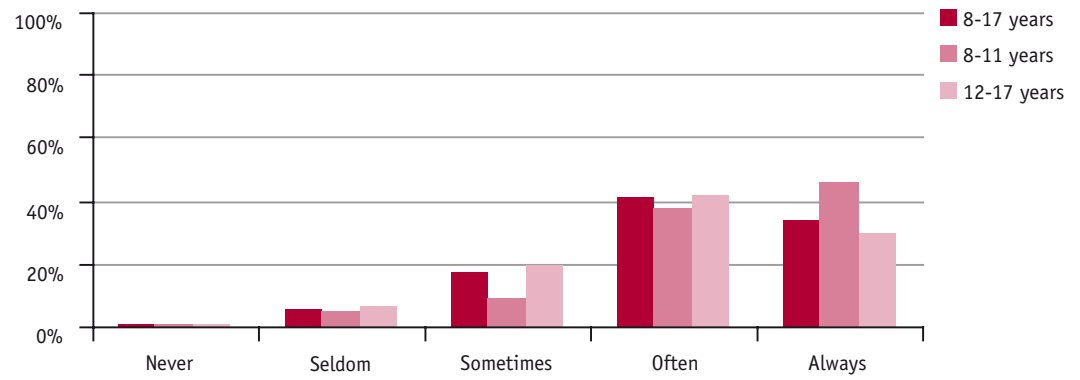
Age group 12-17 years Total = 910	Never	Seldom	Quite often	Very often	Always
Has your life been enjoyable?*	1%	7%	20%	42%	30%
Have you felt pleased that you are alive?*	1%	4%	10%	29%	54%
Have you felt satisfied with your life?*	3%	5%	21%	37%	34%
Have you been in a good mood?	0%	9%	27%	46%	17%
Have you felt cheerful?	0%	9%	27%	46%	17%
Have you had fun?	1%	6%	19%	43%	31%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

On life enjoyment generally, in answer to the question 'Has your life been enjoyable?', Figure 6 indicates that 75% of all respondents stated that their life has been 'often' or 'always' enjoyable. This breaks down into 85% for children and 72% for adolescents, and 78% for males and 74% for females.

Figure 6: Life enjoyment

Has your life been enjoyable?



7 Dimension 3: Moods and Emotions

Definition:

This dimension covers how much the child or adolescent experiences depressive moods and emotions, and stressful feelings. It specifically reveals feelings such as loneliness, sadness, sufficiency/insufficiency and resignation. Furthermore, this dimension takes into account how distressing these feelings are perceived to be. This dimension shows a high score in HRQoL if these negative feelings are rare.

Respondents were asked 7 questions relating to their mood as experienced in the week prior to completing the questionnaire. Generally, children aged 8-11 were more likely to display positive moods and emotions than adolescents in the 12-17 age group. Adolescents were more likely to feel under pressure than children. Children were more likely to respond that they feel they do everything badly (11%) compared with 6% of adolescents. Very slight differences were noted between male and female perceptions.

Table 13 shows that 78% of **all respondents** reported that they have 'never' or 'seldom' felt that they do everything badly. 76% of all respondents stated that they have 'never' or 'seldom' felt sad and 84% perceived that they have 'never' or 'seldom' felt so bad that they didn't want to do anything. At the other extreme, 17% revealed that they have 'very often' or 'always' felt under pressure, 11% indicated that they have 'very often' or 'always' felt fed up, and 7% reported that they have 'very often' or 'always' felt that they do everything badly.

Table 13: Moods and emotions of all respondents (8-17 year-olds)

Age group 8-17 years Total = 1,265	Never	Seldom	Quite often	Very often	Always
Have you felt that you do everything badly?	25%	53%	14%	5%	2%
Have you felt sad?	21%	55%	16%	6%	1%
Have you felt so bad that you didn't want to do anything?	55%	29%	10%	4%	2%
Have you felt that everything in your life goes wrong?	49%	34%	10%	4%	3%
Have you felt fed up?	21%	49%	19%	8%	3%
Have you felt lonely?	53%	28%	11%	5%	3%
Have you felt under pressure?	31%	32%	20%	11%	6%

By gender, 76% of females, compared with 82% of males, reported that they have 'never' or 'seldom' felt that they do everything badly. 72% of females, compared with 84% of males, stated that they have "never' or 'seldom' felt sad and 84% of females, compared with 86% of males, perceived that they 'never' or 'seldom' felt so bad that they didn't want to do anything. At the other extreme, 18% of females, compared with 15% of males, revealed that they have 'very often' or 'always' felt under pressure; 12% of females, compared with 9% of males, indicated that they have 'very often' or 'always' felt fed up; and 9% of females, compared with 6% of males, reported that they have 'very often' or 'always' felt that they do everything badly.

Table 14 shows that 74% of **children** reported that they have 'never' or 'seldom' felt that they do everything badly. 72% stated that they have 'never' or 'seldom' felt sad and 80% perceived that they have 'never' or 'seldom' felt so bad that they didn't want to do anything. At the other

extreme, 11% revealed that they have 'very often' or 'always' felt under pressure, 10% indicated that they have 'very often' or 'always' felt fed up, and 11% reported that they have 'very often' or 'always' felt that they do everything badly.

Table 14: Moods and emotions of children (8-11 year-olds)

Age group 8-11 years Total = 355	Never	Seldom	Quite often	Very often	Always
Have you felt that you do everything badly?	36%	38%	14%	7%	4%
Have you felt sad?	34%	38%	18%	7%	2%
Have you felt so bad that you didn't want to do anything?	61%	19%	10%	6%	2%
Have you felt that everything in your life goes wrong?	57%	24%	10%	4%	3%
Have you felt fed up?	31%	40%	18%	7%	3%
Have you felt lonely?	60%	19%	10%	5%	3%
Have you felt under pressure?	47%	27%	14%	6%	5%

Table 15 reveals that 79% of **adolescents** reported that they have 'never' or 'seldom' felt that they do everything badly. 77% stated that they have 'never' or 'seldom' felt sad and 86% perceived that they have 'never' or 'seldom' felt so bad that they didn't want to do anything. At the other extreme, 19% revealed that they have 'very often' or 'always' felt under pressure, 11% indicated that they have 'very often' or 'always' felt fed up, and 6% reported that they have 'very often' or 'always' felt that they do everything badly.

Table 15: Moods and emotions of adolescents (12-17 year-olds)

Age group 12-17 years Total = 910	Never	Seldom	Quite often	Very often	Always
Have you felt that you do everything badly?	21%	58%	14%	5%	1%
Have you felt sad?	16%	61%	15%	6%	1%
Have you felt so bad that you didn't want to do anything?	53%	33%	9%	3%	1%
Have you felt that everything in your life goes wrong?	46%	38%	10%	4%	3%
Have you felt fed up?	17%	53%	20%	8%	3%
Have you felt lonely?	50%	32%	11%	5%	2%
Have you felt under pressure?	24%	35%	22%	13%	7%

Figure 7 show responses in relation to feelings of sadness. In response to the question 'Have you felt sad?', 93% of all respondents said they 'never', 'seldom' or 'sometimes' felt sad. This breaks down into 91% for children and 93% for adolescents, and 95% for males and 89% for females.

Figure 7: Feelings of sadness

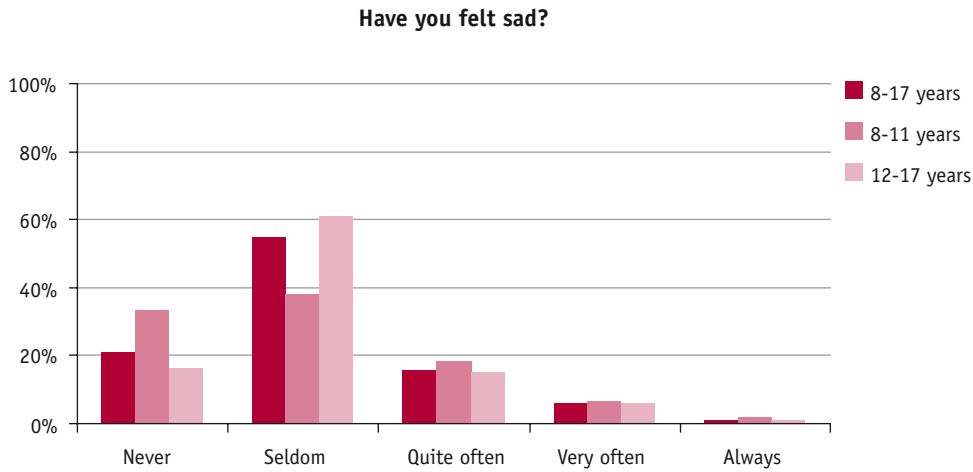
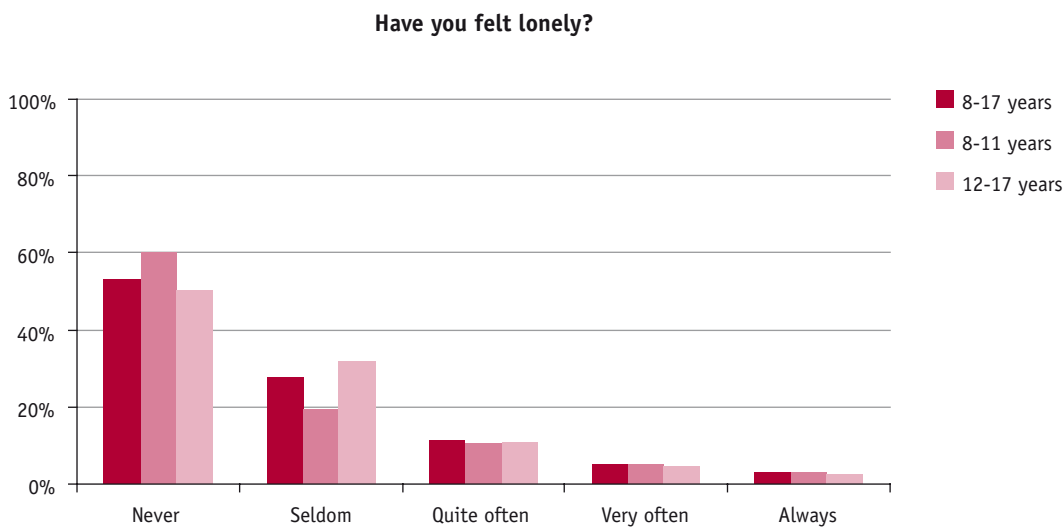


Figure 8 show responses in relation to feelings of loneliness. In response to the question ‘Have you felt lonely?’, 92% of all respondents said they ‘never’, ‘seldom’ or ‘sometimes’ felt lonely. This breaks down into 92% for children and 93% for adolescents, and 95% for males and 91% for females. Overall, 3% of 8-17 year-olds ‘always’ felt lonely.

Figure 8: Feelings of loneliness



8 Dimension 4: Self-perception

Definition:

This dimension explores the child or adolescent's perception of self. It includes whether the appearance of the body is viewed positively or negatively. Body image is explored by questions concerning satisfaction with looks as well as with clothes and other personal accessories. The dimension examines how secure and satisfied children or adolescents feel about themselves, as well as their appearance. Results are meant to reflect the value individuals assign to themselves and the perception of how positively others value them.

Respondents were asked to respond to 5 questions relating to their self-perception as experienced in the week prior to completing the questionnaire. Generally, children aged 8-11 were more likely to have a higher self-perception than adolescents in the 12-17 age group. 65% of all respondents (8-17 year-olds) have 'often' or 'always' been happy with the way they are; this was perceived more positively by 80% of children compared to 60% of adolescents. 13% of children, compared with 33% of adolescents, would 'often' or 'always' want to change something about their body. Adolescents rated their self-perception among the lowest of dimensions. Gender differences can be seen to influence responses in this dimension: 53% of females, compared to 74% of males, would 'never' or 'seldom' want to change something about their body.

Table 16 indicates that 65% of **all respondents** reported that they have 'very often' or 'always' been happy with the way they are. 73% of all respondents stated that they have 'very often' or 'always' been happy with their clothes. 57% perceived that they have 'never' or 'seldom' been worried about the way they look, while 24% revealed that they 'very often' or 'always' have been worried. 61% indicated that they would 'never' or 'seldom' like to change something about their body, while 27% would 'very often' or 'always' like to change something about their body.

Table 16: Self-perception of all respondents (8-17 year-olds)

Age group 8-17 years Total = 1,265	Never	Seldom	Quite often	Very often	Always
Have you been happy with the way you are?	3%	9%	23%	32%	33%
Have you been happy with your clothes?	2%	8%	17%	30%	43%
Have you been worried about the way you look?	27%	30%	18%	14%	10%
Have you felt jealous of the way other girls and boys look?	43%	27%	12%	11%	7%
Would you like to change something about your body?	37%	24%	12%	10%	17%

By gender, 58% of females, compared to 77% of males, reported they have 'very often' or 'always' been happy with the way they are. 67% of females, compared to 82% of males, stated they have 'very often' or 'always' been happy with their clothes. 49% of females, compared to 70% of males, perceived they have 'never' or 'seldom' been worried about the way they look, while 31% of females, compared to 15% of males, revealed they 'very often' or 'always' have been worried. 53% of females, compared to 74% of males, indicated they would 'never' or 'seldom' like to change something about their body, while 36% of females, compared to 16% of males, reported they would 'very often' or 'always' like to change something about their body.

Table 17 indicates that 80% of **children** reported that they have ‘very often’ or ‘always’ been happy with the way they are. 86% stated that they have ‘very often’ or ‘always’ been happy with their clothes. 75% perceived that they have ‘never’ or ‘seldom’ been worried about the way they look, while 13% revealed that they ‘very often’ or ‘always’ have been worried. 81% indicated that they would ‘never’ or ‘seldom’ like to change something about their body, while 13% reported that they would like to change something about their body ‘very often’ or ‘always’.

Table 17: Self-perception of children (8-11 year-olds)

Age group 8-11 years Total = 355	Never	Seldom	Quite often	Very often	Always
Have you been happy with the way you are?	3%	4%	13%	29%	51%
Have you been happy with your clothes?	1%	3%	9%	21%	65%
Have you been worried about the way you look?	53%	22%	11%	9%	4%
Have you felt jealous of the way other girls and boys look?	70%	19%	5%	3%	3%
Would you like to change something about your body?	60%	21%	6%	5%	8%

Table 18 shows that **adolescents** rate their self-perception, along with their school environment (see Chapter 12), as the lowest of all dimensions and certainly lower than children. 60% of adolescents reported that they have ‘very often’ or ‘always’ been happy with the way they are. 68% of adolescents stated that they have ‘very often’ or ‘always’ been happy with their clothes. 50% perceived that they have ‘never’ or ‘seldom’ been worried about the way they look, while 29% revealed that they ‘very often’ or ‘always’ have been worried. 53% indicated that they would ‘never’ or ‘seldom’ like to change something about their body, while 33% reported that they would ‘very often’ or ‘always’ like to.

Table 18: Self-perception of adolescents (12-17 year-olds)

Age group 12-17 years Total = 910	Never	Seldom	Quite often	Very often	Always
Have you been happy with the way you are?	3%	12%	26%	34%	26%
Have you been happy with your clothes?	2%	10%	20%	34%	34%
Have you been worried about the way you look?	17%	33%	20%	16%	13%
Have you felt jealous of the way other girls and boys look?	32%	31%	15%	14%	8%
Would you like to change something about your body?	28%	25%	14%	12%	21%

Figures 9 and 10 compare responses on self-perception across the age groups. In response to the question ‘Have you been happy with the way you are?’, 88% of all respondents reported they have ‘quite often’, ‘very often’ or ‘always’ been happy with the way they are (see Figure 9). This breaks down into 93% for children and 86% for adolescents, and 92% for males and 85% for females. Overall, 3% of all respondents stated they have ‘never’ been happy with the way they are.

Figure 9: Self-perception — Happy with the way you are?

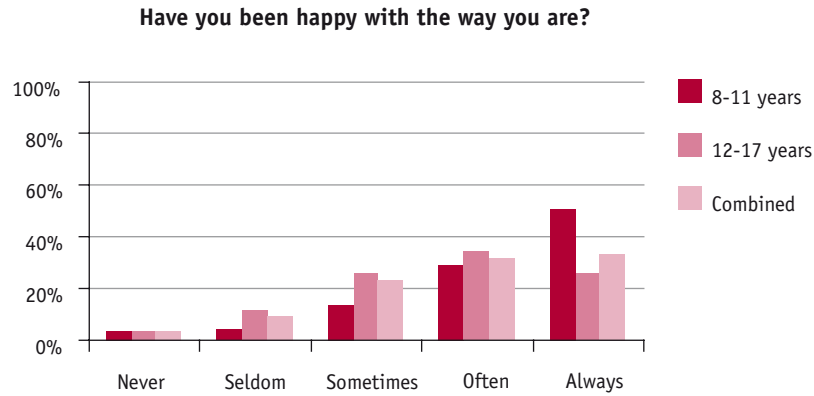
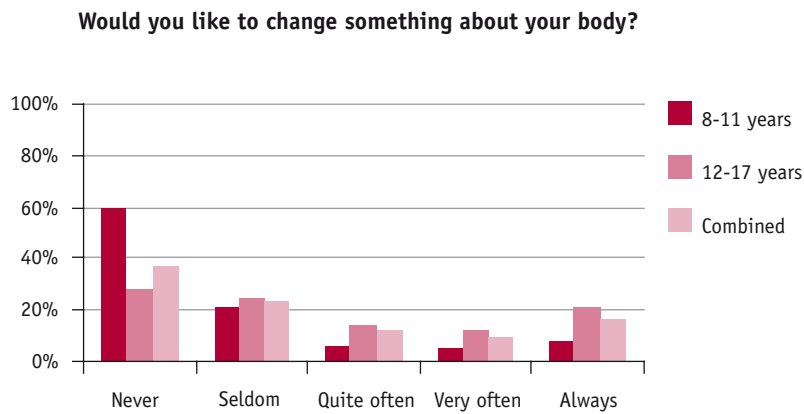


Figure 10 shows that in response to the question ‘Would you like to change something about your body?’, 73% of all respondents would ‘never’, ‘seldom’ or ‘sometimes’ like to change something about their body. This breaks down into 87% for children and 67% for adolescents, and 84% for males and 64% for females. Overall, 17% of all respondents would ‘always’ like to change something about their body; the breakdown by gender was 23% of females and 10% of males.

Figure 10: Self-perception — body appearance



9 Dimension 5: Autonomy

Definition:

This dimension looks at the opportunity given to a child or adolescent to create his or her own social and leisure time. It examines the person's level of autonomy, seen as an important developmental issue for creating an individual identity. This refers to the child or adolescent's freedom of choice, self-sufficiency and independence. In particular, the extent to which they feel able to shape their own lives, as well as being able to make decisions about day-to-day activities, will be considered. The dimension also examines if the child or adolescent feels sufficiently provided with opportunities to participate in social activities, particularly in leisure activities and pastimes.

Respondents were asked 5 questions relating to their social and leisure time as experienced in the week prior to completing the question. Generally, 59% of 8-17 year-olds have 'often' or 'always' had enough time for themselves. Children aged 8-11 scored higher on autonomy than did adolescents aged 12-17. Gender differences were noted, with females responding lower than males (e.g. 54% of females and 67% of males have 'often' or 'always' had enough time for themselves).

Table 19 indicates that 59% of **all respondents** reported that they have 'very often' or 'always' had enough time for themselves. 68% of all respondents stated that they have 'very often' or 'always' had enough opportunity to be outside. 65% perceived that they have 'very often' or 'always' had enough time to meet friends, while 18% revealed that they have 'never' or 'seldom' had such time. 18% indicated that they have 'never' or 'seldom' been able to do the things that they want to do in their free time.

Table 19: Autonomy of all respondents (8-17 year-olds)

Age group 8-17 years Total = 1,265	Never	Seldom	Quite often	Very often	Always
Have you had enough time for yourself?	3%	13%	25%	29%	30%
Have you been able to do the things that you want to do in your free time?	3%	15%	26%	28%	28%
Have you had enough opportunity to be outside?	4%	11%	17%	26%	42%
Have you had enough time to meet friends?	4%	14%	21%	29%	31%
Have you been able to choose what to do in your free time?	2%	10%	22%	31%	34%

By gender, 54% of females and 67% of males reported that they have 'very often' or 'always' had enough time for themselves. 65% of females and 76% of males stated that they have 'very often' or 'always' had enough opportunity to be outside. 57% of females and 66% of males perceived that they have 'very often' or 'always' had enough time to meet friends, while 22% of females and 14% of males revealed that they have 'never' or 'seldom' had such time. 23% of females and 12% of males indicated that they have 'never' or 'seldom' been able to do the things that they want to do in their free time.

Table 20 indicates that 72% of **children** reported that they have 'very often' or 'always' had enough time for themselves. 80% stated that they have 'very often' or 'always' had enough opportunity to be outside. 68% perceived that they have 'very often' or 'always' had enough time to meet friends, while 13% revealed that they have 'never' or 'seldom' had such time. 11% indicated that they have 'never' or 'seldom' been able to do the things that they want to do in their free time.

Table 20: Autonomy of children (8-11 year-olds)

Age group 8-11 years Total = 355	Never	Seldom	Quite often	Very often	Always
Have you had enough time for yourself?	3%	8%	18%	29%	43%
Have you been able to do the things that you want to do in your free time?	3%	8%	20%	25%	44%
Have you had enough opportunity to be outside?	3%	5%	12%	23%	57%
Have you had enough time to meet friends?	6%	7%	17%	29%	39%
Have you been able to choose what to do in your free time?	3%	7%	18%	30%	42%

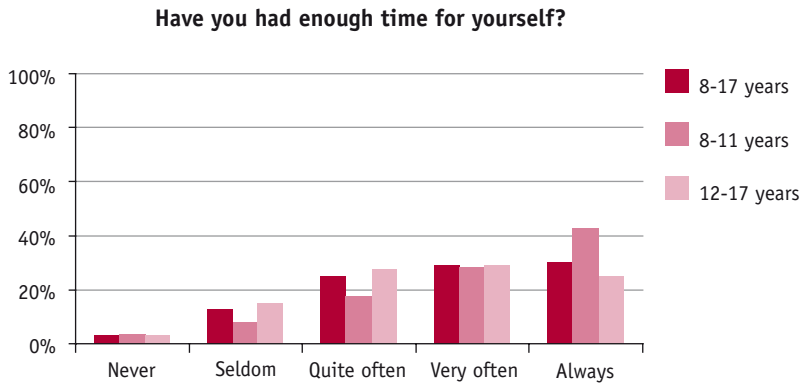
As seen in Table 21, 54% of **adolescents** reported that they have 'very often' or 'always' had enough time for themselves. 64% stated that they have 'very often' or 'always' had enough opportunity to be outside. 57% perceived that they have 'very often' or 'always' had enough time to meet friends, while 20% revealed that they have 'never' or 'seldom' had such time. 21% indicated that they have 'never' or 'seldom' been able to do the things that they want to do in their free time.

Table 21: Autonomy of adolescents (12-17 year-olds)

Age group 12-17 years Total = 910	Never	Seldom	Quite often	Very often	Always
Have you had enough time for yourself?	3%	15%	28%	29%	25%
Have you been able to do the things that you want to do in your free time?	3%	18%	29%	29%	21%
Have you had enough opportunity to be outside?	4%	13%	19%	28%	36%
Have you had enough time to meet friends?	3%	17%	23%	29%	28%
Have you been able to choose what to do in your free time?	1%	12%	24%	31%	31%

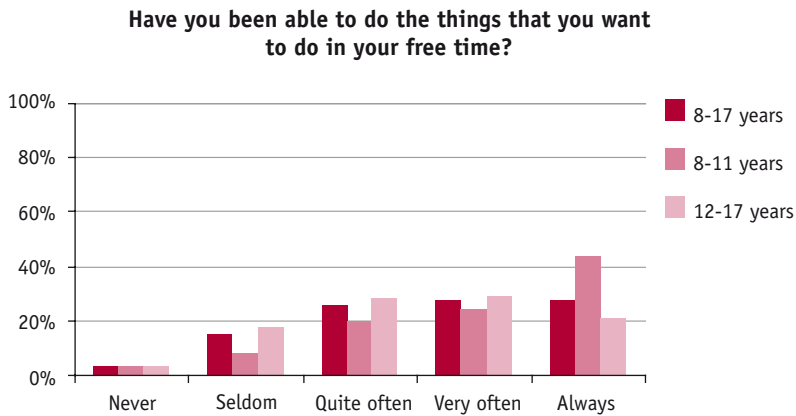
Figures 11 and 12 compare responses of autonomy across the age groups. In response to the question 'Have you had enough time for yourself?', 84% of all respondents reported that they have 'quite often', 'very often' or 'always' had enough time for themselves (see Figure 11). This breaks down into 89% for children and 82% for adolescents, and 88% for males and 81% for females.

Figure 11: Autonomy — Time for yourself



In response to the question ‘Have you been able to do the things that you want to do in your free time?’, 82% of all respondents stated that they have ‘quite often’, ‘very often’ or ‘always’ been able to do the things that they want to do in their free time (see Figure 12). This breaks down into 89% for children and 79% for adolescents, and 88% for males and 77% for females.

Figure 12: Autonomy — Free time



10 Dimension 6: Parent Relations and Home Life

Definition:

This dimension examines the relationship of the child or adolescent with their parents and the atmosphere in the home. It explores the quality of the interaction between the child/adolescent and the parents/carers, as well as the feelings of the child/adolescent towards the parents/carers. Particular importance is attached to whether the child/adolescent feels loved and supported by the family, whether the atmosphere at home is comfortable or otherwise, and whether the child/adolescent feels fairly treated.

Respondents were asked 6 questions relating to parent relations and home life as experienced in the week prior to completing the questionnaire. Generally, 85% of 8-17 year-olds have 'often' or 'always' felt loved by their parents. Children aged 8-11 exhibited a more positive view across this dimension than did adolescents in the 12-17 age group. 92% of 8-11 year-olds and 82% of 12-17 year-olds have 'often' or 'always' felt loved by their parents. Males and females responded quite similarly, generally on the higher ends of this dimension's scale, but 17% of females and 9% of males have 'never' or 'seldom' felt their parent or parents understood them.

Table 22 indicates that 64% of **all respondents** reported that their parents have 'very' or 'extremely' understood them. 85% stated that they have felt 'very' or 'extremely' loved by their parents and 75% perceived that they have 'very often' or 'always' been happy at home. 72% indicated that their parents have 'very often' or 'always' had enough time for them and treated them fairly (75%). At the other end of the scale, 12% revealed that they have 'never' or 'seldom' been able to talk to their parents when they wanted to, while 14% perceived that their parents have 'not at all' or 'slightly' understood them.

Table 22: Parent relations and home life of all respondents (8-17 year-olds)

Age group 8-17 years Total = 1,265	Never	Seldom	Quite often	Very often	Always
Have your parent(s) understood you?*	4%	10%	22%	36%	28%
Have you felt loved by your parent(s)?*	1%	3%	10%	26%	59%
Have you been happy at home?	1%	6%	18%	32%	43%
Have your parent(s) had enough time for you?	2%	7%	18%	26%	46%
Have your parent(s) treated you fairly?	3%	7%	15%	27%	48%
Have you been able to talk to your parent(s) when you wanted to?	3%	9%	18%	23%	46%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

By gender, 61% of females and 69% of males reported that their parents have 'very' or 'extremely' understood them. 85% of females and 88% of males stated that they have felt 'very' or 'extremely' loved by their parents and 73% of females and 78% of males perceived that they have 'very often' or 'always' been happy at home. 72% of females and 74% of males indicated that their parents have 'very often' or 'always' had enough time for them and treated them fairly (71% females and 81% males). At the other end of the scale, 16% of females and 8% of males revealed that they have 'never' or 'seldom' been able to talk to their parents when they wanted to, while 17% of females and 9% of males perceived that their parents have 'not at all' or 'slightly' understood them.

Table 23 shows that 81% of **children** reported that their parents have 'very' or 'extremely' understood them. 92% stated that they have felt 'very' or 'extremely' loved by their parents and 86% perceived that they have 'very often' or 'always' been happy at home. 76% indicated that their parents have 'very often' or 'always' had enough time for them and treated them fairly (83%). At the other end of the scale, 7% revealed that their parents have 'never' or 'seldom' had enough time for them, while 7% perceived that their parents have 'never' or 'seldom' treated them fairly.

Table 23: Parent relations and home life of children (8-11 year-olds)

Age group 8-11 years Total = 355	Never	Seldom	Quite often	Very often	Always
Have your parent(s) understood you?*	2%	4%	13%	33%	48%
Have you felt loved by your parent(s)?*	1%	1%	4%	17%	75%
Have you been happy at home?	1%	4%	9%	28%	58%
Have your parent(s) had enough time for you?	3%	4%	14%	25%	51%
Have your parent(s) treated you fairly?	3%	4%	9%	19%	64%
Have you been able to talk to your parent(s) when you wanted to?	1%	4%	13%	19%	62%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

Table 24 indicates that 58% of **adolescents** reported that their parents have 'very' or 'extremely' understood them. 82% of adolescents stated that they have felt 'very' or 'extremely' loved by their parents and 70% perceived that they have 'very often' or 'always' been happy at home. 71% indicated that their parents have 'very often' or 'always' had enough time for them and treated them fairly (72%). At the other end of the scale, 17% perceived that their parents have 'not at all' or 'slightly' understood them, while 15% revealed that they have 'never' or 'seldom' been able to talk to their parents when they wanted to.

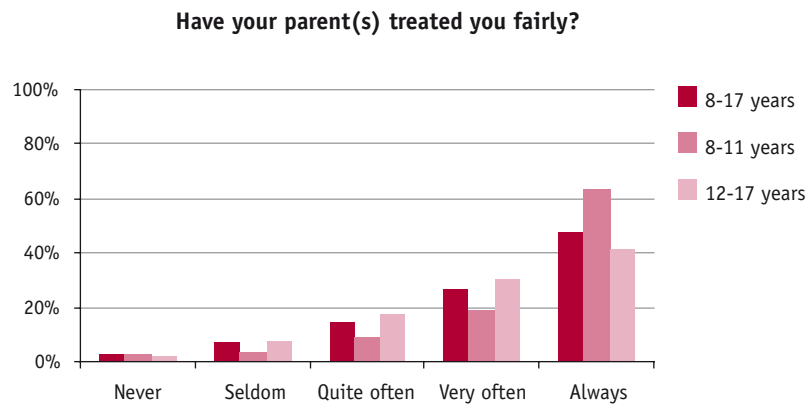
Table 24: Parent relations and home life of adolescents (12-17 year-olds)

Age group 12-17 years Total = 910	Never	Seldom	Quite often	Very often	Always
Have your parent(s) understood you?*	5%	12%	26%	37%	21%
Have you felt loved by your parent(s)?*	1%	4%	12%	29%	53%
Have you been happy at home?	1%	7%	22%	33%	37%
Have your parent(s) had enough time for you?	1%	9%	19%	26%	45%
Have your parent(s) treated you fairly?	2%	8%	18%	30%	41%
Have you been able to talk to your parent(s) when you wanted to?	4%	11%	20%	24%	40%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

As seen in Figure 13, 90% of all respondents indicated that their parents have 'quite often', 'very often' or 'always' treated them fairly. This breaks down into 95% for children and 90% for adolescents, and 93% for males and 89% for females.

Figure 13: Parent relations



11 Dimension 7: Social Support and Peers

Definition:

This dimension examines the nature of the child or adolescent's relationships with other children or adolescents, and considers the social relations with friends and peers. The dimension explores the quality of the interaction between the child/adolescent and peers, as well as their perceived support. The questions examine the extent to which the child/adolescent feels accepted and supported by friends and their ability to form and maintain friendships. In particular, aspects concerning communication with others are considered. Also explored is the extent to which the person experiences positive group feelings and how much he or she feels part of a group and respected by peers and friends.

Respondents were asked 6 questions relating to social support and peer relationships as experienced in the week prior to completing the questionnaire. Generally, 79% of all respondents, aged 8-17, have 'often' or 'always' spent time with their friends. Similar results were identified for both children and adolescent age groups. There were few gender differences, most responses being similar, with some exceptions. For example, 67% of females and 51% of males have 'often' or 'always' been able to talk about everything with their friends.

Table 25 indicates that 79% of **all respondents** reported that they have 'very often' or 'always' spent time with their friends. 65% stated that they have 'very often' or 'always' done things with other girls and boys, and 86% indicated that they have 'very often' or 'always' had fun with their friends. 69% reported that they and their friends have 'very often' or 'always' helped each other and 60% perceived that they have 'very often' or 'always' been able to talk about everything with their friends. 72% stated that they have 'very often' or 'always' been able to rely on their friends. At the other end of the scale, 17% revealed that they have 'never' or 'seldom' been able to talk about everything with their friends.

Table 25: Social support and peers of all respondents (8-17 year-olds)

Age group 8-17 years Total = 1,265	Never	Seldom	Quite often	Very often	Always
Have you spent time with your friends?	1%	4%	16%	39%	40%
Have you done things with other girls and boys?	4%	9%	21%	34%	31%
Have you had fun with your friends?	1%	2%	10%	27%	59%
Have you and your friends helped each other?	2%	6%	23%	31%	38%
Have you been able to talk about everything with your friends?	4%	13%	23%	25%	35%
Have you been able to rely on your friends?	3%	7%	18%	28%	44%

By gender, 79% of females and 80% of males reported that they have 'very often' or 'always' spent time with their friends. 67% of females and 64% of males stated that they have 'very often' or 'always' done things with other girls and boys, and 88% of females and 86% of males indicated that they have 'very often' or 'always' had fun with their friends. 74% of females and 64% of males reported that they and their friends have 'very often' or 'always' helped each other and 67% of

females and 51% of males perceived that they have 'very often' or 'always' been able to talk about everything with their friends. 74% of females and 70% of males stated that they have 'very often' or 'always' been able to rely on their friends. At the other end of the scale, 14% of females and 21% of males revealed that they have 'never' or 'seldom' been able to talk about everything with their friends.

Table 26 indicates that 81% of **children** reported that they have 'very often' or 'always' spent time with their friends. 57% stated that they have 'very often' or 'always' done things with other girls and boys, and 89% indicated that they have 'very often' or 'always' had fun with their friends. 75% reported that they and their friends have 'very often' or 'always' helped each other and 59% perceived that they have 'very often' or 'always' been able to talk about everything with their friends. 75% stated that they have 'very often' or 'always' been able to rely on their friends. At the other end of the scale, 17% revealed that they have 'never' or 'seldom' been able to talk about everything with their friends.

Table 26: Social support and peers of children (8-11 year-olds)

Age group 8-11 years Total = 355	Never	Seldom	Quite often	Very often	Always
Have you spent time with your friends?	2%	3%	14%	36%	45%
Have you done things with other girls and boys?	8%	12%	22%	30%	27%
Have you had fun with your friends?	1%	3%	6%	17%	72%
Have you and your friends helped each other?	2%	5%	16%	30%	45%
Have you been able to talk about everything with your friends?	7%	10%	23%	22%	37%
Have you been able to rely on your friends?	4%	7%	13%	23%	52%

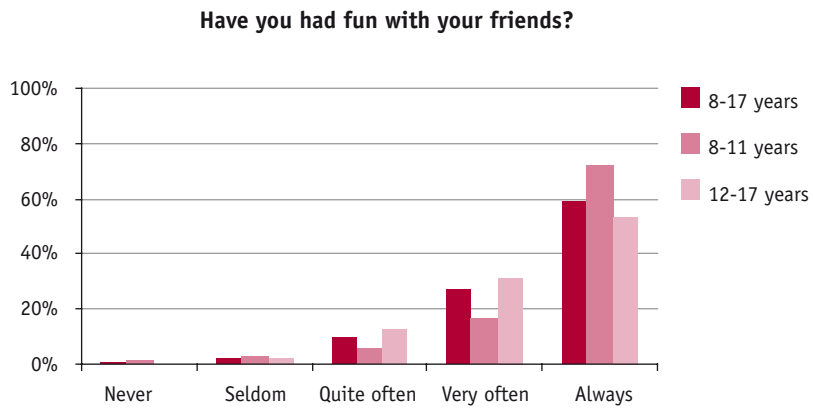
Table 27 shows that 78% of **adolescents** reported that they have 'very often' or 'always' spent time with their friends. 68% stated that they have 'very often' or 'always' done things with other girls and boys, and 85% indicated that they have 'very often' or 'always' had fun with their friends. 67% reported that they and their friends have 'very often' or 'always' helped each other and 61% perceived that they have 'very often' or 'always' been able to talk about everything with their friends. 71% stated that they have 'very often' or 'always' been able to rely on their friends. At the other end of the scale, 17% revealed that they have 'never' or 'seldom' been able to talk about everything with their friends.

Table 27: Social support and peers of adolescents (12-17 year-olds)

Age group 12-17 years Total = 910	Never	Seldom	Quite often	Very often	Always
Have you spent time with your friends?	1%	5%	17%	40%	38%
Have you done things with other girls and boys?	2%	8%	21%	35%	33%
Have you had fun with your friends?	0%	2%	12%	31%	54%
Have you and your friends helped each other?	1%	6%	25%	32%	35%
Have you been able to talk about everything with your friends?	3%	14%	22%	26%	35%
Have you been able to rely on your friends?	2%	7%	20%	31%	40%

In response to the question 'Have you had fun with your friends?', 97% of all respondents reported they have 'quite often', 'very often' or 'always' had fun with their friends (see Figure 14). This breaks down into 96% for children and 97% for adolescents, with the percentages being the same for boys and girls.

Figure 14: Social support and peers — Friends



12 Dimension 8: School Environment

Definition:

This dimension explores the perception of the child or adolescent about their cognitive capacity, learning and concentration, and their feelings about school. It includes their satisfaction with their ability and performance at school. General feelings about school (e.g. whether school is an enjoyable place to be) are also considered. In addition, the dimension explores the child or adolescent's view of their relationship with their teachers. For example, questions include whether they get along well with their teachers and whether the teachers are perceived as being interested in them as individuals.

Respondents were asked 6 questions about their school environment as experienced in the week prior to completing the questionnaire. Generally, adolescents and children responded more negatively to this dimension than to all other dimensions. The adolescent group, aged 12-17, had lower perceptions of the school environment than did the children, aged 8-11. 52% of participants have 'often' or 'always' been happy at school. At the other end of the scale, 30% have 'never' or 'seldom' enjoyed going to school and 24% have 'never' or 'seldom' been satisfied with their teachers. Gender similarities were observed.

Table 28 indicates that 52% of **all respondents** reported that they have been 'very' or 'extremely' happy at school. 63% stated that they have got on 'very' or 'extremely' well at school and 46% indicated that they have been 'very' or 'extremely' satisfied with their teachers. 54% perceived that they have 'very often' or 'always' been able to pay attention. 42% reported that they have 'very often' or 'always' enjoyed going to school and 55% stated that they have 'very often' or 'always' got along well with their teachers. At the other end of the scale, 30% revealed that they have 'never' or 'seldom' enjoyed going to school and 24% indicated that they have been 'not at all' or 'slightly' satisfied with their teachers.

Table 28: School environment of all respondents (8-17 year-olds)

Age group 8-17 years Total = 1,265	Never	Seldom	Quite often	Very often	Always
Have you been happy at school?*	7%	12%	29%	35%	17%
Have you got on well at school?*	4%	8%	24%	40%	23%
Have you been satisfied with your teachers?*	10%	14%	29%	28%	18%
Have you been able to pay attention?	3%	11%	31%	35%	19%
Have you enjoyed going to school?	11%	19%	27%	26%	16%
Have you got along well with your teachers?	4%	13%	28%	33%	22%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

By gender, 54% of females and 49% of males reported that they have been 'very' or 'extremely' happy at school. 65% of females and 60% of males stated that they have got on 'very' or 'extremely' well at school and 48% of females and 44% of males indicated that they have 'very often' or 'always' been satisfied with their teachers. 55% of females and 54% of males perceived that they have 'very often' or 'always' been able to pay attention. 46% of females and 38% of males reported that they have 'very often' or 'always' enjoyed going to school and 60% of females

and 49% of males stated that they have 'very often' or 'always' got along well with their teachers. At the other end of the scale, 28% of females and 33% of males revealed that they have 'never' or 'seldom' enjoyed going to school and 22% of females and 26% of males indicated that they have been 'not at all' or 'slightly' satisfied with their teachers.

Table 29 indicates that 62% of **children** reported that they have been 'very' or 'extremely' happy at school. 75% stated that they have got on 'very' or 'extremely' well at school and 66% indicated that they have been 'very' or 'extremely' satisfied with their teachers. 72% perceived that they have 'very often' or 'always' been able to pay attention. 53% reported that they have 'very often' or 'always' enjoyed going to school and 68% stated that they have 'very often' or 'always' got along well with their teachers. At the other end of the scale, 26% revealed that they have 'never' or 'seldom' enjoyed going to school and 19% indicated that they have been 'not at all' or 'slightly' satisfied with their teachers.

Table 29: School environment of children (8-11 year-olds)

Age group 8-11 years Total = 355	Never	Seldom	Quite often	Very often	Always
Have you been happy at school?*	7%	12%	19%	38%	24%
Have you got on well at school?*	4%	8%	13%	40%	35%
Have you been satisfied with your teachers?*	8%	9%	17%	30%	36%
Have you been able to pay attention?	3%	5%	19%	33%	39%
Have you enjoyed going to school?	13%	13%	20%	26%	27%
Have you got along well with your teachers?	4%	8%	19%	28%	40%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

Table 30 shows that 48% of **adolescents** reported that they have been 'very' or 'extremely' happy at school. 59% stated that they have got on 'very' or 'extremely' well at school and 39% indicated that they have been 'very' or 'extremely' satisfied with their teachers. 47% perceived that they have 'very often' or 'always' been able to pay attention. 38% reported that they have 'very often' or 'always' enjoyed going to school and 50% stated that they have 'very often' or 'always' got along well with their teachers. At the other end of the scale, 32% revealed that they have 'never' or 'seldom' enjoyed going to school and 27% indicated that they have been 'not at all' or 'slightly' satisfied with their teachers.

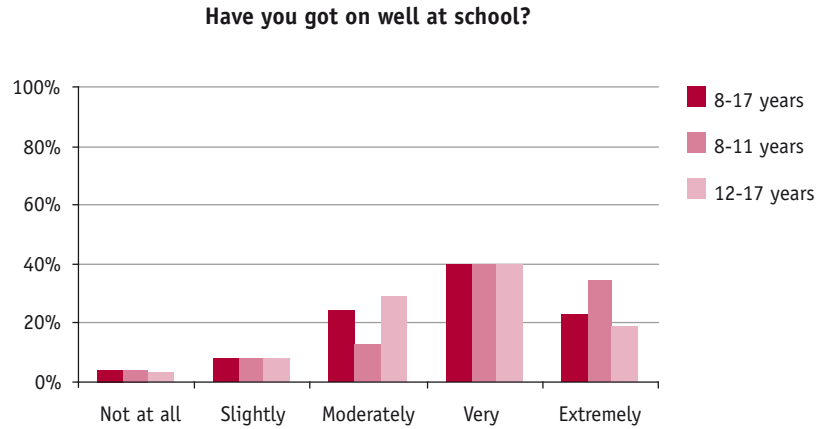
Table 30: School environment of adolescents (12-17 year-olds)

Age group 12-17 years Total = 910	Never	Seldom	Quite often	Very often	Always
Have you been happy at school?*	8%	12%	32%	34%	14%
Have you got on well at school?*	4%	8%	29%	40%	19%
Have you been satisfied with your teachers?*	11%	16%	34%	28%	11%
Have you been able to pay attention?	3%	14%	36%	36%	11%
Have you enjoyed going to school?	10%	22%	30%	26%	12%
Have you got along well with your teachers?	4%	15%	31%	35%	15%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

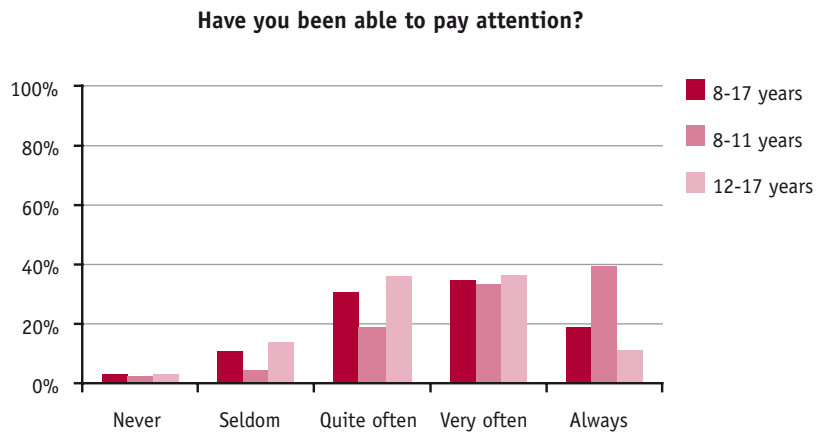
Figures 15 and 16 compare responses on school environment across age groups. In response to the question ‘Have you got on well at school?’, 88% of all respondents stated that they have got on ‘moderately’, ‘very’ or ‘extremely’ well at school (see Figure 15). Similar responses were noted across age groups and gender.

Figure 15: School environment — Getting on well at school



In response to the question ‘Have you been able to pay attention [at school]?’, 86% of all respondents (92% of children and 83% of adolescents) perceived that they have ‘quite often’, ‘very often’ or ‘always’ been able to pay attention at school (see Figure 16). Responses were similar by gender — 85% of females and 87% of males.

Figure 16: School environment — Able to pay attention at school



13 Dimension 9: Social Acceptance/Bullying

Definition:

This dimension covers the aspect of feeling rejected by peers in school. It explores both the feeling of being rejected by others as well as the feeling of anxiety towards peers.

'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. But it is not bullying when two students of about the same strength quarrel or fight.' This definition is quite standard and has been used over a number of years in the HBSC studies.

This dimension shows a high score in QoL if these negative feelings are rare.

Respondents were asked 3 questions relating to social acceptance/bullying as experienced in the week prior to completing the questionnaire.

Table 31 indicates that 90% of **all respondents** reported that they have 'never' or 'seldom' been afraid of other girls and boys. 83% stated that other girls and boys have 'never' or 'seldom' made fun of them and 90% perceived that other girls and boys have 'never' or 'seldom' bullied them. At the other end of the scale, 8% of all respondents revealed that other girls and boys have 'very often' or 'always' made fun of them.

Table 31: Social acceptance/bullying of all respondents (8-17 year-olds)

Age group 8-17 years Total = 1,265	Never	Seldom	Quite often	Very often	Always
Have you been afraid of other girls and boys?	65%	25%	5%	3%	2%
Have other girls and boys made fun of you?	49%	34%	9%	4%	4%
Have other girls and boys bullied you?	70%	20%	5%	2%	3%

By gender, 89% of females and 94% of males reported that they have 'never' or 'seldom' been afraid of other girls and boys. 83% of females and 85% of males stated that other girls and boys have 'never' or 'seldom' made fun of them and 90% of females and 91% of males perceived that other girls and boys 'never' or 'seldom' bullied them. At the other end of the scale, 9% of females and 7% of males revealed that other girls and boys have 'very often' or 'always' made fun of them. Males and females shared relatively the same perceptions on social acceptance.

Table 32 indicates that 89% of **children** reported that they have 'never' or 'seldom' been afraid of other girls and boys. 80% stated that other girls and boys have 'never' or 'seldom' made fun of them and 85% perceived that other girls and boys have 'never' or 'seldom' bullied them. At the other end of the scale, 11% of children revealed that other girls and boys have 'very often' or 'always' made fun of them.

Table 32: Social acceptance/bullying of children (8-11 year-olds)

Age group 8-11 years Total = 355	Never	Seldom	Quite often	Very often	Always
Have you been afraid of other girls and boys?	67%	22%	5%	3%	3%
Have other girls and boys made fun of you?	53%	28%	9%	5%	6%
Have other girls and boys bullied you?	63%	23%	5%	3%	5%

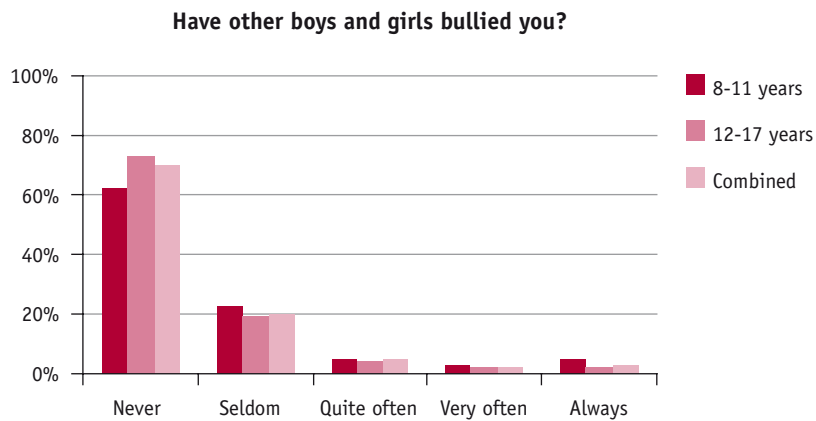
Table 33 shows that 91% of **adolescents** reported that they have ‘never’ or ‘seldom’ been afraid of other girls and boys. 85% stated that other girls and boys have ‘never’ or ‘seldom’ made fun of them and 92% perceived that other girls and boys ‘never’ or ‘seldom’ bullied them. At the other end of the scale, 7% of adolescents revealed that other girls and boys have ‘very often’ or ‘always’ made fun of them.

Table 33: Social acceptance/bullying of adolescents (12-17 year-olds)

Age group 12-17 years Total = 910	Never	Seldom	Quite often	Very often	Always
Have you been afraid of other girls and boys?	64%	27%	5%	3%	1%
Have other girls and boys made fun of you?	48%	37%	8%	4%	3%
Have other girls and boys bullied you?	73%	19%	4%	2%	2%

Figure 17 compares responses of bullying across age groups, revealing that 95% of all respondents have ‘never’, ‘seldom’ or ‘sometimes’ been bullied. This breaks down into 92% for children and 96% for adolescents, and 95% for males and 94% for females.

Figure 17: Social Acceptance — Bullying



14 Dimension 10: Financial Resources

Definition:

This dimension deals with money matters and assesses the perceived quality by the child or adolescent of their financial resources. It explores whether the child/adolescent feels that they have enough financial resources to allow them to live a lifestyle that is comparable to other children or adolescents and to provide them with the opportunity to do things together with their peers.

Respondents were asked 3 questions relating to their financial resources as experienced in the week prior to completing the questionnaire. Generally, the perceptions of children and adolescents were similar. 70% of 8-17 year-olds (70% children and 69% adolescents) have 'very often' or 'always' had enough money to do the same things as their friends. Gender similarities were noted (69% of females and 72% males).

Table 34 shows that, overall, 70% of **all respondents** 'very often' or 'always' had enough money to do the same things as their friends. 68% of respondents 'very often' or 'always' had enough money for their expenses and 71% 'very often' or 'always' have enough money to do things with their friends. At the other end of the scale, 14% of respondents 'never' or 'seldom' had enough money to do the same things as their friends. 9% said they did not have enough money to do things with their friends.

Table 34: Money matters for all respondents (8-17 year-olds)

Age group 8-17 years Total = 1,265	Never	Seldom	Quite often	Very often	Always
Have you had enough money to do the same things as your friends?	4%	10%	17%	27%	43%
Have you had enough money for your expenses?	3%	9%	19%	25%	43%
Do you have enough money to do things with your friends?*	2%	7%	20%	34%	37%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

By gender, 69% of females and 72% of males reported that they have 'very often' or 'always' had enough money to do the same things as their friends. 65% of females and 73% of males stated that they have 'very often' or 'always' had enough money for their expenses and 69% of females and 73% of males indicated that they ('very' or 'extremely') have enough money to do things with their friends. At the other end of the scale, 13% of females and 13% of males revealed that they have 'never' or 'seldom' had enough money to do the same things as their friends. 10% of females and 9% of males reported that they did not ('not at all' or 'slightly') have enough money to do things with their friends.

Table 35 shows that 70% of **children** reported that they have 'very often' or 'always' had enough money to do the same things as their friends. 65% stated that they have 'very often' or 'always' had enough money for their expenses and 67% indicated that they do ('very' or 'extremely') have enough money to do things with their friends. At the other end of the scale, 16% of children revealed that they have 'never' or 'seldom' had enough money to do the same things as their friends. 14% reported that they did not ('not at all' or 'slightly') have enough money to do things with their friends.

Table 35: Money matters for children (8-11 year-olds)

Age group 8-11 years Total = 355	Never	Seldom	Quite often	Very often	Always
Have you had enough money to do the same things as your friends?	6%	10%	14%	26%	44%
Have you had enough money for your expenses?	4%	10%	18%	23%	42%
Do you have enough money to do things with your friends?*	3%	11%	18%	32%	35%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

Table 36 shows that 69% of **adolescents** reported that they have 'very often' or 'always' had enough money to do the same things as their friends. 69% stated that they have 'very often' or 'always' had enough money for their expenses and 72% indicated that they do ('very' or 'extremely') have enough money to do things with their friends. At the other end of the scale, 13% of adolescents revealed that they have 'never' or 'seldom' had enough money to do the same things as their friends. 8% reported that they did not ('not at all' or 'slightly') have enough money to do things with their friends.

Table 36: Money matters for adolescents (12-17 year-olds)

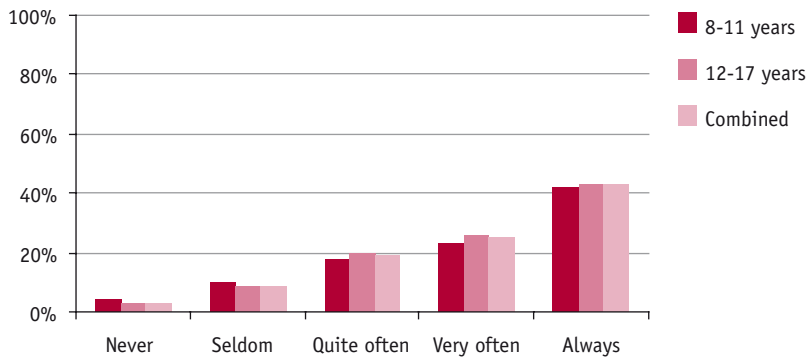
Age group 12-17 years Total = 910	Never	Seldom	Quite often	Very often	Always
Have you had enough money to do the same things as your friends?	3%	10%	18%	27%	42%
Have you had enough money for your expenses?	3%	9%	20%	26%	43%
Do you have enough money to do things with your friends?*	2%	6%	20%	35%	37%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

Figure 18 compares responses on money matters across age groups. In response to the question 'Have you had enough money for your expenses?', 86% of all respondents stated that they have 'quite often', 'very often' or 'always' had enough money for their expenses. This breaks down into 86% for children and 89% for adolescents, and 91% for males and 86% for females.

Figure 18: Money matters — Expenses

Have you had enough money for your expenses?



15 KIDSCREEN-52 — HRQoL Sum Scores

The group score on a particular KIDSCREEN scale can be compared with the average score of the reference population on that scale. For the following reference values, the scales have been transformed to a range of 0-100. These values allow for the interpretation of child and adolescent health across each dimension by age and gender, and represent their overall mean HRQoL across each individual dimension.

Mean scores by age

Table 37 shows that, on average, mean scores by age range from 70-80. The highest HRQoL mean score was indicated for social acceptance/bullying (85.30) and the lowest score was for physical well-being (67.02).

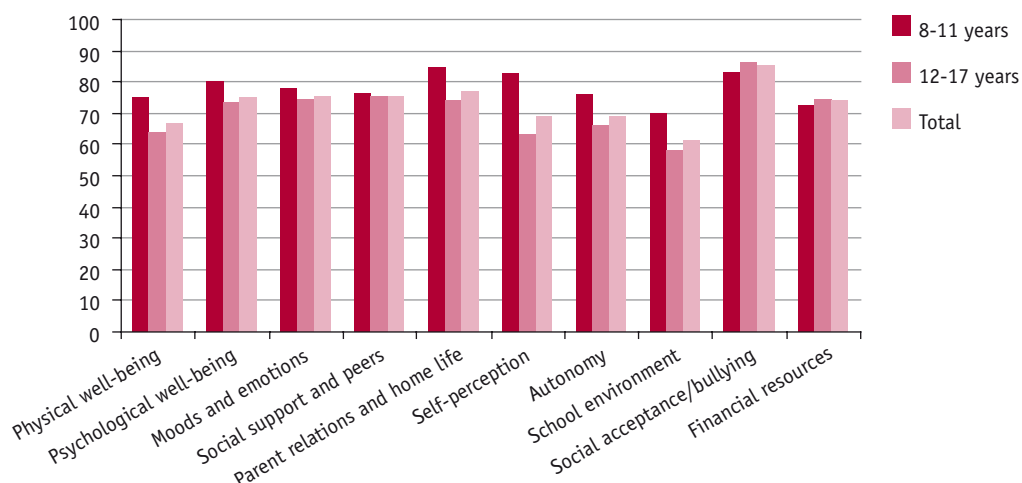
Table 37: Dimensions by HRQoL sum scores, by age

KIDSCREEN-52 10 Dimensions	Total = 1,265 8-17 years Sum score 0-100	Total = 355 8-11 years Sum score 0-100	Total = 910 12-17 years Sum score 0-100
Physical well-being	67.02	75.04	63.98
Psychological well-being	75.10	80.05	73.25
Moods and emotions	75.45	77.91	74.51
Social support and peers	75.67	76.41	75.39
Parent relations and home life	76.85	84.73	73.92
Self-perception	68.82	82.56	63.48
Autonomy	68.92	75.84	66.27
School environment	61.45	69.76	58.26
Social acceptance/bullying	85.30	83.21	86.10
Financial resources	74.13	72.62	74.70

Figure 19 presents in graphic form the HRQoL mean scores (reference population mean scores) by age across the KIDSCREEN 10 dimensions. Overall, children and adolescents fared well and rated social acceptance/bullying as the highest dimension of their health-related quality of life, followed by parent relations, and social support and peers. The lowest perception of health-related quality of life for both age groups was for the dimension on school environment, followed by physical well-being and self-perception.

Children ranked parent relations as their highest rated dimension, with social acceptance/bullying coming second for them. In contrast, adolescents ranked social acceptance/bullying first and social support and peers second. Both children and adolescents, however, were in agreement on their lowest rated dimension — school environment. Differences of perceptions were noted for the self-perception dimension: children rated this 3rd, while adolescents rated it 9th, or second last. Differences of perceptions were also noted for money matters (the financial resources dimension): adolescents rated this 3rd, while children rated it 9th, or second last.

Figure 19: Dimensions by HRQoL sum scores, by age



Mean scores by gender

Table 38 shows that for both males and females, the highest HRQoL mean score was indicated for social acceptance/bullying (86.69 and 84.35 respectively). Females had the lowest score for self-perception (62.51), followed closely by school environment (62.60), while males had by far the lowest score for school environment (59.73).

Table 38: Dimensions by HRQoL sum scores, by gender

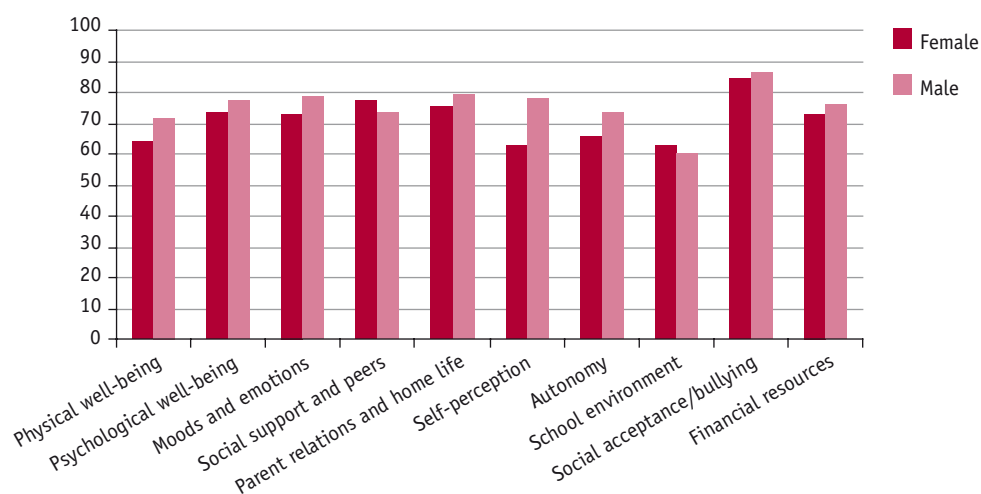
KIDSCREEN-52 10 Dimensions	Total = 1,265 FEMALE (8-17 years) Sum score 0-100	Total = 1,265 MALE (8-17 years) Sum score 0-100
Physical well-being	63.74	71.85
Psychological well-being	73.63	77.31
Moods and emotions	73.20	78.76
Social support and peers	77.17	73.45
Parent relations and home life	75.39	79.04
Self-perception	62.51	78.11
Autonomy	65.92	73.40
School environment	62.60	59.73
Social acceptance/bullying	84.35	86.69
Financial resources	72.95	75.87

Figure 20 presents in graphic form the HRQoL mean scores (reference population mean scores) by gender across the KIDSCREEN 10 dimensions. It shows that females fared poorest across the following HRQoL dimensions, which they rated the lowest in ascending order: self-perception, school environment, physical well-being and autonomy. Females fared well for social acceptance/bullying, social support and peers, parent relations and money matters. Males fared poorest across the following HRQoL dimensions, which they rated the lowest in ascending order: school environment, physical well-being, autonomy, and social support and peers. Males fared well for social acceptance/bullying, parent relations, moods and self-perception.

By and large, females rated their overall HRQoL across the 10 dimensions as lower than that of their male counterparts. Females and males both rated social acceptance/bullying the highest, with mean scores of 84.35 and 86.69 respectively. School environment, physical well-being and autonomy were the poorest three dimensions for both males and females. Females rated self-perception among the lowest four dimensions, while males rated social support and peers — indicating slight differences in poor perceptions of health-related quality of life.

In general, males tended to rate their overall HRQoL better than that of their female counterparts. Females and males both rated social acceptance/bullying and parent relations as the highest two dimensions. Females rated social support and peers, and money matters among the highest four dimensions, while males rated moods and self-perception — indicating slight differences in positive perceptions of health-related quality of life. While females rated self-perception the lowest of all HRQoL dimensions, males rated it in their top four.

Figure 20: Dimensions by HRQoL sum scores, by gender



16 Results from DISABKIDS question 'How do you feel?'

The KIDSCREEN project collaborated closely with the European DISABKIDS project, also funded by the European Commission, entitled 'Quality of life questionnaires for children with chronic conditions'. The DISABKIDS new instruments assess quality of life of children with chronic conditions, such as asthma, cerebral palsy, diabetes mellitus, epilepsy, juvenile arthritis, serious skin diseases, obesity and cystic fibrosis.

Some of these newly developed DISADKIDS questions relating to 'How do you feel?' were incorporated in the KIDSCREEN questionnaire used in this study. Figures 21-29 present the responses received from the 1,265 participants in the survey.

Figure 21 shows that 7% of all respondents reported that they felt sad 'most of the time' or 'all the time' during the previous 4 weeks.

Figure 21: During the past 4 weeks, how much of the time did you feel sad?

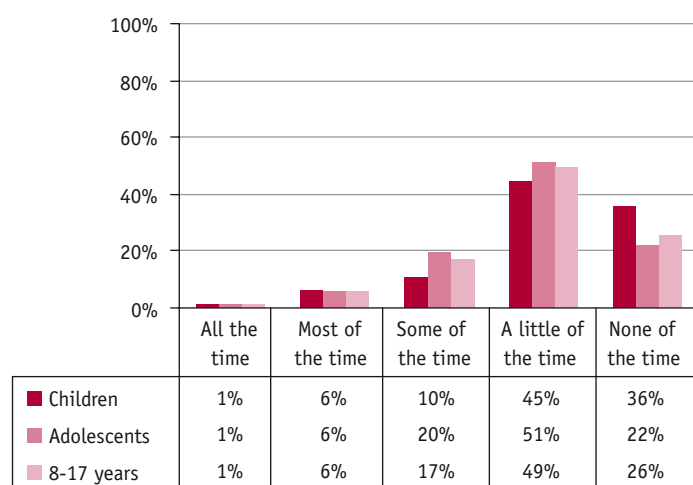


Figure 22 shows that 3% of all respondents revealed that they felt afraid or scared 'most of the time' or 'all the time' during the previous 4 weeks (4% of children and 1% of adolescents).

Figure 22: During the past 4 weeks, how much of the time did you feel afraid or scared?

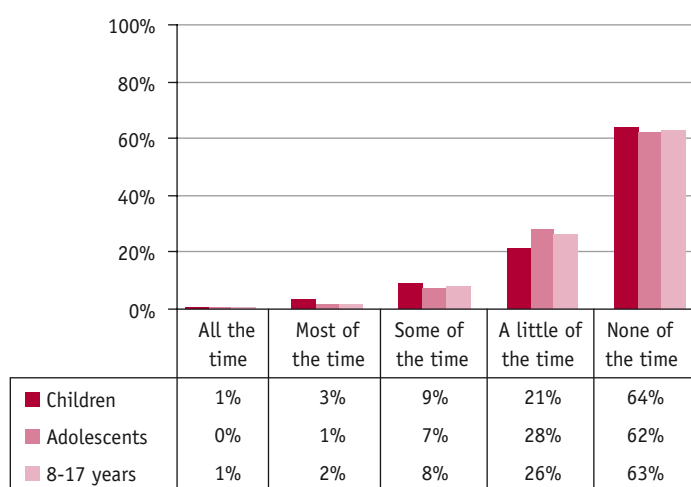


Figure 23 shows that 18% of all respondents indicated that they worried about things ‘most of the time’ or ‘all the time’ during the previous 4 weeks. 10% of children were more likely to worry about things ‘most of the time’ or ‘all the time’ compared to 20% of adolescents.

Figure 23: During the past 4 weeks, how much of the time did you worry about things?

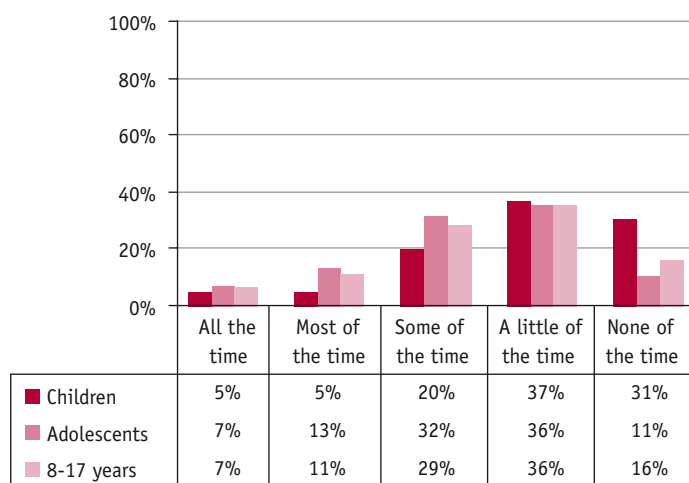


Figure 24 shows that 9% of children and 8% of adolescents expressed that they felt unhappy ‘most of the time’ or ‘all the time’ in the previous 4 weeks.

Figure 24: During the past 4 weeks, how much of the time did you feel unhappy?

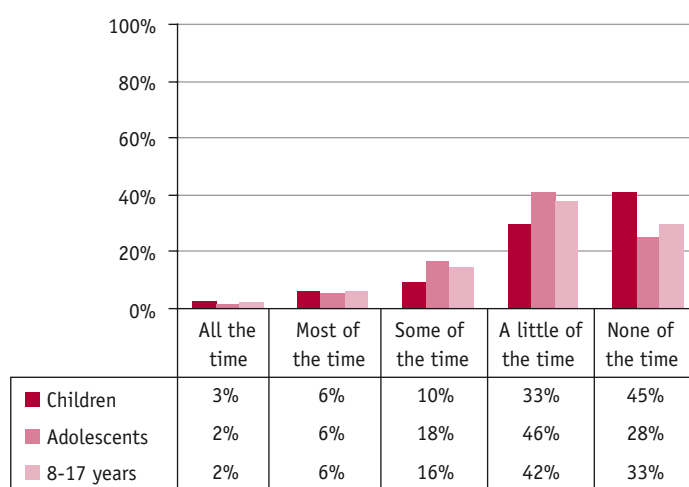


Figure 25 shows that 91% of all respondents stated that they felt happy ‘some of the time’, ‘most of the time’ or ‘all the time’. 39% of children, compared to 16% of adolescents, felt happy ‘all the time’. 2% of all respondents revealed that they felt happy ‘none of the time’ during the previous 4 weeks.

Figure 25: During the past 4 weeks, how much of the time did you feel happy?

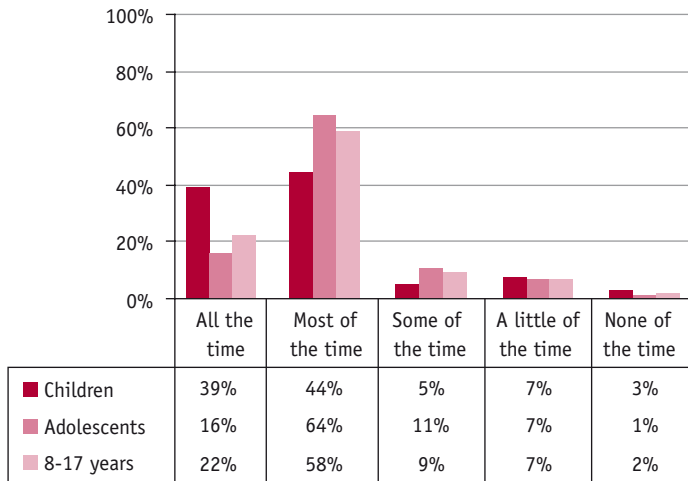


Figure 26 shows that 93% of all respondents reported that they enjoyed the things they did ‘some of the time’, ‘most of the time’ or ‘all the time’ during the previous 4 weeks.

Figure 26: During the past 4 weeks, how much of the time did you enjoy the things you did?

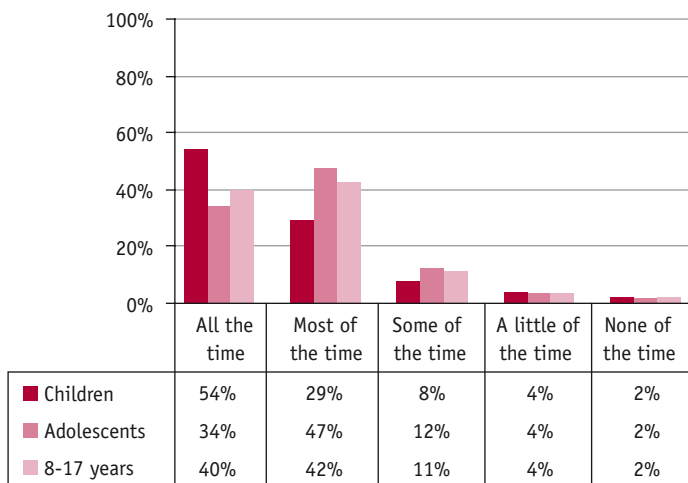


Figure 27 shows that 93% of all respondents indicated that they had fun ‘some of the time’, ‘most of the time’ or ‘all the time’ during the previous 4 weeks. Only 2% said they had fun ‘none of the time’.

Figure 27: During the past 4 weeks, how much of the time did you have fun?

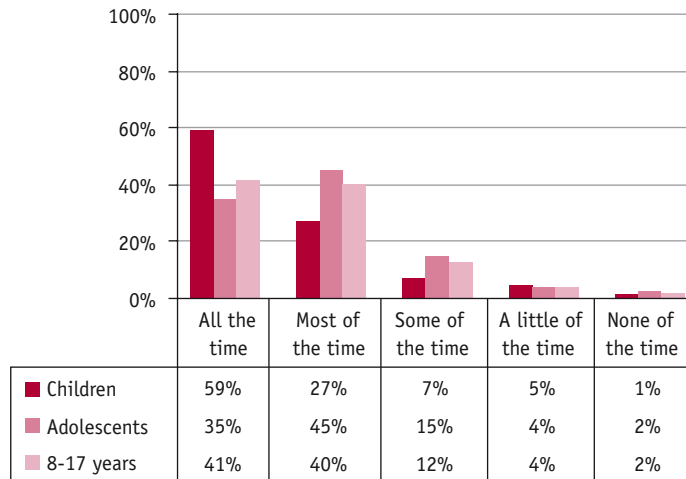


Figure 28 shows that 83% of all respondents perceived that they liked themselves ‘some of the time’, ‘most of the time’ or ‘all the time’. Twice as many children as adolescents (50% and 25% respectively) indicated that they liked themselves ‘all the time’. 16% of all respondents revealed that they liked themselves ‘a little of the time’ or ‘none of the time’ during the previous 4 weeks.

Figure 28: During the past 4 weeks, how much of the time did you like yourself?

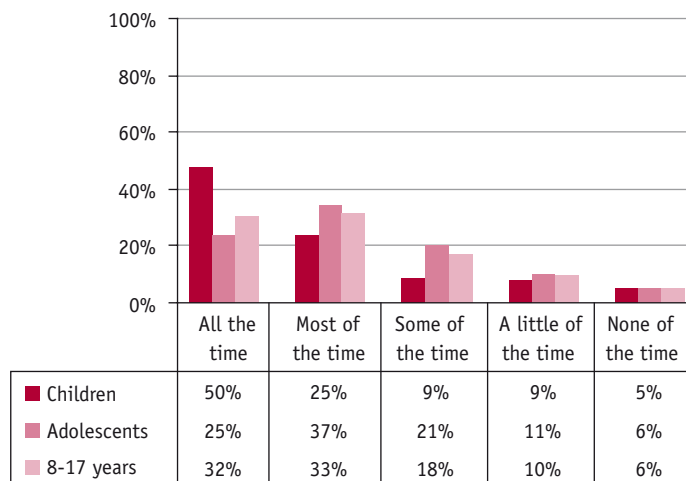
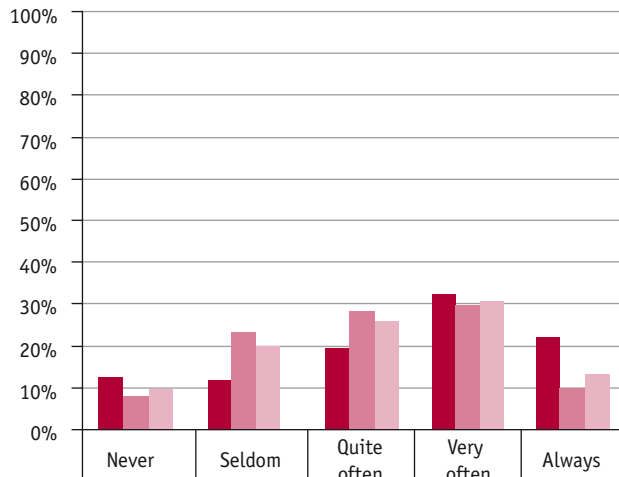


Figure 29 shows that 70% of all respondents reported that they felt on top of the world ‘quite often’, ‘very often’ or ‘always’ during the previous week. A further 29% said that they felt on top of the world ‘seldom’ or ‘never’ during the previous week.

Figure 29: During the past week, how often did you feel on top of the world?



	Never	Seldom	Quite often	Very often	Always
■ Children	13%	12%	19%	32%	22%
■ Adolescents	8%	23%	28%	30%	10%
■ 8-17 years	9%	20%	26%	31%	13%

17 Conclusions and Recommendations

This national KIDSCREEN survey, the first of its kind in Ireland, assessed the opinions, attitudes and feelings of children and adolescents about their perceived health-related quality of life (HRQoL). It complements other national studies on children and young people's lives, such as the HBSC, ESPAD, PISA and SONC.

The following discussion aims to draw attention to key findings that have implications for policy and services relating to children and young people's well-being. Given the range and depth of data generated in this study, it is recommended that further analyses of the data, together with a more detailed discussion on findings and their implications for policy and practice, form part of future reports. The data from KIDSCREEN Ireland can play a significant part in progressing the vision and goals of Government policy in relation to children, as articulated in the current Social Partnership Agreement, *Towards 2016*. Section 30(1) of that agreement states:

The parties to this agreement share a vision of an Ireland where children are respected as young citizens with a valued contribution to make and a voice of their own; where all children are cherished and supported by family and the wider society; where they enjoy a fulfilling childhood and realise their potential.

1. Ireland has ratified the UN Convention on the Rights of the Child and is committed to its implementation in our laws and policies.

To achieve this vision, the Government and social partners will work together over the next ten years towards the following long-term goals for children in Ireland:

- Every child should grow up in a family with access to sufficient resources, supports and services, to nurture and care for the child, and foster the child's development and full and equal participation in society.
- Every family should be able to access childcare services which are appropriate to the circumstances and needs of their children.
- Every child should leave primary school literate and numerate.
- Every student should complete a senior cycle or equivalent programme (including ICT) appropriate to their capacity and interests.
- Every child should have access to world-class health, personal social services and suitable accommodation.
- Every child should have access to quality play, sport, recreation and cultural activities to enrich their experience of childhood.
- Every child and young person will have access to appropriate participation in local and national decision-making.

A key strength of the KIDSCREEN survey was the use of a standardised, generic, cross-cultural instrument. The information generated from the survey is an important source of evidence for health service provision, policy and practice for children, both nationally and internationally. Due to the survey, reference data are available for the first time in Ireland that can be used for the purposes of preventive health and well-being, provision of care and treatment, and management of healthcare services. Ireland's 2006 benchmark report on the *State of the Nation's Children*, published by the Office of the Minister for Children, has included an item from the KIDSCREEN survey as an indicator of self-esteem, a measure central to understanding mental health. The KIDSCREEN instrument can be further used in a variety of settings by a range of practitioners, enabling comparison with the reference data provided in this report.

A response rate of 47.5% was obtained in the survey, consisting of 39 schools completing 1,265 questionnaires (355 children and 910 adolescents). Distribution of respondents according to gender and geography would suggest a representative sample was secured. A limitation of the sample was always going to be the literacy levels of participants and the exclusion of children or young people

not attending school. Perceived socio-demographic status was assessed and would suggest a slight under-representation of lower socio-economic respondents. However, questions related to *perceived* family wealth, not to actual levels of income.

Issues arising on family and friends

While children rated their quality of life higher than adolescents, overall the findings suggest that most Irish children enjoy a high health-related quality of life. Parent relations and home life was a dimension that most respondents rated highly, particularly children who rated it the highest. This dimension relates to respondents feeling that their parents understood them, that their parents treated them fairly and that they had the ability to talk to their parents when they wanted to.

Social acceptance (bullying) is the dimension in which respondents rated their perceptions of being afraid of other girls and boys, other girls and boys making fun of them and other girls and boys bullying them. The social acceptance dimension was rated highest among adolescents. 13% of children and 8% of adolescents indicated that they had been bullied by other boys and girls. It would be interesting to explore what children and young people understand by 'bullying'. The findings in this part of the survey will be of particular use and interest to those working in schools and communities that deal with the issue of bullying.

The quality of their financial resources was rated highly by the majority of respondents. For adolescents, it was their third highest rated dimension, 13% indicating that they did not have enough money to do the same things as their friends.

Issues of interest for children and young people's well-being

While psychological well-being was rated highly by most respondents, particularly children, there are areas of concern. Twice as many children as adolescents indicated that they liked themselves 'all of the time' (50% and 25% respectively). 8% of adolescents indicated that their life was 'not at all' or only 'slightly' enjoyable and 7% have 'never' or 'seldom' had fun in the week prior to completion of the questionnaire. 37% of all respondents (25% children and 42% adolescents) perceived that they felt under pressure 'quite often', 'very often' or 'always'.

The findings in dimensions relating to psychological well-being and moods and emotions are particularly useful in understanding the mental health and well-being of children and adolescents. This information can be used as reference data for people working in the area of mental health services and mental health promotion, and will be useful when comparing populations of concern and also exploring the impact of interventions on population groups. For example, adolescents' perception of self was their lowest rated dimension and gender differences were also notable in this dimension. These findings will be useful in furthering understanding on issues of mental health, obesity and eating disorders.

The most negative dimension for all groups was school environment. However, 52% of all respondents (62% of children and 48% of adolescents) reported being 'very' or 'extremely' happy at school. Findings in this dimension will be of interest to the education sector and to people working with and on behalf of children and young people.

Findings on autonomy are important in considering children and young people's opportunities to participate in social activities and will be particularly useful in informing the implementation of the national policies on play and recreation.

Issues arising on healthcare

Almost one-third of adolescents felt that they did not have a healthcare professional who could provide them with confidential advice should they need it. This is of significant concern given the opportunities in adolescence for the prevention of problems in later life. 17% of respondents indicated that they have chronic health problems.

Among those with health problems, areas of impact on respondents' quality of life included 27% (36% of children) indicating that they 'never' or 'seldom' feel like everybody else (because of their healthy problems), while 23% (32% of children) had fears about the future because of their condition. Tiredness and difficulty sleeping were also issues for respondents with health problems. The findings in this part of the study will be of interest to people attempting to plan and provide child- and adolescent-centred health services.

Comparison with European data findings

KIDSCREEN data were collected from 13 European countries — Austria, Czech Republic, France, Germany, Greece, Hungary, Ireland, Poland, Spain, Sweden, Switzerland, the Netherlands and the United Kingdom. A total of 23,375 children (aged 8-11) and adolescents (aged 12-18) took part in the KIDSCREEN study in their relevant country. Comparisons between countries are outlined in Appendix 4.

Data collected from the 1,265 Irish children and adolescents fall near the standard approximation scores base layer set within this study. 'Social support and peers' was the only dimension for which Irish children and adolescents scored higher than European children and adolescents, in relation to items such as spending time with their friends, doing things with other girls and boys, having fun with their friends, having them and their friends help one another, and being able to rely on their friends. Irish children and adolescents had overall high perceptions of their HRQoL across the 10 KIDSCREEN dimensions.

Recommendations for future KIDSCREEN initiatives

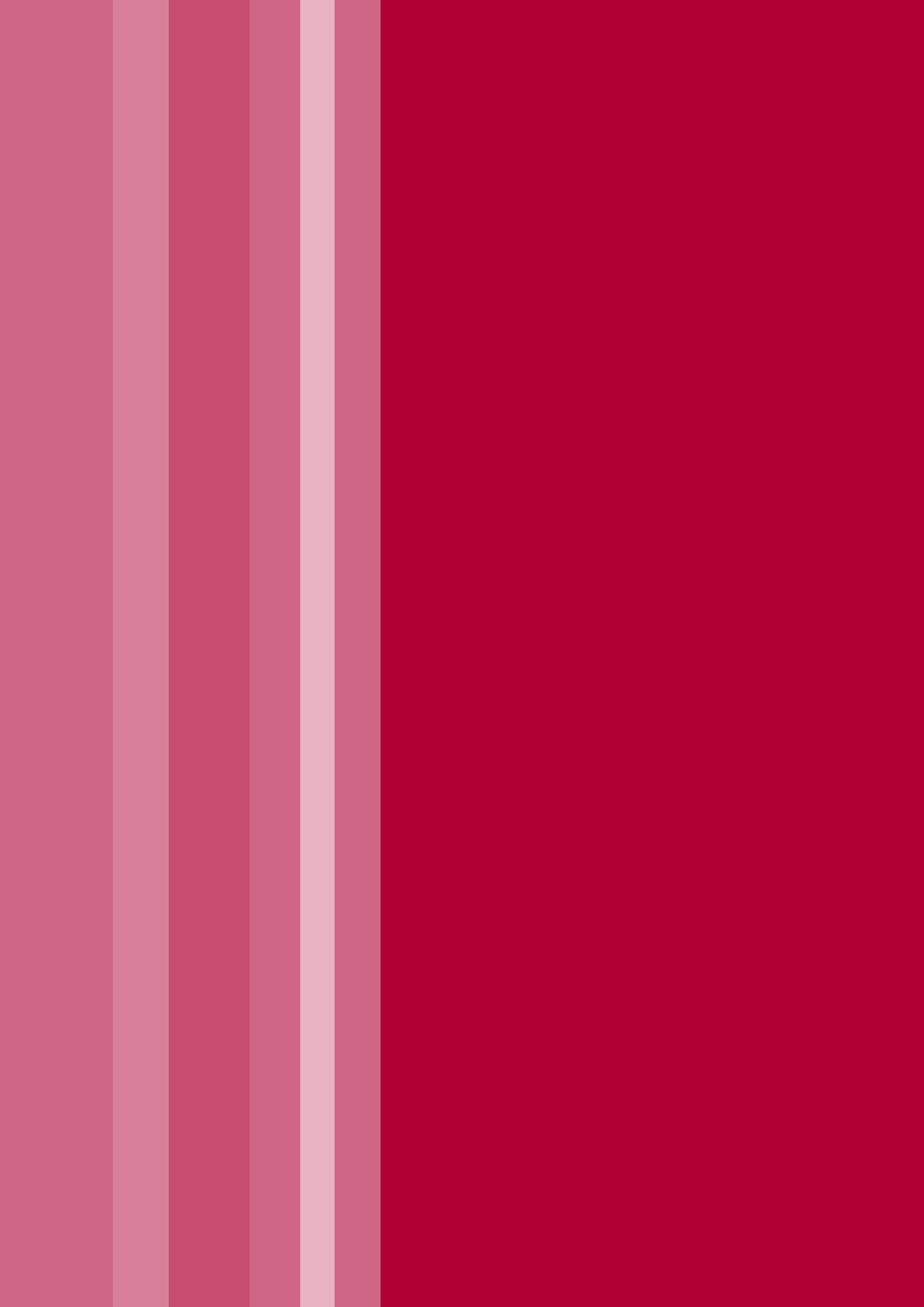
KIDSCREEN is an innovative project in research with children and young people. The data generated by this survey contribute greatly to our understanding of the lives of children and young people, and to our ability to measure their well-being. This type of research is central to progressing the implementation of a range of plans and strategies relating to the lives of children and young people in Ireland. These include the National Children's Strategy, *Towards 2016* and the WHO European Strategy on Child and Adolescent Health. In planning and delivering services and in policy-making relating to child and adolescent health, best practice needs to be informed by quality research that involves children and adolescents. Children's and adolescents' subjective measurement of health-related quality of life is valuable in public health policy and planning. We need to pay attention to our research methods with children and young people and match methods to settings in a way that maximises the voices of children and adolescents, and does not place undue pressure or responsibility on them.

KIDSCREEN contributes to European and Irish policies by providing information about the types and distribution of quality of life impairments. It enables a better understanding of perceived health in children and adolescents from their own perspective and can help to identify populations at risk.

A number of recommendations in relation to the findings of the Irish KIDSCREEN National Survey 2005 are made below:

- The data presented in this study need to be explored in more detail, especially in relation to reporting on the implications of the findings in particular areas. It is therefore recommended that a number of sub-reports are prepared on each dimension, which will compare the findings in this study with the wider literature and which will draw out implications for policy and planning of services. Lodging of the data in the Irish Social Science Data Archive (ISSDA) is recommended to make the information accessible to a wide range of users.
- The KIDSCREEN tools should be used in future national health surveys and also in multi-disciplinary research and clinical monitoring. Use of KIDSCREEN in smaller scale research studies is now particularly valuable since a national reference dataset is available. Exploration of the use of the tools in out-of-school settings should also be pursued.

- KIDSCREEN-52 is the instrument used for this study. It allows detailed profile information for 10 HRQoL dimensions and requires 15-20 minutes to be completed. Two other KIDSCREEN instruments are also available for use. KIDSCREEN-27 uses items derived from the 52-item version, allows detailed profile information for 5 HRQoL dimensions and requires 10-15 minutes to be completed. KIDSCREEN-10 Index uses items derived from the 27-item version, is a global HRQoL score for monitoring and screening uses, and requires 5 minutes to be completed. The KIDSCREEN instruments are available in child and adolescent versions, as well as parent/proxy versions, and have been translated and adapted for use in several languages. A score can be calculated and T-values and percentages are available for each country stratified by age and gender.
- KIDSCREEN should be promoted for use in the evaluation of programmes aimed at improving the health-related quality of life of children and young people.
- Ireland should continue as a partner in the KIDSCREEN Group Europe and the project should be allied to an appropriate academic institution.



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APPENDICES

Appendix 1: Description of the KIDSCREEN Instruments

The following information is taken from www.kidscreen.org

KIDSCREEN-52, KIDSCREEN-27 and KIDSCREEN-10 Index
Health-related Quality of Life Questionnaires for Children and Adolescents
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Origin

The KIDSCREEN generic health-related quality of life measures for children and adolescents were developed within the European project 'Screening and Promotion for Health-related Quality of Life in Children and Adolescents — A European Public Health Perspective'. The project was funded by the European Commission and took place over 3 years (2001-2004). Participants in the project were Austria, Czech Republic, France, Germany, Greece, Hungary, Ireland, Poland, Spain, Sweden, Switzerland, the Netherlands and the United Kingdom. (Acknowledgement: The KIDSCREEN project was financed by the European Commission EC Grant Number QLG-CT-2000-00751 within the EC 5th Framework Programme 'Quality of Life and Management of Living Resources'.)

Aim

The main objective of the project was the cooperative European development of a standardised screening instrument for children's quality of life for use in representative national and European health surveys. In addition, the instrument can be used as a generic instrument to assess quality of life in children and adolescents with a chronic illness. The aim is to identify children at risk in terms of their subjective health and to suggest appropriate early interventions by including the instrument in health services research and health reporting.

Population

The KIDSCREEN measure is applicable for healthy and chronically ill children and adolescents from 8 to 18 years. A proxy measure for parents or primary care-givers is also available.

Administration

The KIDSCREEN is a self-report measure, which can be administered in hospitals, medical establishments and schools by professionals in the fields of Public Health, Epidemiology and Medicine.

Time required:

KIDSCREEN-52:	15-20 minutes;
KIDSCREEN-27:	10-15 minutes;
KIDSCREEN-10 Index:	5 minutes

Scoring: Scores can be calculated for each of the 10 dimensions. T-values and percentages will be available for each country stratified by age, gender and socio-economic status.

Languages: Czech, Dutch, English (UK, IE), French, German (AT, CH, DE), Greek, Hungarian, Korean (RKO), Polish, Portuguese, Spanish, Swedish.

Description

The KIDSCREEN instruments assess the subjective health and well-being of children and adolescents (health-related quality of life — HRQoL). They were developed as self-report measures applicable for healthy and chronically ill children and adolescents, aged from 8 to 18 years. The KIDSCREEN project used a simultaneous approach to include 13 European countries in the cross-cultural harmonisation and development of the measure. The generation of the questionnaire was based on literature reviews, expert consultation and children's focus groups in all participating countries. This was done to identify dimensions and items of HRQoL which are relevant to respondents in all countries. The KIDSCREEN-52 instrument measures 10 HRQoL dimensions: Physical well-being (5 items), Psychological well-being (6 items), Moods and emotions (7 items), Self-perception (5 items), Autonomy (5 items), Parent relations and home life (6 items), Social support and peers (6 items), School environment (6 items), Social acceptance (Bullying) (3 items), and Financial resources (3 items). It was constructed and pilot-tested using the data of more than 3,000 European children and adolescents. In addition to common psychometric analyses, Item- Response-Theory Analysis and Structural Equation Modelling were performed to determine the optimal item and scale characteristics of the questionnaire. One focus of analyses was to identify items showing differential item functioning (DIF). The control of DIF enables comparable measurement of the identified quality of life dimensions across the 13 European countries. The KIDSCREEN-52 was used in representative mail surveys of HRQoL in approximately 1,800 children and their parents per country (total $n = 22,296$) and normative data were produced. The final analysis of the instruments involving national and cross-cultural analyses confirmed the results of the pilot test. The sub-scales enable true cross-cultural measurement on interval scale level by fulfilling the assumption of the Rasch model and displaying no DIF. Additionally, all three versions are available for parents and primary care-givers. The KIDSCREEN measure is available in several languages, e.g. Czech, Dutch, English, French, German, Greek, Hungarian, Polish, Spanish, and Swedish (new translations of the KIDSCREEN questionnaires will be included on the website, www.kidscreen.org).

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www.kidscreen.org

Reliability

KIDSCREEN-52: Cronbach's alphas were calculated for the 10 KIDSCREEN dimensions and range satisfactorily between 0.76 (social acceptance) and 0.89 (financial support).

KIDSCREEN-27: Cronbach's alphas were calculated for the 10 KIDSCREEN dimensions and range satisfactorily between 0.79 (physical well-being) and 0.84 (psychological well-being).

KIDSCREEN-10 Index: Cronbach's alpha is 0.82.

Validity

Convergent and discriminant validity were tested using information on the physical health of the children and adolescents (Children with Special Health Care Needs screener for parents (CSHCN), Bethell *et al*, 2002) and on their mental health (Strength and Difficulties Questionnaire (SDQ), Goodman *et al*, 2000). For example, correlations up to 0.55 were found when correlating the KIDSCREEN dimensions with the frequency of physical complaints. In addition to this, in each country the relationship between national HRQoL instruments for children and adolescents and the KIDSCREEN versions were analysed and showed overall satisfactory results.

Responsiveness

The high correlations between the KIDSCREEN instruments and the health status of the children and adolescents can be considered as a good basis for potential responsiveness.

Strengths

The international collaborative nature of the KIDSCREEN project provided many challenges in terms of producing an instrument that is conceptually and linguistically appropriate for use in many different countries. By giving each country the possibility to be involved at the early stages of the instrument development (the item 'construction phase'), the KIDSCREEN measures are the first truly cross-national HRQoL instrument for use with children and adolescents. The KIDSCREEN instruments can contribute to European policies by providing information about the types and distribution of quality of life impairments (nationally as well as Europe-wide). They enable a better understanding of perceived health in children and adolescents, and can help to identify populations at risk. In addition, another strength is the cooperation with the DISABKIDS project, which aims at developing health-related quality of life instruments for children and adolescents of the age groups 4-7 and 8-16 with chronic conditions, such as asthma, cerebral palsy, diabetes mellitus, epilepsy, juvenile arthritis, serious skin diseases, overweight problems and cystic fibrosis. DISABKIDS proxy measures for parents and carers are also available. Both projects collaborated as closely as possible during the instrument development phases to ensure a joint methodology and a wide coverage.

Weaknesses

As the KIDSCREEN instruments for children, adolescents and their parents are newly developed instruments, more future research in clinical settings is desired.

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Appendix 2: Reliability and Validity Results

Findings from reliability and validity measures

Scores obtained from the 1,265 Irish study sample produced Cronbach's alphas of 0.76 to 0.88. Alpha coefficients of 0.7 or higher were considered as acceptable. Cronbach's alphas were calculated for the 10 KIDSCREEN dimensions and proved satisfactory between 0.76 (social acceptance) and 0.89 (financial resources). Across all dimensions and all groups, the internal reliability showed a high level of inter-item co-variance. This is an indication that the items/dimensions appear to be suitable for the Irish population. The internal consistency of the Irish data sample is supported by results from the Reliability analysis performed on the International KIDSCREEN dataset of 22,296 responses, in which alphas ranged from 0.77 – 0.89 for Europe, indicating a high reliability, with all items measuring the same underlying construct.

The test-retest reliability of the KIDSCREEN questionnaires was assessed in a sub-sample of 559 children and adolescents from the International KIDSCREEN sample on two separate occasions, approximately two weeks apart. The participants' health status was declared unchanged from both the point of view of children and adolescents between the two assessments. Intraclass Correlation Coefficients (ICC) were computed between scale scores for the two assessments and paired comparisons of KIDSCREEN dimension scores of these two assessments were also performed. A coefficient of 0.6 or higher was considered as evidence of adequate test-retest stability.

The validity was tested on the International dataset using information about the physical health of the children and adolescents (Children with Special Health Care Needs screener for parents (CSHCN), Bethell *et al*, 2002), mental health (Strength and Difficulties Questionnaire (SDQ), Goodman *et al*, 2000) and psychosomatic health complaints (HBSC symptom checklist, Currie *et al*, 2001). Correlations up to 0.53 were found when correlating the KIDSCREEN-52 dimensions with the frequency of physical complaints; for the KIDSCREEN-27 (dimension: psychological well-being) and KIDSCREEN-10 Index version, correlations were up to 0.52. In addition to this, convergent and discriminant validity were tested. In each country, the relationship between national HRQoL instruments for children and adolescents and the KIDSCREEN-52, -27 and -10 Index versions was analysed and showed overall satisfactory results (see International KIDSCREEN Manual at www.KIDSCREEN.org).

Table A2.1 Cronbach's Alpha by 10 dimensions — Ireland and Europe

KIDSCREEN-52 dimensions	8-11 years	12-17 years	Ireland 8-17 years	Europe 8-17 years
Physical well-being	0.70	0.81	0.79	0.80
Psychological well-being	0.80	0.87	0.86	0.89
Moods and emotions	0.86	0.86	0.86	0.86
Self-perception	0.75	0.85	0.85	0.79
Autonomy	0.79	0.85	0.84	0.84
Parent relations and home life	0.81	0.89	0.88	0.89
Peer and social support	0.74	0.84	0.82	0.85
School environment	0.83	0.85	0.85	0.87
Social acceptance/bullying	0.79	0.76	0.77	0.77
Financial resources	0.84	0.89	0.87	0.89

Appendix 3: Results of KIDSCREEN dimensions by gender

Table A3.1: Physical well-being

Total = 1,265	Not at all		Slightly		Moderately		Very		Extremely	
Female v Male	F	M	F	M	F	M	F	M	F	M
In general, how would you say your health is?*	1%	0%	4%	3%	30%	27%	45%	42%	20%	28%
Have you felt fit and well?	3%	2%	10%	6%	29%	24%	41%	46%	17%	23%
Have you been physically active (e.g. running, climbing, biking)?	6%	2%	11%	6%	26%	17%	33%	35%	25%	40%
Have you been able to run well?	4%	2%	10%	5%	28%	15%	38%	42%	21%	36%
Have you felt full of energy?***	1%	2%	14%	7%	34%	29%	33%	36%	17%	25%

* Responses for this question are 'poor'; 'fair'; 'good'; 'very good'; 'excellent'.

** Responses for this question are 'never'; 'seldom'; 'quite often'; 'very often'; 'always'.

Table A3.2: Psychological well-being

Total = 1,265	Never		Seldom		Quite often		Very often		Always	
Female v Male	F	M	F	M	F	M	F	M	F	M
Has your life been enjoyable?*	2%	1%	8%	4%	17%	17%	42%	40%	32%	38%
Have you felt pleased that you are alive?*	2%	1%	5%	3%	9%	8%	28%	25%	56%	64%
Have you felt satisfied with your life?*	4%	2%	6%	4%	19%	15%	39%	39%	33%	41%
Have you been in a good mood?	1%	1%	9%	5%	30%	30%	45%	45%	16%	20%
Have you felt cheerful?	1%	0%	9%	6%	24%	27%	45%	47%	21%	20%
Have you had fun?	1%	0%	6%	3%	17%	14%	40%	38%	37%	44%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

Table A3.3: Moods and emotions

Total = 1,265	Never		Seldom		Quite often		Very often		Always	
Female v Male	F	M	F	M	F	M	F	M	F	M
Have you felt that you do everything badly?	22%	30%	54%	52%	16%	12%	7%	4%	2%	2%
Have you felt sad?	16%	29%	56%	55%	19%	12%	9%	4%	2%	1%
Have you felt so bad that you didn't want to do anything?	53%	60%	31%	26%	10%	9%	4%	4%	2%	1%
Have you felt that everything in your life goes wrong?	44%	57%	37%	29%	11%	10%	5%	2%	3%	2%
Have you felt fed up?	16%	27%	51%	47%	21%	17%	9%	6%	3%	3%
Have you felt lonely?	46%	65%	32%	23%	13%	8%	6%	3%	3%	2%
Have you felt under pressure?	33%	31%	33%	32%	20%	20%	11%	10%	7%	5%

Table A3.4: Self-perception

Total = 1,265	Never		Seldom		Quite often		Very often		Always	
Female v Male	F	M	F	M	F	M	F	M	F	M
Have you been happy with the way you are?	4%	2%	12%	6%	27%	15%	32%	34%	26%	43%
Have you been happy with your clothes?	3%	1%	12%	4%	19%	14%	30%	30%	37%	52%
Have you been worried about the way you look?	18%	40%	31%	30%	20%	15%	17%	10%	14%	5%
Have you felt jealous of the way other girls and boys look?	29%	63%	31%	23%	16%	6%	15%	5%	9%	3%
Would you like to change something about your body?	28%	51%	25%	23%	12%	11%	13%	6%	23%	10%

Table A3.5: Autonomy

Total = 1,265	Never		Seldom		Quite often		Very often		Always	
Female v Male	F	M	F	M	F	M	F	M	F	M
Have you had enough time for yourself?	3%	3%	16%	9%	27%	21%	28%	31%	26%	36%
Have you been able to do the things that you want to do in your free time?	4%	2%	19%	10%	27%	25%	27%	29%	23%	34%
Have you had enough opportunity to be outside?	5%	2%	13%	7%	19%	14%	26%	28%	39%	48%
Have you had enough time to meet friends?	5%	3%	17%	11%	22%	20%	30%	29%	27%	37%
Have you been able to choose what to do in your free time?	3%	1%	12%	8%	23%	20%	29%	34%	32%	37%

Table A3.6: Parent relations and home life

Total = 1,265	Never		Seldom		Quite often		Very often		Always	
Female v Male	F	M	F	M	F	M	F	M	F	M
Have your parent(s) understood you?*	5%	2%	12%	7%	23%	22%	35%	37%	26%	32%
Have you felt loved by your parent(s)?*	2%	1%	3%	3%	10%	8%	22%	32%	63%	56%
Have you been happy at home?	1%	1%	8%	4%	19%	17%	30%	35%	43%	43%
Have your parent(s) had enough time for you?	2%	2%	9%	5%	18%	18%	24%	29%	48%	45%
Have your parent(s) treated you fairly?	3%	2%	8%	5%	17%	13%	26%	28%	45%	53%
Have you been able to talk to your parent(s) when you wanted to?	4%	2%	12%	6%	20%	17%	21%	25%	44%	50%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

Table A3.7: Peer and social support

Total = 1,265	Never		Seldom		Quite often		Very often		Always	
	F	M	F	M	F	M	F	M	F	M
Female v Male										
Have you spent time with your friends?	1%	2%	4%	5%	17%	15%	38%	40%	41%	40%
Have you done things with other girls and boys?	4%	4%	9%	9%	21%	23%	37%	30%	30%	34%
Have you had fun with your friends?	1%	1%	2%	2%	10%	12%	26%	30%	62%	56%
Have you and your friends helped each other?	1%	3%	6%	6%	20%	27%	30%	33%	44%	31%
Have you been able to talk about everything with your friends?	4%	5%	10%	16%	19%	28%	26%	24%	41%	27%
Have you been able to rely on your friends?	2%	3%	8%	6%	16%	22%	27%	31%	47%	39%

Table A3.8: Social acceptance/bullying

Total = 1,265	Never		Seldom		Quite often		Very often		Always	
	F	M	F	M	F	M	F	M	F	M
Female v Male										
Have you been afraid of other girls and boys?	60%	73%	29%	21%	5%	4%	4%	2%	2%	1%
Have other girls and boys made fun of you?	50%	48%	33%	37%	8%	9%	5%	3%	4%	4%
Have other girls and boys bullied you?	68%	73%	22%	18%	4%	5%	3%	2%	3%	3%

Table A3.9: School environment

Total = 1,265	Never		Seldom		Quite often		Very often		Always	
	F	M	F	M	F	M	F	M	F	M
Female v Male										
Have you been happy at school?*	6%	10%	13%	10%	27%	32%	36%	34%	18%	15%
Have you got on well at school?*	4%	4%	8%	9%	24%	25%	41%	38%	24%	22%
Have you been satisfied with your teachers?*	8%	12%	14%	14%	29%	30%	28%	29%	20%	15%
Have you been able to pay attention?	3%	3%	12%	10%	31%	33%	38%	32%	17%	22%
Have you enjoyed going to school?	9%	14%	19%	19%	27%	28%	29%	23%	17%	15%
Have you got along well with your teachers?	4%	4%	10%	17%	26%	30%	36%	29%	24%	20%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

Table A3.10: Financial resources (money matters)

Total = 1,265	Never		Seldom		Quite often		Very often		Always	
Female v Male	F	M	F	M	F	M	F	M	F	M
Have you had enough money to do the same things as your friends?	4%	3%	9%	10%	19%	15%	28%	26%	41%	46%
Have you had enough money for your expenses?	3%	2%	11%	7%	21%	28%	24%	27%	41%	46%
Do you have enough money to do things with your friends?*	2%	2%	8%	7%	21%	18%	34%	34%	35%	39%

* Responses for this question are 'not at all'; 'slightly'; 'moderately'; 'very'; 'extremely'.

Appendix 4: KIDSCREEN Ireland and Europe

KIDSCREEN data were collected from 13 European countries (Austria, Czech Republic, France, Germany, Greece, Hungary, Ireland, Poland, Spain, Sweden, Switzerland, the Netherlands and United Kingdom). Further details of the European data are available in *The KIDSCREEN Questionnaires* publication (KIDSCREEN Group Europe, 2006).

Profile of Respondents: International KIDSCREEN

A total of 23,375 children (8-11 years) and adolescents (12-18 years) took part in the KIDSCREEN study throughout the 13 European countries. Some 28% were children and 72% were adolescents, 53% were female and 47% were male. As Table A4.1 shows, Sweden had the highest sample of participants for Europe, while Spain had the lowest sample. Greece and Sweden had adolescent participants only. Ten of the countries had higher samples of female participants than males, while Spain, Sweden and the UK had more males than females.

Table A4.1: Comparison across KIDSCREEN countries of cases within the age of 8-18 years with information on gender

	Total	Austria	Switzerland	Czech Republic	Germany	Spain	France	Greece	Hungary	Ireland	Netherlands	Poland	Sweden	United Kingdom
	(n = 22,827)	(n = 1,475)	(n = 1,701)	(n = 1,592)	(n = 1,723)	(n = 876)	(n = 1,049)	(n = 1,174)	(n = 3,237)	(n = 1,240)	(n = 1,885)	(n = 1,715)	(n = 3,283)	(n = 1,877)
Response rate (%)	68.9	35.3	40.2	71.5	40.6	24.2	26.4	72.0	90.0	82.5	68.0	59.6	91.2	42.4
Children N	6,882	518	580	556	610	321	394	-	1,378	321	678	565	-	961
Mean age years (SD)	9.7 (1.1)	9.7 (1.1)	9.8 (1.0)	9.6 (1.0)	9.7 (1.1)	9.7 (1.1)	9.5 (1.1)	-	9.5 (1.1)	10.4 (0.7)	9.6 (1.1)	9.9 (1.0)	-	9.5 (1.0)
Age range	8-11	8-11	8-11	8-11	8-11	8-11	8-11	-	8-11	8-11	8-11	8-11	-	8-11
Female (%)	51.3	53.5	52.4	50.5	50.0	46.1	50.3	-	55.2	52.6	49.3	53.3	-	47.3
Adolescents N	15,945	957	1,121	1,036	1,113	555	655	1,174	1,859	919	1,207	1,150	3,283	916
Mean age years (SD)	14.4 (1.7)	14.5 (1.8)	14.5 (1.8)	14.9 (1.9)	14.6 (1.9)	14.7 (1.9)	14.6 (1.9)	14.6 (1.7)	14.6 (1.8)	14.6 (1.4)	14.6 (1.8)	14.8 (1.9)	13.7 (1.0)	14.1 (1.6)
Age range	12-18	12-18	12-18	12-18	12-18	12-18	12-18	12-18	12-18	12-18	12-18	12-18	12-15	12-18
Female (%)	53.8	53.9	54.2	48.9	52.0	50.8	52.8	59.7	60.8	62.2	52.2	55.5	49.0	49.7

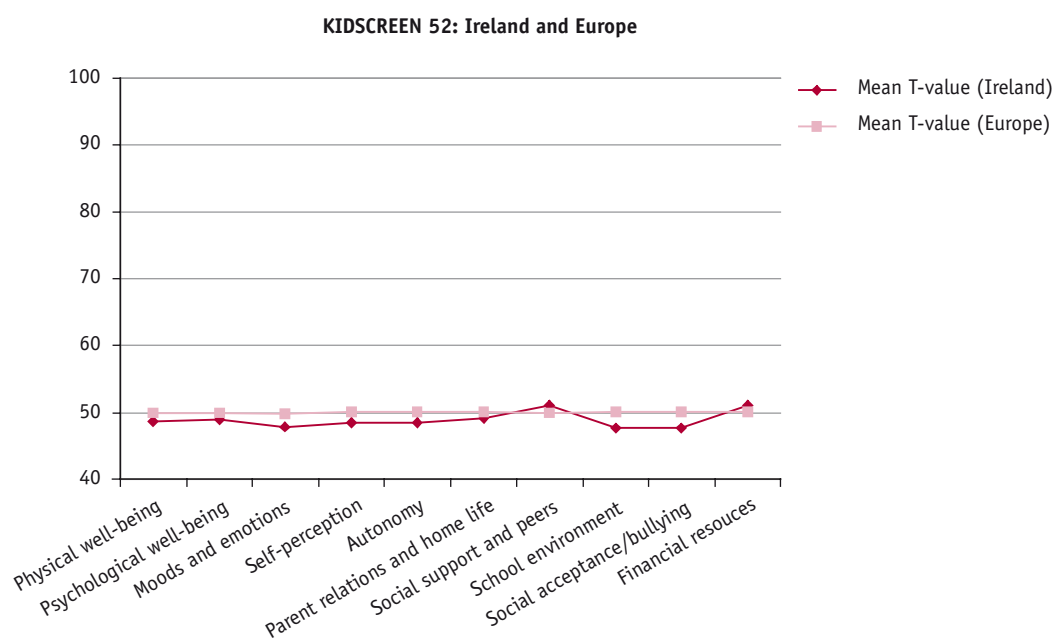
Mean scores varied around 50 (SD = 10) due to T-values standardisation (see Table A4.2).

Table A4.2: Interpretation of differences in scores in 10 dimensions

Scale Description (Person Parameter Estimates) KIDSCREEN-52	Mean T-value (Ireland)	SD	Mean T-value (Europe)	SD
Physical well-being	48.66	9.42	49.94	9.88
Psychological well-being	48.90	9.20	49.92	9.87
Moods and emotions	47.90	9.32	49.83	9.70
Self-perception	48.42	11.20	50.17	10.18
Autonomy	48.43	10.32	50.11	10.14
Parent relations and home life	49.11	10.34	50.13	10.16
Peers and social support	51.03	9.82	49.88	9.95
School environment	47.63	9.63	50.05	10.14
Social acceptance/bullying	47.66	10.64	50.13	10.16
Financial resources	51.02	9.41	50.19	10.21

As Figure A4.1 illustrates, mean data from Ireland is very similar to that of all total KIDSCREEN Europe study population.

Figure A4.1: Comparing KIDSCREEN dimensions between Ireland and Europe





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